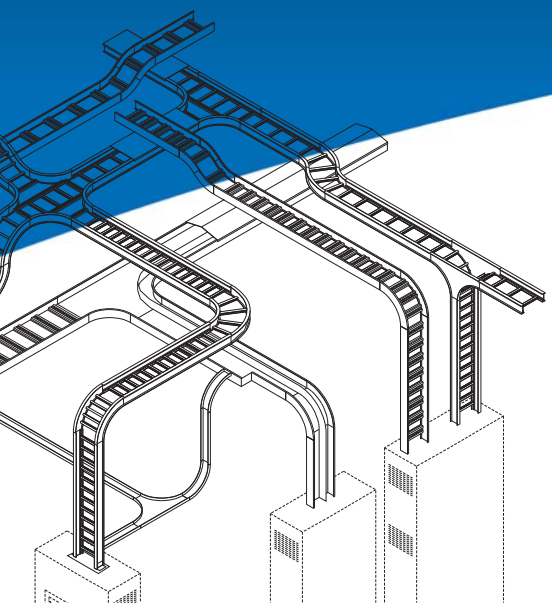
In this catalogue...

T&B® Cable Tray Systems

Thomas&Betts



The Benefits of Cable Tray

Cable tray wiring systems offer significant advantages over conduit pipe and other wiring systems. Cable tray is more cost efficient, more reliable, more adaptable to changing needs and easier to maintain. In addition, its design does not contribute to potential safety problems associated with other wiring systems.

An evaluation of the costs and benefits of various wiring systems should be done in the design phase. Avoiding the system selection process or deferring it until construction, often result in higher costs, scheduling delays and a system that will not meet future needs.

Selection of a wiring system that is not the most suitable for a particular application in terms of cost, potential corrosion and electrical considerations can lead to numerous problems, including excessive initial cost, poor design, faulty installation, extra maintenance, future power outages and unnecessary safety concerns.

Cost Efficiency

Extensive experience has shown that the initial cost of a cable tray installation (including conductor, material and installation labor costs) may be as much as 60% less than a comparable conduit wiring system.

Cable tray systems, including trays, supports, fittings and other materials, are generally much less expensive than conduit wiring systems. In addition, major cost savings are generated by the relative ease of installation. Labor costs of installing a cable tray system can run up to 50 percent less. Total cost savings will vary with the complexity and size of the installation.

Direct cost savings are easy to calculate during the design phase of an installation, but the enormous advantages of cable tray may accrue only over time. The system's reliability, adaptability, ease of maintenance and inherent safety features result in many other types of cost savings, including:

- Lower engineering and maintenance costs
- Less need to reconfigure system as needs change
- Less down time for electrical and data handling systems
- Fewer environmental problems resulting from loss of power to essential equipment

Reliability

Cable tray systems offer unsurpassed reliability, resulting in less maintenance and down time—important considerations for all installations and especially for industries such as data communications and financial services.

In addition, since cable tray is an open system, moisture build up problems are eliminated and damage to cable insulation during installation is also greatly reduced.

Adaptability

A major advantage of cable tray systems derives from their adaptability to new needs and technology. The pace of change in the economy, constantly shifting competitive pressures and rapid introduction of innovative technologies are all accelerating. More than ever before, businesses must be prepared to quickly expand facilities, change products or introduce new processes. The flexibility of the wiring system is a key consideration.

Modifying a cable tray system or adding cables to meet new needs is relatively easy because cables can enter or exit a tray at any point, and initial design considerations can build-in extra capacity as part of the planning process. Cable tray's inherent adaptability allows rewiring for future expansion, building redesign or new technologies without disruption or need to replace the entire wiring system.

Maintenance

Cable tray wiring systems require less maintenance than conduit systems. When maintenance is necessary, it is easier, less time-consuming and less labor intensive.

The physical condition and status of both the cable tray and cables can be inspected visually, something that is not possible with conduit systems. In addition, it is also easy to see if there is sufficient capacity in the trays for additional cables. As was noted above, changing or adding cables can also be accomplished easily.

Another comparative benefit of cable tray systems is that they do not act as channels of moisture paths, as conduit wiring systems do. Conduit systems tend to collect condensation resulting from changes in temperature and then channel the moisture to electrical equipment, where it can lead to corrosion and failure.

Cable tray and tray cable are also less susceptible to fire loss than conduit. An external fire usually results in damage to only a few feet of a cable tray system, while wire insulation inside a conduit suffers significant damage and thermoplastic insulation may actually fuse to the conduit.

Safety

Cable wiring systems lack the inherent safety concerns of conduit systems.

By its nature, a conduit wiring system can serve as a flow-through for corrosive, explosive and toxic gases in the same way that it channels moisture.

The conduit installation process can also present a safety issue for electricians. The process requires that a conduit system be installed from one enclosure to another before pulling in the conductors, leaving the electricians exposed to any live, energized equipment that may be in the enclosures. In contrast, installers can pull tray cables from near one termination enclosure to the next before they are inserted into the enclosures and then terminated.

Finally, in installations where cable tray can be used as the equipment grounding conductor (per NEC standards), it is easy to visually check the system components as well as conduct checks for electrical continuity.

Glossary of Terms

Accessories . . . . . Devices which are used to supplement the function of straight sections and fittings, and include such items as dropouts, covers, conduit adapters, hold-down devices and dividers.

Cable Tray Connector . . . . . A device which joins cable tray straight sections or fittings, or both. The basic types of connectors are: 1. Rigid, 2. Expansion, 3. Adjustable, 4. Reducer.

Cable Tray Fitting . . . . . A device which is used to change the direction, elevation or width of a cable tray system.

Cable Tray Support . . . . . A device which provides adequate means for supporting cable tray sections or fittings, or both. The basic types of cable tray supports are: 1. Cantilever bracket, 2. Trapeze, 3. Individual and suspension.

Channel Cable Tray . . . . . A prefabricated metal structure consisting of a one-piece ventilated bottom or solid bottom channel section, or both, not exceeding 6 inches in width.

Ladder Cable Tray . . . . . A prefabricated metal structure consisting of two longitudinal side rails connected by individual transverse members.

Solid Bottom Cable Tray . . . . A prefabricated metal structure consisting of a bottom with no openings within integral or separate longitudinal side rails.

One-Piece / Unit Cable Tray . . . . . A prefabricated metal structure consisting of a one-piece solid or ventilated bottom.

Horizontal Cross . . . . . A cable tray fitting which is suitable for joining cable trays in four directions at 90-degree intervals in the same plane.

Horizontal Bend . . . . . A cable tray fitting which changes the direction in the same plane.

Horizontal Tee . . . . . A cable tray fitting which is suitable for joining cable trays in three directions at 90 degree intervals in the same plane.

Metallic Cable Tray System . . . . . A metallic assembly of cable tray straight sections, fittings, and accessories that forms a rigid structural system to support cables.

Reducer . . . . . A cable tray fitting which is suitable for joining cable trays of different widths in the same plane. A straight reducer has two symmetrical offset sides. A right-hand reducer, when viewed from the large end, has a straight side on the right. A left-hand reducer, when viewed from the large end, has a straight side on the left.

Straight Section . . . . . A length of cable tray which has no change in direction or size.

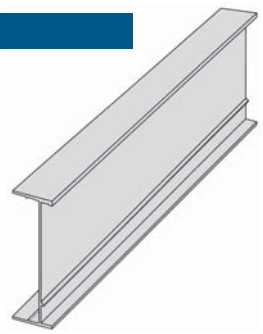
Ventilated Bottom . . . . . A cable tray bottom having openings sufficient for the passage of air and utilizing 75 percent or less of the plan area of the surface to support cables.

Vertical Bend . . . . . A cable tray fitting which changes direction to a different plane. An inside vertical elbow changes direction upward from the horizontal plane. An outside vertical elbow changes direction downward from the horizontal plane.

Unique Design Features

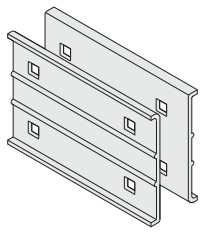
I-Beam Siderail (Aluminum)

— Maximum structural strength



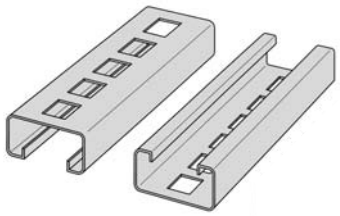
Snap-in Splice Plates (Aluminum)

— Snap-in aluminum splice plates for easy installation



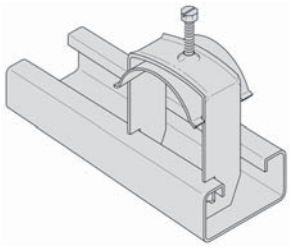
Alternating Rungs (Aluminum & Steel)

— Alternating rungs for top and bottom accessory installation and cable lashing



Continuous Open Slot (Aluminum & Steel)

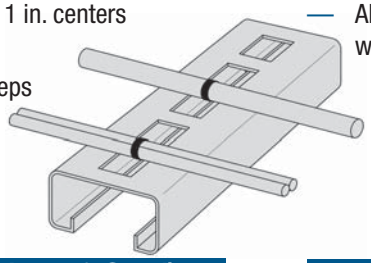
— Rungs have continuous open slot to accept standard strut pipe clamps and provide complete barrier strip adjustability



Ty-Rap® Cable Tie Slots (Aluminum & Steel)

— Exclusive Ty-Rap® cable tie slots on 1 in. centers on all ladder and ventilated bottoms

— Secure cables without kinks and keeps cables uniform

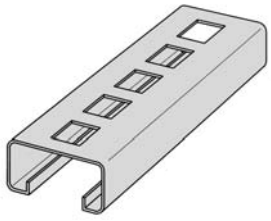


Added Support (Aluminum & Steel)

— Aluminum and steel solid bottoms are constructed with a flat sheet for added cable protection

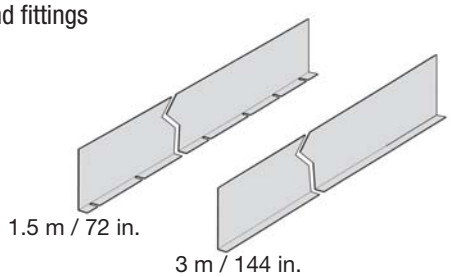
Extra Wide Rung Design (Aluminum & Steel)

— Extra wide rung design for maximum cable bearing surface

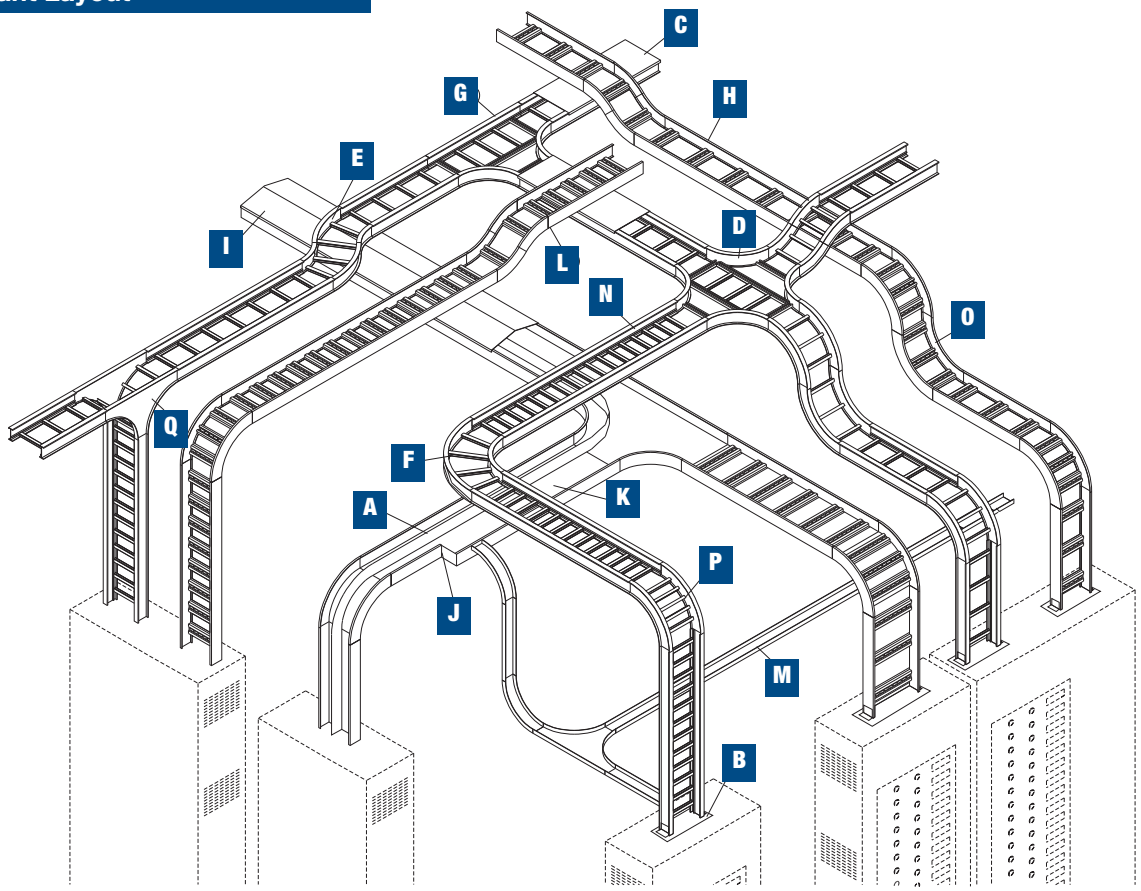


Adjustable Barrier Strips (Aluminum & Steel)

— Barrier strips are fully adjustable (side to side) for use in straight sections and fittings



Sample Plant Layout



Application

COMMERCIAL	INDUSTRIAL
Schools	Petrochemical Plants
Hospitals	Automotive Plants
Office Buildings	Paper Plants
Airports	Food Processing
Casinos	Power Plants
Stadiums	Refineries
	Manufacturing
	Mining

A	Barrier Strip
B	Box Connector
C	Flat Cover
D	Horizontal Cross
E	Horizontal 45°
F	Horizontal 90°
G	Horizontal Tee
H	Ladder Tray
I	Peaked Cover
J	Right Reducer
K	Solid Tray
L	Splice Connector
M	Solid Channel Tray
N	Ventilated Tray
O	Vertical 90° Inside
P	Vertical 90° Outside
Q	Vertical Tee

Selection Process

A number of basic decisions must be made before a cable tray system can be specified. Thomas & Betts has developed a simple eight-step process to guide you in the process:

1. Select Material and Finish (p. A8)
2. Select the Tray Load Class (p. A16)
3. Select the Tray Type (p. A23)
4. Select the Tray Size (p. A23)
5. Select the Fittings (p. A24)
6. Consider Deflection (p. A25)
7. Consider Thermal Expansion & Contraction (p. A28)
8. Electrical Grounding Capacity (p. A29)

Each step is described in detail in the following pages. For many applications, however, you may also have to take the following into account:

- Weight of the installation, which affects the cost of the support structure and the ease of installation.
- Corrosion resistance of the material is one of the most important selection criteria. Cable tray materials may not respond the same way in different environments. Chemicals or combinations of chemicals have a corrosive effect on some materials that can be compounded by temperature or even the speed at which the corrosive elements contact the cable tray. For example, some grades of stainless steel may be resistant to salt water at high flow rates (perfect for heat exchangers), while exhibiting some corrosion pitting in standing salt water. Only the designer can quantify the various elements that affect the corrosion resistance of the cable tray system in a specific application. While Thomas & Betts can provide guidance, the designer is responsible for the final selection. For more information, see “Corrosion” section.
- Melting point and flammability rating are primarily concerns for nonmetallic tray. Local building codes may restrict the use of a given product if certain performance levels are not met. Check with the appropriate inspection authorities before specifying the product.
- Relative cost varies dramatically, including material costs that float with the commodity index. For example, stainless steel prices may vary significantly according to daily changes in the market.

1. Select Material and Finish

The most suitable material and finish for your application will depend on cost, the potential for corrosion, and electrical considerations. Thomas & Betts offers cable tray systems fabricated from corrosion-resistant steel, stainless steel and aluminum alloys along with corrosion-resistant finishes, including zinc, PVC and epoxy. Special paint is also available.

Materials

Most cable tray systems are fabricated from a corrosion-resistant metal (stainless steel or an aluminum alloy) or from a metal with a corrosion-resistant finish (zinc or epoxy). The choice of material for any particular installation depends on the installation environment (corrosion and electrical considerations) and cost.

Aluminum

Cable trays fabricated of extruded aluminum are often used for their high strength-to-weight ratio, superior resistance to certain corrosive environments, and ease of installation. They also offer the advantages of being light weight (approximately 50% that of a steel tray) and maintenance free, and since aluminum cable trays are non-magnetic, electrical losses are reduced to a minimum.

T&B® Cable Tray products are formed from the 6063 series alloys which by design are copper free alloys for marine applications. These alloys contain silicon and magnesium in appropriate proportions to form magnesium silicide, allowing them to be heat treated. These magnesium silicon alloys possess good formability and structural properties, as well as excellent corrosion resistance.

The unusual resistance to corrosion, including weathering, exhibited by aluminum is due to the self-healing aluminum oxide film that protects the surface. Aluminum's resistance to chemicals in the application environment should be tested before installation.

Steel

Thomas & Betts steel cable trays are fabricated from structural quality steels using a continuous roll-formed process. Forming and extrusions increase the mechanical strength.

The main benefits of steel cable tray are its high strength and low cost.

The rate of corrosion will vary depending on many factors such as the environment, coating or protection applied and the composition of the steel. Thomas & Betts offers finishes and coatings to improve the corrosion resistance of steel. These include pre-galvanized, hot dip galvanized (after fabrication), epoxy and special paints.

Stainless Steel

Stainless steel offers high yield strength and high creep strength, at high ambient temperatures.

Thomas & Betts stainless steel cable tray is roll-formed from AISI Type 316/316L stainless steel.

Stainless steel is resistant to dyestuffs, organic chemicals, and inorganic chemicals at elevated temperatures. Higher levels of chromium and nickel and a reduced level of carbon serve to increase corrosion resistance and facilitate welding. Type 316 includes molybdenum to increase high temperature strength and improve corrosion resistance, especially to chloride and sulfuric acid. Carbon content is reduced to facilitate welding.

1. Select Material and Finish (cont'd)

Finishes

Electro-Galvanized Coatings

The most widely used coating for cable tray is galvanizing. It is cost-effective, protects against a wide variety of environmental chemicals, and is self-healing if an area becomes unprotected through cuts or scratches.

Steel is coated with zinc through electrolysis by dipping steel into a bath of zinc salts. A combination of carbonates, hydroxides and zinc oxides forms a protective film to protect the zinc itself. Resistance to corrosion is directly related to the thickness of the coating and the harshness of the environment.

Pre-Galvanized

Pre-galvanized, also known as mill-galvanized or hot dip mill-galvanized, is produced in a rolling mill by passing steel coils through molten zinc. These coils are then slit to size and fabricated.

Areas not normally coated during fabrication, such as cuts and welds, are protected by neighboring zinc, which works as a sacrificial anode. During welding, a small area directly affected by heat is also left bare, but the same self-healing process occurs.

G90 requires a coating of .90 ounces of zinc per square foot of steel, or .32 ounces per square foot on each side of the metal sheet.
In accordance with A653/A653M-06a, pre-galvanized steel is not generally recommended for outdoor use or in industrial environments.

Hot-Dip Galvanized

After the steel cable tray has been manufactured and assembled, the entire tray is immersed in a bath of molten zinc, resulting in a coating of all surfaces, as well as all edges, holes and welds.

Coating thickness is determined by the length of time each part is immersed in the bath and the speed of removal.
Hot dip galvanizing after fabrication creates a much thicker coating than the pre-galvanized and electro-galvanized process, a minimum of 3.0 ounces per square foot of steel or 1.50 ounces per square foot on each side of the sheet (according to ASTMA123, grade 65).

The process is recommended for cable tray used in most outdoor environments and many harsh industrial environment applications.

Other Coatings

Epoxy and special paint coatings are available on request.

1. Select Material and Finish (cont'd)

Corrosion of metal occurs naturally when the metal is exposed to chemical or electrochemical attack. The atoms on the exposed surface of the metal come into contact with a substance, leading to deterioration of the metal through a chemical or electrochemical reaction. The corroding medium can be a liquid, gas or solid.

Although all metals are susceptible to corrosion, they corrode in different ways and at various speeds. Pure aluminum, bronze, brass, most stainless steels and zinc corrode relatively slowly, but some aluminum alloys, structural grades of iron and steel and the 400 series of stainless steels corrode quickly unless protected.

Electrochemical Corrosion

Electrochemical corrosion is caused by an electrical current flow between two dissimilar metals, or if a difference of potential exists, between two areas of the same metal surface.

The energy flow occurs only in the presence of an electrolyte, a moist conductor that contains ions, which carry an electric charge. Solutions of acids, alkalies, and salts contain ions, making water—especially salt water—an excellent electrolyte.

Common Types of Corrosion

Galvanic Corrosion

Galvanic corrosion results from the electrochemical reaction that occurs in the presence of an electrolyte when two dissimilar metals are in contact. The strength of the reaction and the extent of the corrosion depend on a number of factors, including the conductivity of the electrolyte and potential difference of the metals.

The metal with less resistance becomes anodic and more subject to corrosion, while the more resistant becomes cathodic.

The Galvanic Series Table, developed through laboratory tests on industrial metal alloys in sea water (a powerful electrolyte), list metals according to their relative resistance to galvanic corrosion. Those less resistant to galvanic corrosion (anodic) are at the top, and those more resistant (cathodic) are at the bottom.

The metals grouped together are subject to only slight galvanic effect when in contact, and metals at the top will suffer galvanic corrosion when in contact with metals at the bottom (in the presence of an electrolyte). The farther apart two metals are on the table, the greater the potential corrosion.

Galvanic Series Table

Anodic End	
1. Magnesium	25. 50Pb-50Sn solder
2. Magnesium alloys	26. Silver (passive)
3. Zinc	27. Type 304 stainless steel (active)
4. Galvanized steel	28. Type 316 stainless steel (active)
5. Naval brass (C46400)	29. Lead
6. Aluminum 5052H	30. Tin
7. Aluminum 3004	31. Muntz metal (C28000)
8. Aluminum 3003	32. Manganese bronze (C67500)
9. Aluminum 1100	33. Nickel (active)
10. Aluminum 6053	34. Inconel (active)
11. Alclad aluminum alloys	35. Cartridge brass (C26000)
12. Aluminum bronze (C61400)	36. Admiralty metal (C44300)
13. Cadmium	37. Red brass (C23000)
14. Copper (C11000)	38. Silicon bronze (C 65100)
15. Aluminum 2017	39. Copper nickel, 30% (C71500)
16. Aluminum 2024	40. Nickel (passive)
17. Low-carbon steel	41. Inconel (passive)
18. Wrought iron	42. Gold
19. Cast iron	43. Platinum
20. Monel	
21. Ni-resist	
22. Type 304 stainless steel (passive)	
23. Type 410 stainless steel (passive)	
24. Type 316 stainless steel (passive)	Cathodic End

1. Select Material and Finish (cont'd)

Pitting Corrosion

Pitting corrosion is localized and is identified by a cavity with a depth equal to or greater than the cavity's surface diameter. Pits may have different sizes and depths and most often appear randomly distributed. Aluminum and stainless steels in chloride environments are especially susceptible to pitting.

Pitting begins when surface defects, foreign particles or other variations in the metal lead to fixation of anodic (corroded) and cathodic (protected) sites on the metal surface. Acidic metal chlorides, which form and accumulate in the pit as a result of anodes attracting chloride ions, accelerate the pitting process over time. The nature of pitting often makes it difficult to estimate the amount of damage.

Crevice Corrosion

Crevice corrosion is a specialized form of pitting that particularly attacks metals or alloys protected by oxide films or passive layers. It results from a relative lack of oxygen in a crevice, with the metal in the crevice becoming anodic to the metal outside. For the crevice to corrode, it must be large enough to admit the electrolyte, but small enough to suffer oxygen depletion.

Erosion Corrosion

While erosion is a purely mechanical process, erosion corrosion combines mechanical erosion with chemical or electrochemical reaction. The process is accelerated by the generally rapid flow of liquid or gas over an eroded metal surface, removing dissolved ions and solid particles. As a result, the metal surface develops grooves, gullies, waves, rounded holes and valleys.

Erosion corrosion can damage most metals, especially soft ones like aluminum that are susceptible to mechanical wear, and those that depend for protection on a passive surface film, which can be eroded. Resulting damage can also be enhanced by particles or gas bubbles in a suspended state.

Intergranular Corrosion

Intergranular corrosion occurs between the crystals (or grains) that formed when the metal solidified. The composition of the areas between the crystals differs from that of the crystals themselves, and these boundary areas can become subject to intergranular corrosion. Weld areas of austenitic stainless steels are often affected by this form of corrosion, and the heat-treatable aluminum alloys are also susceptible.

1. Select Material and Finish (cont'd)

Corrosion Resistance Guide

The following table has been compiled as a guide for selecting appropriate cable trays for various industrial environments. The information can only be used as a guide because corrosion processes are dictated by the unique circumstances of any particular assembly.

Corrosion is significantly affected by trace impurities which, at times, can become concentrated through wet/dry cycles in locations that are prone to condensation and evaporation. It is not uncommon to find aggressive mists created from contaminant species, notably from sulfur or halogen sources.

Temperature greatly influences corrosion, sometimes increasing the rate of metal loss, (a rule-of- thumb guide is that a 30°C change in temperature results in a 10X change in corrosion rate). Sometimes corrosion attack slows down at higher temperatures because oxygen levels in aqueous solutions are lowered as temperatures increase. If an environment completely dries out then there can be no corrosion.

Stress-associated corrosion might occur when assemblies are poorly installed and/or fabricated, e.g., on-site welding or mechanical fastening. Premature failure can result from: corrosion fatigue, which can occur in any environment; **stress corrosion cracking**, which occurs in the presence of a specific chemical when the metal is under a tensile stress, which may be residual or applied, (e.g., from poor fabrication or welding); fretting, where two adjacent surfaces (under load) are subjected to an oscillatory motion across the mating surfaces.

Design should minimize the risk of stress concentrations within a structure. Examples include sharp profiles, abrupt section changes, and threaded screws. These measures are particularly important for metals that are prone to stress corrosion cracking in specific media. Design plays a significant role in exacerbating corrosion. Non-draining locations create liquid traps; local metal-to-metal (or metal-to-non-metal) contact points (e.g., mechanical assemblies (bolts) with washers or spacers), permit **crevice corrosion** and/or **galvanic corrosion** to occur. Areas that are poorly maintained, (e.g., surfaces are not regularly (or properly) washed and stubborn deposits remain on the metal surface), are particularly prone to localized corrosion damage due to different levels of oxygen under and adjacent to the location in question (differential aeration). Resulting damage from these situations is in the form of small holes (pits). In each of the examples just quoted there is a restricted supply of oxygen. Thus, metals (e.g., aluminum, stainless steels, zinc) that rely on oxygen to form protective corrosion films (oxides, hydroxides, carbonates, etc.,) may be prone to localized **pitting** and/or **crevice corrosion**.

A further example of localized corrosion occurs when **dissimilar metals** contact each other in the presence of a corrodent, i.e., **galvanic corrosion**. Each metal will corrode but the one that is most active [anode] can be more corroded especially when there is a large surrounding area of the less active [cathodic] metal. It is wise to avoid small anodic areas. Some examples include: steel bolts [small area of anodic metal] in stainless steel plate, [large area of cathodic metal]; steel bolts in copper plate - the steel corrodes). There can be environmental influences, for example a fluid that contains active metallic species, for example copper ion contact with aluminum (copper picked up from aqueous solutions conveyed in copper pipe) - the aluminum corrodes. A further dramatic example is provided when trace quantities of mercury contact aluminum - the aluminum corrodes very rapidly. These are examples of **deposit corrosion**.

1. Select Material and Finish (cont'd)

Corrosion Resistance Guide (cont'd)

This guide provides an indication of the suitability of a potential candidate material for a specific chemical environment. These tables should be regarded only as a GUIDE to anticipated performance because of possible contributions from temperature, pollutant (contaminant) species, etc.

Chemical Species

	Aluminum	HDG/Steel	316SS
Acetaldehyde	++	+	++
Acetic acid - aerated	(+)[T,C]	X	(++)[T]
Acetic acid - not aerated	(+)[T,C]	X	(++)[T]
Acetone	++	++	++
Acetylene	++	nd	++
Allyl alcohol	+	nd	++
Aluminum chloride - dry	+	nd	(+)[T,P]
Aluminum chloride - wet	X	X	(-)[P]
Aluminum sulfate - satd.	X	nd	+
Ammonia - anhydrous	++	++	++
Ammonia - gas	-	+	(+)[T]
Ammonium acetate	+	nd	+
Ammonium bicarbonate	-	nd	(+)[T]
Ammonium carbonate - satd.	+	X	+
Ammonium chloride - 28%	X	X	(+)[P,S]
Ammonium chloride - 50%	X	X	X
Ammonium hydroxide	+	+	(++)[C]
Ammonium nitrate	+	X	(++)[S]
Ammonium phosphate - 40%	X	nd	+
Ammonium sulfate - to 30%	X	-	+
Amyl acetate	++	++	++
Asphalt	++	+	+
Beer	++	X	++
Benzene (benzol)	++	+	(+)[P]
Benzoic acid	+	nd	+
Benzol - see benzene			
Boric acid (boracic acid)	++	nd	(++)[T,P]
Bromine - wet	X	X	X
Butadiene (butylene)	+	+	+
Butyl alcohol (butanol)	++	++	++
Butyric acid	+	X	+
Cadmium sulfate	+	nd	++
Calcium carbonate	-	nd	+
Calcium chloride - satd.	+	X	(+)[S]
Calcium hydroxide - satd.	X	nd	+

Chemical Species

	Aluminum	HDG/Steel	316SS
Calcium hypochlorite - satd.	X	X	(-)[P]
Carbon dioxide - wet	++	+	+
Carbon disulfide (bisulfide)	++	+	++
Carbon tetrachloride	X	+	(++)[P,S]
Carbolic acid - see phenol			
Carbonic acid - see carbon dioxide			
Caustic potash - see potassium hydroxide			
Caustic soda - see sodium hydroxide			
Chlorine gas - wet	X	++	(-)[P,S]
Chloroform	(+)dry	+	(+)[T,S]
Chromic acid	+	nd	(+)[P]
Citric acid - dilute	(+)[T,C]	X	(++)[P]
Copper chloride	X	X	(-)[P]
Copper nitrate	X	nd	++
Copper sulfate	X	-	+
Cresol	+	+	+
Crude oil	++	++	++
Diethylamine	+	++	++
Dimethyl ketone - see acetone			
Ethyl acetate	(++)[dry]	++	+
Ethyl alcohol (ethanol)	++	++	++
Ethylene dichloride	(-)[dry]	++	(+)[P,S]
Ethylene glycol (glycol)	++	++	++
Ferric chloride	X	X	X
Ferric nitrate - 10%	X	nd	+
Ferrous sulfate	+	nd	(+)[P]
Formaldehyde (methanal)	(+)[P]	++	(++)[T,C]
Fluorine gas - moist	X	X	X
Formalin - see formaldehyde			
Formic acid (methanoic acid) - 10%	(+)[T]	X	(+)[P,C]
Furfural (furfuraldehyde)	+	nd	+
Furol - see furfural			
Gelatin	++	+	++
Glycerine (glycerol)	++	++	++
Hexamine - 80%	++	nd	++

SYMBOLS:

- **++** first choice; very low corrosion rate, typically <5 mpy, or <0.005 inch/year, (1 mil = 1/1000 inch)
- **+** good choice; low corrosion rate, typically <20 mpy, or <0.02 ipy
- **-** can use; corrosion rate up to 50 mpy (0.05 ipy); some limitations may apply
- **X** not recommended
- **(-)** brackets indicate probable limitations, e.g., at higher temperatures, [symbol "T"]; at higher concentrations, [symbol "C"]; due to pitting, [symbol "P"]; due to local grain boundary attack in the metal - intergranular corrosion, [symbol "I"]; or, due to stress corrosion cracking, [symbol "S"]
- **nd** no available data

1. Select Material and Finish (cont'd)

Corrosion Resistance Guide (cont'd)

This guide provides an indication of the suitability of a potential candidate material for a specific chemical environment. These tables should be regarded only as a GUIDE to anticipated performance because of possible contributions from temperature, pollutant (contaminant) species, etc.

Chemical Species

	Aluminum	HDG/Steel	316SS
Hydrobromic acid	X	X	X
Hydrochloric acid (muriatic acid)	X	X	X
Hydrocyanic acid - dilute	+	nd	+
Hydrocyanic acid - conc	X	nd	+
Hydrofluoric acid	X	X	X
Hydrogen chloride gas - dry	X	X	(++)^{S}
Hydrogen chloride gas - wet	X	X	+
Hydrogen fluoride	(-)^{T}	nd	+
Hydrogen peroxide - to 40%	++	nd	+
Hydrogen sulfide - wet	(+)^{P}	nd	(+)^{PS}
Hypo - see sodium thiosulfate			
Hypochlorous acid	X	X	X
Iodine solution - satd	X	X	X
Lactic acid	(+)T	nd	(+)^{PI}
Latex	++	-	++
Lithium chloride - to 30%	X	nd	++
Linseed oil	+	nd	++
Magnesium chloride - 50%	X	X	(+)^{PS}
Magnesium hydroxide	+	nd	++
Magnesium sulfate	+	X	+
Maleic acid (maleinic acid) - 20%	+	nd	+
Methyl alcohol (methanol)	++	++	++
Methyl ethyl ketone	+	++	+
Milk	++	X	++
Molasses	+	nd	++
Naptha	+	+	+
Natural fats	++	++	++
Nickel chloride	X	nd	(+)^{PS}
Nickel sulfate	X	nd	+
Nitric acid	X	X	(++)^{I}
Oleic acid	(++)^{T}	nd	++
Oxalic acid - dilute	-	nd	+
Oxalic acid - saturated	(+)^{T}	X	X
Paraformaldehyde - to 30%	+	nd	++
Perchloroethylene	+	X	(++)^{P}

Chemical Species

	Aluminum	HDG/Steel	316SS
Phenol (carbolic acid)	+	+	++
Phosphoric acid - dilute	X	X	++
Phosphoric acid - 50%	X	X	(++)^{I}
Picric acid	++	nd	+
Potassium bicarbonate - 30%	X	nd	++
Potassium carbonate	X	nd	++
Potassium chloride - to 25%	X	X	(++)^{P}
Potassium dichromate - 30%	(++)^{T}	X	++
Potassium hydroxide	X	nd	(+)^{S}
Potassium nitrate	++	++	+
Potassium sulfate	++	++	++
Propionic acid (propanoic acid)	(+)^{T}	X	(+)^{T}
Propyl alcohol (propane)	++	++	++
Prussic acid - see hydrocyanic acid			
Pyridine	+	nd	++
Soaps	+	-	+
Sodium bicarbonate - 20%	+	nd	++
Sodium bisulfate	X	X	(+)^{T}
Sodium bisulfite	X	X	+
Sodium chloride - to 30%	X	X	(+)^{PS}
Sodium cyanide	X	nd	(+)^{T}
Sodium hydroxide - 10-30%	X	X	(+)^{S}
Sodium hydroxide - 50%	X	X	(++)^{S}
Sodium hydroxide - conc	X	X	++
Sodium hypochlorite - conc	X	+	(-)^{PS}

SYMBOLS:

- **++** first choice; very low corrosion rate, typically <5 mpy, or <0.005 inch/year, (1 mil = 1/1000 inch)
- **+** good choice; low corrosion rate, typically <20 mpy, or <0.02 ipy
- **-** can use; corrosion rate up to 50 mpy (0.05 ipy); some limitations may apply
- **X** not recommended
- **(-)** brackets indicate probable limitations, e.g., at higher temperatures, [symbol "T"]; at higher concentrations, [symbol "C"]; due to pitting, [symbol "P"]; due to local grain boundary attack in the metal - intergranular corrosion, [symbol "I"]; or, due to stress corrosion cracking, [symbol "S"]
- **nd** no available data

1. Select Material and Finish (cont'd)

Corrosion Resistance Guide (cont'd)

This guide provides an indication of the suitability of a potential candidate material for a specific chemical environment. These tables should be regarded only as a GUIDE to anticipated performance because of possible contributions from temperature, pollutant (contaminant) species, etc.

Chemical Species

	Aluminum	HDG/Steel	316SS
Sodium nitrate	++	X	++
Sodium peroxide - 10%	+	nd	+
Sodium silicate	++	nd	++
Sodium sulfate	(++)[30%]	X	++
Sodium sulfide - to 50%	X	nd	(+)[T]
Sodium thiosulfate	+	nd	++
Steam	(+)[P]	++	++
Stearic acid	+	nd	++
Sorbital (hexahydric alcohol)	++	+	++
Sulfur dioxide - dry	+	+	++
Sulfur dioxide - wet	X	X	(+)[T]
Sulfuric acid - to 80%	X	X	X
Sulfuric acid - 80-90%	X	X	(-)[I]
Sulfuric acid - 98%	X	X	(+)[I]
Tannic acid (tannin)	X	X	+
Tartaric acid - to 50%	(+)T	nd	++
Toluene (Toluol; methyl benzene)	++	++	++
Trichloroethylene	(++)[T]	+	(+)[P]
Turpentine	+	++	++
Water - acid, mine	X	-	(++)[P]
Water - potable	+	+	++
Water - sea	+	+	++
Xylene	++	nd	++
Zinc chloride - dilute	++	nd	(++)[PS]

SYMBOLS:

- **++** first choice; very low corrosion rate, typically <5 mpy, or <0.005 inch/year, (1 mil = 1/1000 inch)
- **+** good choice; low corrosion rate, typically <20 mpy, or <0.02 ipy
- **-** can use; corrosion rate up to 50 mpy (0.05 ipy); some limitations may apply
- **X** not recommended
- **(-)** brackets indicate probable limitations, e.g., at higher temperatures, [symbol "T"]; at higher concentrations, [symbol "C"]; due to pitting, [symbol "P"]; due to local grain boundary attack in the metal - intergranular corrosion, [symbol "I"]; or, due to stress corrosion cracking, [symbol "S"]
- **nd** no available data

2. Select the Tray Class / Load Capacity (Loading)

Selection Process

The standard classes of cable trays, as related to their maximum design loads and to the associated design support spacing based on a simple beam span requirement, shall be designated in accordance with Table 1. Please note the load ratings in Table 1 are those most commonly used. Other load ratings are acceptable. (according to NEMA VE-1 / CSA C22.2 Nº 126.1-02).

Costs vary between different load classes. Since labor and coupling costs are similar for a given length of tray, the heavier classes are less cost-effective on a load length basis. The designer should therefore specify the lightest class of tray compatible with the weight requirements of the cable tray.

TABLE 1

Span/Load Class Designation — USA
(See Clauses 4.8.1, 4.8.2 and 6.1.2 (c).)

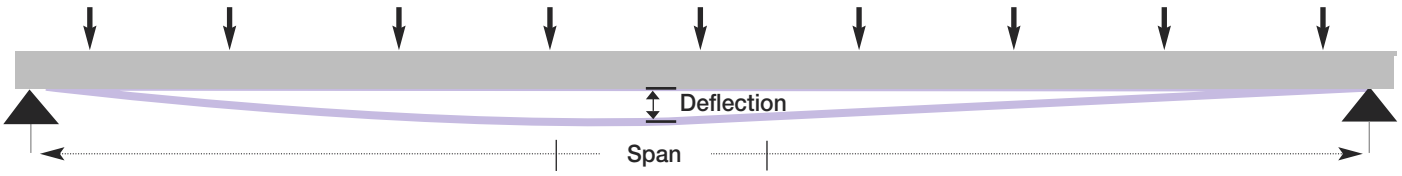
LOAD kg/m (lb./ft.)	SPAN, m (ft.)				
	1.5 (5)	2.4 (8)	3.0 (10)	3.7 (12)	6.0 (20)
37 (25)	5AA	8AA	10AA	12AA	20AA
74 (50)	5A	8A	10A	12A	20A
112 (75)	–	8B	–	12B	20B
149 (100)	–	8C	–	12C	20C

Note:These ratings are also used in Mexico

TABLE 2

Span/Load Class Designation — CANADA
(See Clauses 4.8.1, 4.8.2 and 6.1.2 (c).)

LOAD kg/m (lb./ft.)	SPAN, m (ft.)						
	1.5 (5)	2.0	2.5	3.0 (10)	4.0	5.0	6.0 (20)
37 (25)				A			
45 (30)			A				
62 (42)		A					
67 (45)							D
82 (55)						D	
97 (65)				C			
99 (67)	A						
112 (75)							E
113 (76)					D		
119 (80)			C				
137 (92)						E	
164 (110)		C					
179 (120)				D			
189 (127)					E		
259 (174)	C						
299 (200)				E			



2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Selection Process

Cable Loads: The cable load is the total weight, expressed in (kg/m), of all the cables that will be placed in the cable tray.

Snow Loads: The additional design load from snowfall should be determined using the building codes which apply for each installation.

Ice Loads: The additional load design due to the ice is determined by the following formula:

$Wi = W \times Ti \times Di/144$

Where:
Wi = ice load (lb./linear foot)
W = width of the tray (inches)
Ti = maximum ice thickness (inches).
Di = 57 lb./ft.^{3} - ice density

Ice thickness will vary depending on installation location. A value of 1/2 inch can be used as a conservative standard for Canada.

Wind Loads: The additional loading to be considered is the effect of the impact pressure normal to the side rail.

This loading is determined by the following formula:

$Wp = 0.00256 \times V^2 \times H/12$

Where:
Wp = loading due to the wind (lb./linear foot)
V = wind velocity (mph)
H = Height of the side rail (inches)

It is important to note that cable tray is not designed to support personnel.

The user should display appropriate warnings to prevent the use of cable tray as walkways.

Concentrated Loads

A concentrated static load is not included in the Table 1. Some user applications may require that a given concentrated static load be imposed over and above the working load.

Such a concentrated static load represents a static weight applied on the centerline of the tray at midspan. When so specified, the concentrated static load may be converted to an equivalent uniform load (We) in kilograms/metre (pounds/linear foot), using the following formula, and added to the static weight of cable in the tray:

$$We = \frac{2 \times (\text{concentrated static load, kg (lb.)})}{\text{Span length, m (ft.)}}$$

Seismic Loads

It is now known that cable tray systems can withstand stronger earthquakes than previously thought. The tray itself and the support material are highly ductile, and the cables moving within the tray tend to dissipate energy. However, if you have specific seismic specifications for selected cable tray, please consult Thomas & Betts to ensure your specifications are met.

2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Loading for Grades B, C and D

General Loading Requirements and Maps (IEEE: Section 25 Loading for Grades B, C and D)

General

1. It is necessary to assume the loadings that may be expected to occur on a line because of wind and ice during all seasons of the year. These weather loadings shall be the values of loading resulting from the application of Rules 250B or 250C. Where both rules apply, the required loading shall be the one that, when combined with the appropriate overload capacity factors, has the greater effect on strength requirements.
2. Where construction or maintenance loads exceed those imposed by Rule 250A1, which may occur more frequently in light loading areas, the assumed loadings shall be increased accordingly.
3. It is recognized that loadings actually experienced in certain areas in each of the loading districts may be greater, or in some cases, may be less than those specified in these rules. In the absence of a detailed loading analysis, no reduction in the loadings specified therein shall be made without the approval of the administrative authority.

Combined Ice and Wind Loading

Three general degrees of loading due to weather conditions are recognized and are designated as heavy, medium, and light loading. **Figure 250-1** shows the districts in which these loadings are normally applicable.

Figure 250-1 shows the radial thickness of ice and the wind pressures to be used in calculating loading. Ice is assumed to weigh 57 lb./ft.^{2} (913 kg/m3).

Extreme Wind Loading

If any portion of a structure or its supported facilities exceeds 60 ft. (18m) above ground or water level, the applicable horizontal wind speed of **Figure 250-2**, as determined by the linear interpolation, shall be used to calculate horizontal wind pressures. These pressures shall be applied to the entire structure and supported facilities without ice loading.
The following formulas shall be used to calculate wind pressures on cylindrical surfaces:

pressure in lb./ft.^{3} = 0.00256 (v m/h)^2
pressure in pascals = 0.613 (v m/h)^2

where m = meters
s = seconds

Figure 250-2 lists the conversions of velocities to pressures for typical wind speeds as calculated by the formulas listed above. If no portion of the structure or its supported facilities exceeds 60 ft. (18m) above ground or water level, the provisions of this rule are not required.

For Canadian customers, please refer to Annex A (page A212) for ***Figure 250-1CDN*** and ***Figure 250-2CDN***.

2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Structural Design

An installed cable tray system functions as a beam under a uniformly distributed load. The four basic beam configurations found in cable installations are simple, continuous, cantilever and fixed. Each is attached to the cable tray support in a different way.

Continuous Beam

Cable tray sections forming spans constitute a continuous beam configuration, the most common found in cable tray installations. This configuration exhibits characteristics of the simple beam and the fixed beam. For example, with loads applied to all spans at the same time, the ends spans function like simple beams, while the counterbalancing loads on either side of a support function like a fixed beam. As the number of spans increases, the continuous beam behaves increasingly like a fixed beam, and the maximum deflection continues to decrease. As this occurs, the system's load carrying capability increases.

Simple Beam

A straight section of cable tray supported at both ends but not fastened functions as a simple beam. Under a load, the tray will exhibit deflection. The load carrying capacity of a cable tray unit should be based on simple beam loading, since this type of loading occurs at run ends, offsets, etc., in any tray system. The NEMA/CSA Load Test is a simple beam, uniformly distributed load test, used primarily because it is easy to test and represents the worst case beam condition compared to continuous or fixed configurations. The only criterion for NEMA/CSA acceptance is the ability to support 150% of the rated load.

Fixed Beam

Like the cantilever beam, a fixed beam applies more to the cable tray supports than the tray itself, because both ends of a fixed beam are firmly attached to the supports. The rigid attachment prevents movement and increases load bearing ability.

Cantilever Beam

A cantilever beam has more to do with the cable tray supports than the tray. Attaching one end of a beam to a support while the other end remains unsupported, as when wall mounting a bracket, creates a cantilever beam configuration. Obviously, with one end unsupported, the load rating of a cantilever beam is significantly less than that of a simple beam.

Design Loadings

Basic cable trays are designed on the basis of maximum allowable stress for a certain section and material. The allowable cable load varies with the span, type and width of the tray.

2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Structural Design (cont'd)

Splicing

Since the need for a continuous system requires that siderails be spliced, splice plates must be both strong and easy to install. Thomas & Betts Aluminum Snap-In Splice Plate allows hands free installation of hardware for easier assembly. If practical, splices in a continuous span cable tray system should be installed at points of minimum stress. Unspliced straight sections should be used on all simple spans and on end spans of continuous span runs. Straight section lengths should be equal to or greater than the span length to ensure not more than one splice between supports.

Examples of splicing configurations are shown on page A27.

Basic Design Stresses

Allowable working stresses are the basis for all structural design. Since they must be of such magnitude as to assure the safety of the structure against failure, their selection is a matter of prime importance. In practice, a basic design stress is determined by dividing the strength of the material by a factor of safety. The determining factors in establishing a set of basic design stresses for a structure are therefore the mechanical properties of the materials and suitable factors of safety. Yield strength and ultimate strength are the mechanical properties most commonly considered to govern design. Values for these properties are readily obtainable. In determining the factor of safety, the designer must usually be guided by current practice—the "standard specifications" adopted by various technical societies and associations—and his or her own judgment and experience.

Factors of safety

Since a low value for the factor of safety results in economy of material, the designer seeks to establish a value as low as is practical, based on sound engineering judgment and experience. In making the determination, consideration of the following factors are highly important:

The accuracy with which the loads to represent service conditions are selected and assumed. If there is much doubt concerning these loads, the basic design stress will have to be more conservative than under conditions where the loads are known with considerable accuracy.

The accuracy with which the stresses in the members of a structure are calculated. Many approximations are used in structural design to estimate stress distribution. The choice of a factor of safety should be consistent with how accurate the analysis is. The more precise the method, the greater the allowable unit stress may be.

The significance of the structure being designed. The designer must keep in mind the relative importance of the structure and appraise the possibility of its failure causing significant property damage or loss of life. In this respect, the significance of the design will govern the choice of a factor of safety to a considerable extent.

The factors of safety used in designing most common types of structures are an outgrowth of the experience gained from many applications and tests—even failures. The trend in recent years has been to reduce the factors of safety in line with improved quality of material and increasing knowledge of stress distribution. Further reductions may be made in the future as greater accuracy in determinations becomes possible and practicable.

2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Structural Design (cont'd)

Application of design stresses to cable tray systems

A cable tray manufacturer must design standard products to accommodate the great variations encountered in applications. The factors affecting the selection of a suitable basic design stress necessarily result in more conservative stresses than might otherwise be required.

An engineer, who is in a position to determine specific stress requirements with a far greater degree of accuracy, may consider that the manufacturer's basic design stresses are too conservative for a particular project. Using individual experience and judgment, he or she would establish a new set of basic design stresses, selecting those safety factors that would result in a cable tray system best suited to meet the projected service conditions. With these stresses, the engineer can easily calculate an increase or decrease in the manufacturer's loading data, since the load is always in direct proportion to the stress.

The factors of safety used in determining maximum allowable stresses are as follows:

- **Aluminum Alloys**
  - a. For tension: the lower of 1/3 the minimum ultimate strength or 1/2 the minimum yield strength in tension.
  - b. For compression: the lower of 1/3 the minimum ultimate strength or 2/5 the minimum yield strength in compression.
  - c. For shear: the lower of 1/3 the minimum ultimate strength or 1/2 the minimum yield strength in shear.
- **For Hot Rolled Steels**
  - a. For tension: the lower of 1/2 the minimum ultimate strength or the minimum yield point in tension times .61.
  - b. For compression: the lower of 1/2 the minimum ultimate strength or the minimum yield point in compression times .61.
  - c. For shear: maximum stress not to exceed a value of 2/3 the basic design stress for tension.

Design Efficiency

A tray designed to perform its required function with the minimum weight (which facilitates installation) requires the material to be used in the most effective manner. The design requirements of siderails are different from those of rungs or ventilated bottom; fabricated tray allows the designer to use different shapes and thicknesses of metal to the best advantage. The strength of the siderail and rungs is increased by the proper use of metal in the high strength heat-treated aluminum or continuously rolled cold-worked steel sections.

2. Select the Tray Class / Load Capacity (Loading) (cont'd)

Loading

Load Diagrams for Beams

CANTILEVER BEAMS

Uniform Load

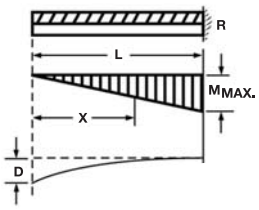
Reaction R = wL = W

Moment at any point: M = $\frac{wX^2}{2} = \frac{WX^2}{2L}$

Maximum moment Mmax = $\frac{wL^2}{2} = \frac{WL}{2}$

Maximum deflection, D = $\frac{wL^4}{8EI} = \frac{WL^3}{8EI}$

Maximum Shear, V = wL



Concentrated Load at Free End

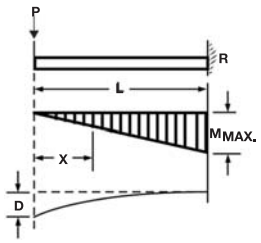
Reaction; R = P

Moment at any point: M = Px

Maximum moment, Mmax = PL

Maximum deflection, D = $\frac{PL^3}{3EI}$

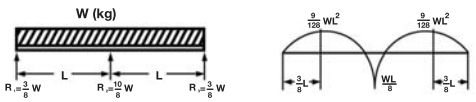
Maximum Shear, V = P



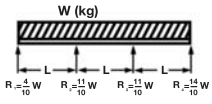
CONTINUOUS BEAMS

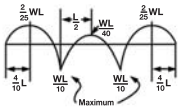
Two Span

W = wL

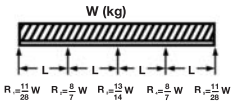


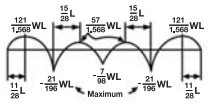
Three Span



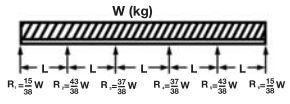


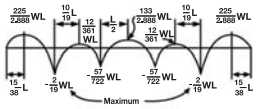
Four Span





Five Span





SIMPLE BEAMS

Uniform Load

w per unit of length, total load w

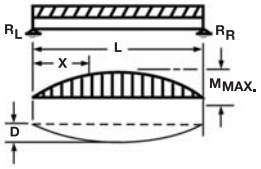
ReactionS: $R_L = R_R = \frac{WL}{2} = \frac{W}{2}$

Moment at any point: M = $\frac{wX(L-X)}{2} = \frac{WX(L-X)}{2L}$

Maximum moment, AT CENTER Mmax = $\frac{wL^2}{8} = \frac{WL}{8}$

Maximum deflection: D = $\frac{5wL^4}{384EI} = \frac{5WL^3}{384EI}$

Maximum Shear: V = $\frac{WL}{2}$



Concentrated Load AT CENTER

Reaction $R_L = R_R = \frac{P}{2}$

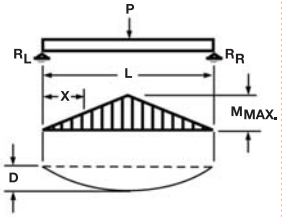
Moment at any point: X <= $\frac{L}{2}$, M = $\frac{PX}{2}$

X > = $\frac{L}{2}$, M = $\frac{P(L-X)}{2}$

Maximum moment, AT CENTER, Mmax = $\frac{PL}{4}$

Maximum deflection, D = $\frac{PL^3}{48EI}$

Maximum Shear, V = $\frac{P}{2}$



Concentrated Load at any Point

Reaction: $R_L = \frac{Pb}{L}$, $R_R = \frac{Pa}{L}$

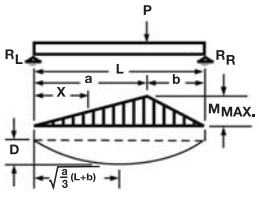
Moment at any point: X <= a, M = $R_L X = \frac{PbX}{L}$

X >= a, M = $R_R (L-X) = \frac{Pa(L-X)}{L}$

Maximum moment, At X = a, Mmax = $\frac{Pab}{L}$

Maximum deflection, D = $\frac{Pab(L+b)3a(L+b)}{27EIL}$

Maximum Shear, V = $\frac{Pa}{L}$, WHEN a > b



3. Select the Tray Type

Cable tray is available with three styles of bottom:

Ladder Cable Tray is a prefabricated structure consisting of two longitudinal siderails connected by individual transverse members.

Ventilated Cable Tray is a prefabricated structure consisting of a ventilated bottom within integral or separate longitudinal siderails, with no openings exceeding 4 in. in a longitudinal direction.

Solid Bottom Cable Tray is a prefabricated structure without openings in the bottom.

Ladder tray is most often used because of its cost-effectiveness. The designer has a choice of four nominal rung spacings: 6, 9, 12, and 18 inches. The greatest rung spacing compatible with an adequate cable bearing surface area should be selected. Heavy power cables often require greater cable bearing area due to the possibility of creep in the jacket material of the cable. If this is a concern, consult the cable manufacturer. This condition may require the use of ventilated tray, which also offers additional mechanical protection for the cables.

Local building codes may require totally enclosed cable tray systems under certain conditions. The designer should verify these before specifying the type of tray to be used.

4. Select the Tray Size

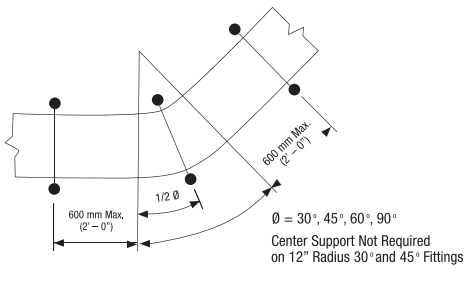
The width or height of a cable tray is a function of the number, size, spacing and weight of the cables in the tray. Available nominal widths are 6, 9, 12, 18, 24, 30 and 36 inches.

When specifying width, it is important to remember that the load rating does not change as the width increases. Even with six times the volume, a 36 in. wide tray cannot hold any more weight than a 6 in. wide tray. If the load rating of the tray permits, cable can be piled deeper in the tray. Most tray classes are available in a nominal 3-5/8, 4, 5, 6 and 7 inches (8 inch height also available as a special - see appendix). Cable ties or other spacing devices may be used to maintain the required air space between cables.

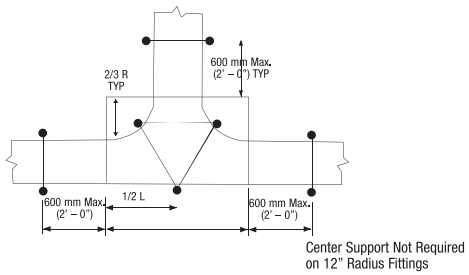
5. Select the Fittings

Fittings are used to change the size or direction of the cable tray. The most important decision to be made in fitting design concerns radius. The radius of the bend, whether horizontal or vertical, can be 12, 24, 36 or 48 in., or even greater on a custom basis. The selection requires a compromise with the considerations being available space, minimum bending radius of cables, ease of cable pulling, and cost. The typical radius is 24 in. Fittings are also available for 30°, 45°, 60°, and 90° angles. When a standard angle will not work, field fittings or adjustable elbows can be used. It may be necessary to add supports to the tray at these points. Refer to NEMA VE2 Installation Guidelines for suggested support locations. Note that fittings are not subject to NEMA/CSA load ratings.

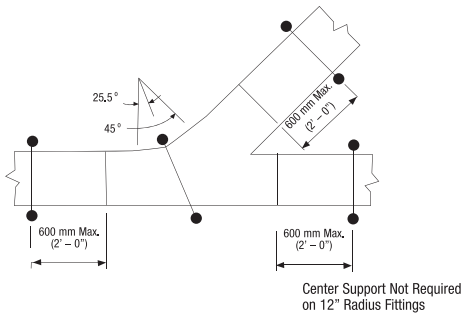
Support Locations for Fittings



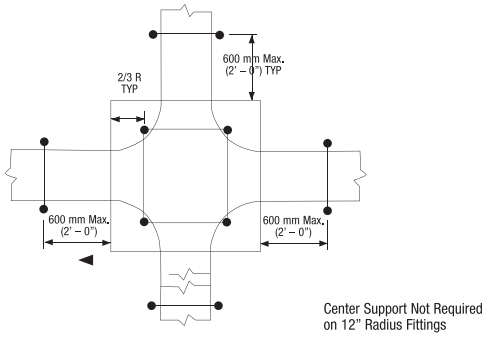
HORIZONTAL ELBOWS



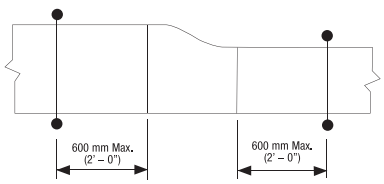
HORIZONTAL TEE



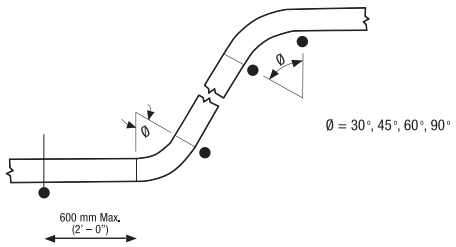
HORIZONTAL WYE



HORIZONTAL CROSS



REDUCER



VERTICAL ELBOWS (side view)

6. Consider Deflection

Deflection of the cable tray affects the appearance of an installation, but it is not a structural issue. In the case of nonmetallic cable tray, deflection may be affected by elevated temperatures.

The NEMA/CSA load test is a simple beam, uniformly distributed load test (see **Figure 1.2**). This type of test was initially selected because:

- It was easiest to test.
- It represents the worst case beam condition compared to continuous or fixed configurations. When consulting the manufacturer's catalogue for deflection information, the designer must verify whether the data shown represents simple or continuous beam deflection. If continuous beam deflection is shown, the calculation factor should be given.

NEMA/CSA has one criterion for acceptance under their load test: the ability to support 150% of the rated load.

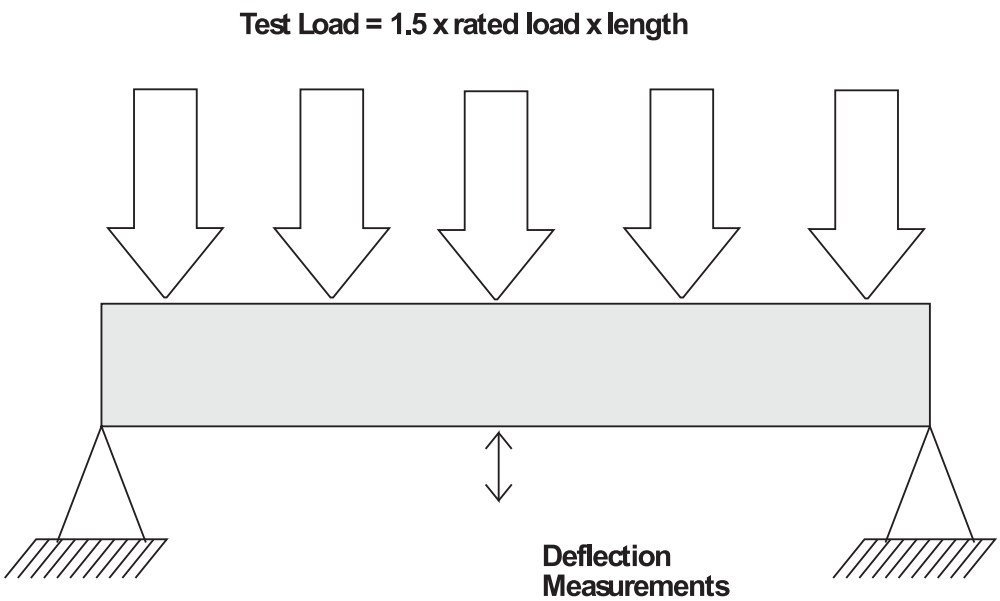


Figure 1.2

6. Consider Deflection (cont'd)

Simple Versus Continuous Beam Deflection

Theoretical maximum deflection for a simple beam, uniformly distributed load may be calculated as:

$$.0130 \frac{w L^4}{E I} \times 1728 = 22.5 \frac{w L^4}{E I}$$

Where:
- w = Load in lb./ft.
- L = Length in ft.
- E = Modulus of Elasticity lbf/in^2 (psi)
- I = Moment of Inertia in in^4

The maximum deflection calculation for a continuous beam of two spans with a uniformly distributed load is:

$$.00541 \frac{w L^4}{E I}$$

A continuous beam of two spans therefore has a theoretical maximum deflection of only 42% of its simple beam deflection. As the number of spans increases, the beam behaves increasingly like a fixed beam, and the maximum deflection continues to decrease. As this occurs, the system's load carrying capability increases.

Simple vs. Continuous Beam Deflection

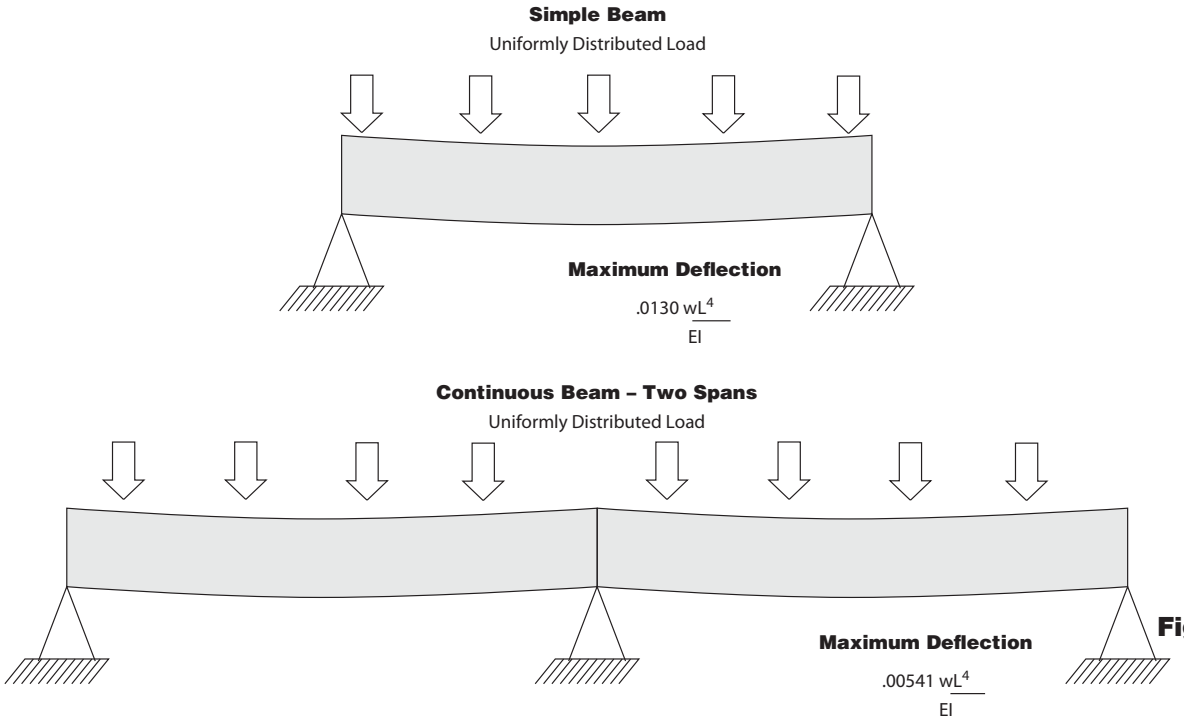


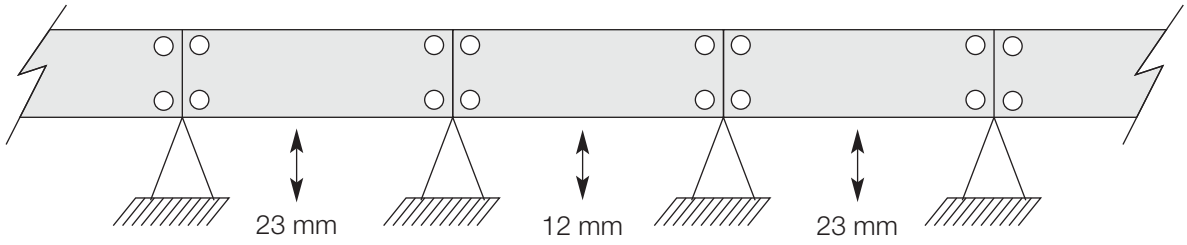
Figure 1.3

6. Consider Deflection (cont'd)

Location of Couplings

Since different bending moments are created in each span, there is no simple factor to approximate deflection as the number of spans increases. It is possible to calculate these deflections at any given point by using second integration of the basic differential equation for beams. Testing shows that the center span of a three-tray continous beam can deflect less than 10 % of its simple beam deflection.

Couplers at Supports - Not Recommended



Couplers at 1/4 Span From Supports - Ideal Layout

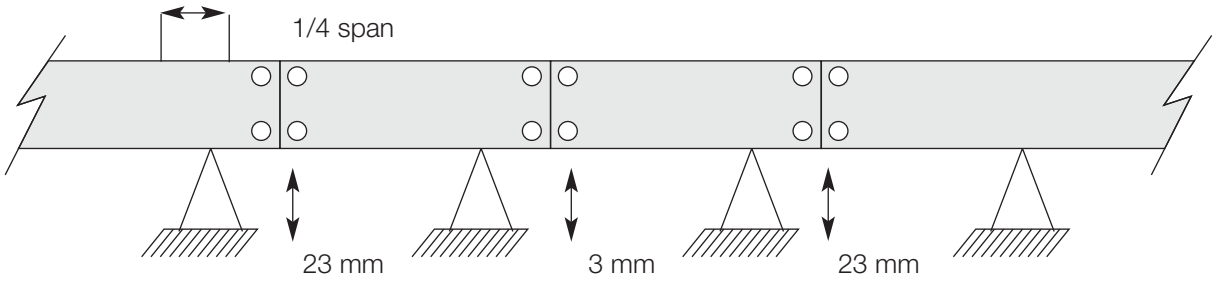


Figure 1.4

The support span should not be greater than the straight section length, to ensure no more than one splice is located between supports.

Location of Couplers. (see **Figure 1.4**) The location of the coupler dramatically affects the deflection of a cable tray system under equal loading conditions. Testing indicates that the maximum deflection of the center span of a three-span tray run can decrease four times if the couplers are moved to the one-quarter point from the above supports.
This can be a major concern for designers considering modular systems for tray and pipe racks.

7. Consider Thermal Expansion & Contraction

A cable tray system may be affected by thermal expansion and contraction, which must be taken into account during installation. To determine the number of expansion splice plates you need, decide the length of the straight cable tray runs and the total difference between the minimum winter and maximum summer temperatures. To function properly, expansion splice plates require accurate gap settings between trays. To find the gap (see **Figure 2**):

PLOT YOUR GAP SETTING

a. Locate the lowest metal temperature on low temperature line.
b. Locate the highest metal temperature on high temperature line.
c. Connect these two points.
d. Locate installation temperature and plot to high/low line. Drop plot to gap setting.

MAXIMUM DISTANCE BETWEEN EXPANSION JOINTS (For 1 in. Movement)

316 Stainless Steel	Temperature Differential		Steel		Aluminum	
	°C	°F	m	Feet	m	Feet
379	14	25	156	512	79	260
189	28	50	78	256	40	130
126	42	75	52	171	27	87
95	56	100	39	128	20	65
76	70	125	31	102	16	52
63	83	150	26	85	13	43
54	97	175	22	73	11	37

Note: Every pair of expansion splice plates requires two bonding jumpers for grounding continuity.

Table 1

The support nearest the midpoint between expansion splice plates should be anchored, allowing the tray longitudinal movement in both directions. All other support location should be secured by expansion guides. (See **Figure 3**)

Figure 2

Gap Setting of Expansion Splice Plate

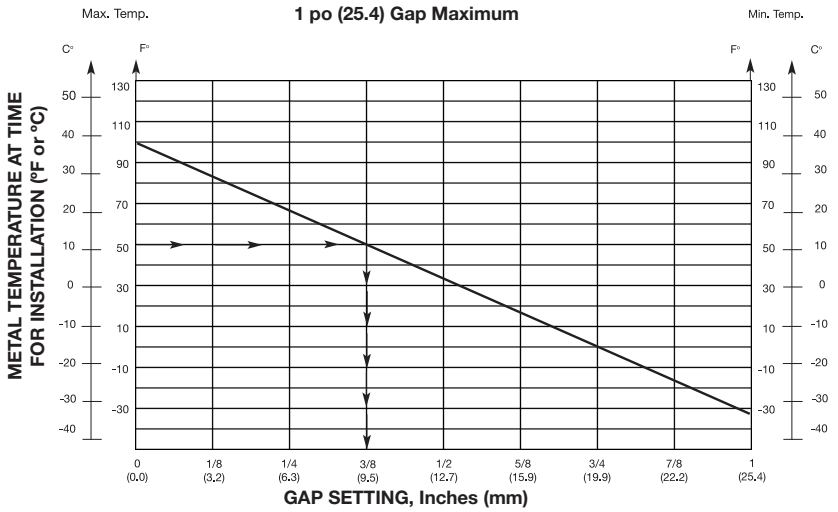
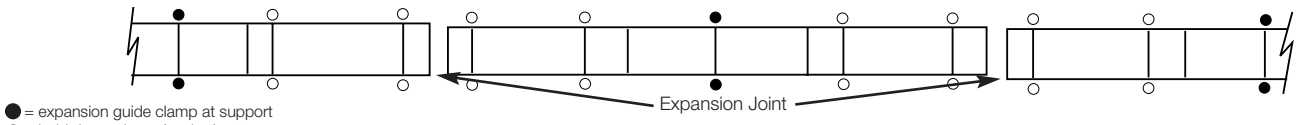


Figure 3

Typical Cable Tray Installation



● = expansion guide clamp at support
○ = hold down clamp (anchor) at support

8. Electrical Grounding Capacity

The National Electrical Code, Article 392-7 allows cable tray to be used as an equipment grounding conductor. All Thomas & Betts standard cable trays are classified by Underwriter's Laboratories per US NEC Table 392-7 based on their cross sectional area.

The corresponding cross-sectional area for each siderail design (2-siderails) is listed on the label. This cable tray label is attached to each straight section that is UL classified. Fittings are not subject to CSA or UL.

NEC TABLE 392.7 (A)
Metal Area Requirements for Cable Trays Used as Equipment Grounding Conductors

Maximum Fuse Ampere Rating, Circuit Breaker Ampere Trip Setting, or Circuit Breaker Protective Relay Ampere Trip Setting for Ground Fault Protection of any Cable Circuit in the Cable Tray System	Minimum Cross-Sectional Area of Metal* In Square Inches	
	Steel Cable Trays	Aluminum Cable Trays
60	0.20	0.20
100	0.40	0.20
200	0.70	0.20
400	1.00	0.40
600	1.50 **	0.40
1000	-	0.60
1200	-	1.00
1600	-	1.50
2000	-	2.00 **

For SI units: one square inch = 645 square millimeters.

* Total cross-sectional area of both side rails for ladder or trough-type cable trays: or the minimum cross-sectional area of metal in channel-type cable trays or cable trays of one-piece construction.

** Steel cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 600 amperes. Aluminum cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 2000 amperes.

For larger ampere ratings an additional grounding conductor must be used.

See pages A217 to A219 for grounding and bonding products.

For more information on grounding and bonding cable tray refer to section 4.7 of the NEMA VE 2-2006 Cable Tray installation guidelines.

Engineering Cable Tray Specification

Cable Tray

- Cable tray shall be by one manufacturer and shall consist of straight sections, fittings and accessories per NEMA VE1-2006/CSA C22.2 No. 126.1-02. Cable Tray must be listed by UL as equipment grounding conductor. There shall be no burrs, projections or sharp edges to damage the cable insulation.

Material

- Aluminum - All siderails, and rungs shall be of extruded aluminum type 6063-T6. Siderails shall be of I-beam construction.
- Pre-Galvanized Steel - All siderails and rungs shall be of steel conforming to the requirements of ASTM A653/A653M-06a with G90 coating thickness. Siderail shall be reinforced with flanges turned inward.
- Hot Dip Galvanized Steel - All siderails and rungs shall be made from steel conforming to the requirements of A1008/A1008M-07, SS grade 33, type 2 or A1011/A1011-06b SS, grade 33 and shall be hot dip galvanized after manufacture per ASTM A123 providing a minimum thickness of 1.50 oz per $ft.^2$
- Stainless Steel - All cable tray and accessories shall be of type AISI 316 stainless steel.

Tray Types

- Ladder - Ladder tray shall incorporate two siderails connected by lateral rungs. Rungs shall provide minimum 1 in. bearing surface and have slots perpendicular to the centerline of the rung on 1 in. centers for attachment of cable ties. Rungs shall also have an open slot to facilitate attachment of pipe straps and other accessories. Rungs shall be installed at 6, 9, 12 or 18 in. spacing. The rungs shall not be below the bottom of the siderail.
- Solid Bottom - Solid Bottom tray shall incorporate two siderails connected by rungs on 12 in. centers with a solid sheet applied below the rungs.
- Ventilated Trough - Ventilated trough tray shall incorporate two siderails connected by rungs at 4 in. spacing.

Dimensions

- Siderail Height - Siderails heights shall be 3-5/8, 4, 5, 6 and 7 in. minimum loading depths shall be 2-5/8, 3, 4, 5, and 6 in.
- Length - All cable tray straight sections shall be supplied in 12 ft., 24ft., 3m and 6m lengths.
- Width - Cable tray shall be supplied in 6, 9, 12, 18, 24, 30 and 36 in. widths as required.
- Radiused Fittings - For all fittings requiring a radius that radius shall be 12, 24, 36 and 48 in. and shall be measured to the nearest perpendicular surface.

Accessories

- Covers and Accessories - Covers shall be supplied to protect tray cable where needed. Appropriate holddowns shall be supplied to properly attach the covers to the tray.
- Splice Plates - Aluminum splice plates shall be designed to snap into tray siderail and shall be supplied with four square neck carriage bolts and hex nuts for attachment. Steel splice plates shall be supplied with four square neck carriage bolts and hex nuts for attachment.

Loading Capabilities

- Cable tray shall meet specified NEMA/CSA load ratings with safety factor of 1.5. The cable tray should also be able to support a 200 lb. concentrated load at midspan over and above stated cable load.

Design and Manufacture

- Cable tray design shall be that of T&B® Cable Tray Systems as manufactured by Thomas & Betts.

Engineering Cable Tray Specification (cont'd)

Selection of Thomas & Betts Series of Cable Tray

– **Please refer to Table 2 for Aluminum and Table 3 for Steel** – **(page A32)**

TABLE 1a

Span/Load Class Designation — USA
(See Clauses 4.8.1, 4.8.2 and 6.1.2 (c).)

LOAD kg/m (lb./ft.)	SPAN, m (ft.)				
	1.5 (5)	2.4 (8)	3.0 (10)	3.7 (12)	6.0 (20)
37 (25)	5AA	8AA	10AA	12AA	20AA
74 (50)	5A	8A	10A	12A	20A
112 (75)	–	8B		12B	20B
149 (100)	–	8C		12C	20C

Note: These ratings are also used in Mexico.

TABLE 1b

Span/Load Class Designation — CANADA
(See Clauses 4.8.1, 4.8.2 and 6.1.2 (c).)

LOAD kg/m (lb./ft.)	SPAN, m (ft.)						
	1.5 (5)	2	2.5	3.0 (10)	4.0	5.0	6.0 (20)
37 (25)				A			
45 (30)			A				
62 (42)		A					
67 (45)							D
82 (55)						D	
97 (65)				C			
99 (67)	A						
112 (75)							E
113 (76)					D		
119 (80)			C				
137 (92)						E	
164 (110)		C					
179 (120)				D			
189 (127)					E		
259 (174)	C						
299 (200)				E			

Note: 8A/B/C, 12A/B/C, 16A/B/C, and 20A/AA/B/C are the USA & Mexico designations. A, C, D, and E are the canadian designations.

Engineering Cable Tray Specification (cont'd)

TABLE 2 Aluminum Load / Span Class Designation

Siderail Height (in.)	Series	Load Depth (in.) Nominal	NEMA Class	CSA Class
4	AH04 AH14 AH24 AH34 AH44 AH54	3	8B 12A 12B 12C 20A 20B	– C/3m D/3m D/6m E/3m E/6m
5	AH25 AH35 AH45	4	12C 20A 20B	D/6m E/3m E/6m
6	AH06 AH16 AH26 AH36 AH46 AH56 AH66 AH76	5	12B 12C 20A 20B 20C 20C 20C –	C/3m D/6m E/3m E/6m – – – –
7	AH27 AH37 AH47	6	20B 20C 20C	E/6m – –
8	AH18	7	–	–

TABLE 3 Steel Load / Span Class Designation

Siderail Height (in.)	Series	Load Depth (in.) Nominal	NEMA Class	CSA Class
3-5/8	SH13/SP13/SS13	2-5/8	12A	C/3m
4	SH14/SP14/SS14 SH34/SP34/SS34	3	12C 20A	D/3m D/6m
5	SH25/SP25/SS25 SH45/SP45/SS45 SH55/SP55	4	20A 20B 20C	D/6m E/6m –
6	SH16/SP16/SS16 SH36/SP36/SS36 SH46/SP46/SS46	5	20A 20B 20C	D/6m E/6m –
7	SH37/SP37/SS37	6	20C	–

Table of Contents

Overview

Features

- Straight Siderail Design: Extruded I-beam
  Nominal Height 4 in. to 7 in.
  Loading Height 3 in. to 6 in.
- Snap-in splice plate connection
- Reverse position of every other rung for bottom or top mounting of cable ties
- Versatile continuous open slot rungs (strut profile)
- Exclusive Ty-Rap® cable tie slots (5/8 x 5/8) on one inch (1 in.) centers
- Extra wide rung design
- Four bolt connection
- Choice of two styles of fitting (U & H) siderails

Applications

Commercial

- Schools
- Hospitals
- Office Buildings
- Airports
- Casinos
- Stadiums

Industrial

- Petrochemical Plants
- Automotive Plants
- Paper Plants
- Food Processing
- Power Plants
- Refineries
- Manufacturing
- Mining

Accessories

- Each pair of splice plates comes with 3/8 in. mounting hardware
- Complete line of accessories and support systems

Material

- 6063 Aluminum Alloy

Compliance

- CSA, NEMA, NEC, UL

Load Ratings

- 1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

Tray Bottom Types
Ladder, Ventilated and Solid Trough

Ladder

— Extra wide aluminum rungs are welded to extruded aluminum I-beam siderails. Every second rung is reversed to allow for easy top or bottom mounting of cable ties and clamps. All edges and welds are rounded and smooth to prevent cable damage.

Ventilated

— A fabricated structure consisting of integral or separate longitudinal rails and a bottom having openings sufficient for the passage of air and utilizing 75% or less of the plan area of the surface to support cables. The maximum open spacings between cable support surfaces of transverse elements do not exceed 102 mm (4 in) in the direction parallel to the tray side rails (rung edge to rung edge).

Note: For load ratings of CSA Class C/NEMA 12C or less, please see alternative ventilated series of cable tray called – One-Piece found on pages A153 to A185 of the catalogue.

Solid Trough

— A fabricated structure consisting of a bottom without ventilation openings within separate longitudinal side rails.

Note : Fast and easy snap-in splice plates are provided with each straight section.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

Number Selection

Straight sections utilize a 7 in. splice plate and the fittings have tangents at the extremities.

How to Create Part Numbers

Thomas & Betts has created a numbering system based on the order of selection criteria. For example the first selection issue is the environment which the cable tray will be subjected to. This selection will lead to the best material for your application.
For complete details on cable tray selection process, see page A8 in the technical section.

Methods

1. Select the material best suited to your environment. Refer to technical section page A8.
2. Determine the tray series using the NEMA/CSA Load/Span Designations page A16, and Sizing Cable Tray page A23.
3. Select nominal depth and width of tray based on Cable Loading. See Sizing Cable Tray page A23.
4. Select the bottom type based on cables and spacing requirements.
5. The last number is the length of the cable tray in meters or inches.

Straight Section Number Selection

(AH1-6) 24-L09-144

Material	Style	Series	Siderail Height (in.)	Width	Bottom Type	Length
A • Aluminum	**H** • H-Beam	***0** • Series 0 ****1** • Series 1 **2** • Series 2 **3** • Series 3 **4** • Series 4 **5** • Series 5	**4**	***** **06** • (6 in.) **09** • (9 in.) **12** • (12 in.) **18** • (18 in.) **24** • (24 in.) **30** • (30 in.) **36** • (36 in.)	**L06** • 6 in. rung spacing **L09** • 9 in. rung spacing **L12** • 12 in. rung spacing ****V** • Ventilated **S** • Solid Trough	**144** • (12 ft.) **288** • (24 ft.) **3** • (3 meters) **6** • (6 meters) †**360** • (30 ft.)
Prefix		**2** • Series 2 **3** • Series 3 **4** • Series 4	**5**			
		* **0** • Series 0 **1** • Series 1 **2** • Series 2 **3** • Series 3 **4** • Series 4 **5** • Series 5 **6** • Series 6 **7** • Series 7	**6**			
		2 • Series 2 **3** • Series 3 **4** • Series 4	**7**			
		1 • Series 1	**8**			

* This series is not available in 288 in. or 6 meter lengths.
** Fittings not available for 8 in. siderail Series 1.
*** For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.
† For Series 76, 47 and 18 only.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

4 in. Straight Sections / Series 1-4

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH1-4)-24-L09-144

Prefix	Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
	A • Aluminum	**H** • H-Beam	* **1** • Series 1	**4** • (4 in.)	**06** • (6 in.) **09** • (9 in.) **12** • (12 in.) **18** • (18 in.) **24** • (24 in.) **30** • (30 in.) **36** • (36 in.)	**L06** • 6 in. rung spacing **L09** • 9 in. rung spacing **L12** • 12 in. rung spacing ** **V** • Ventilated **S** • Solid Trough	**144** • (12 ft.) **288** • (24 ft.) **3** • (3 meters) **6** • (6 meters)

* Series 1 is not available in 288 in., or 6 meter lengths.

** For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

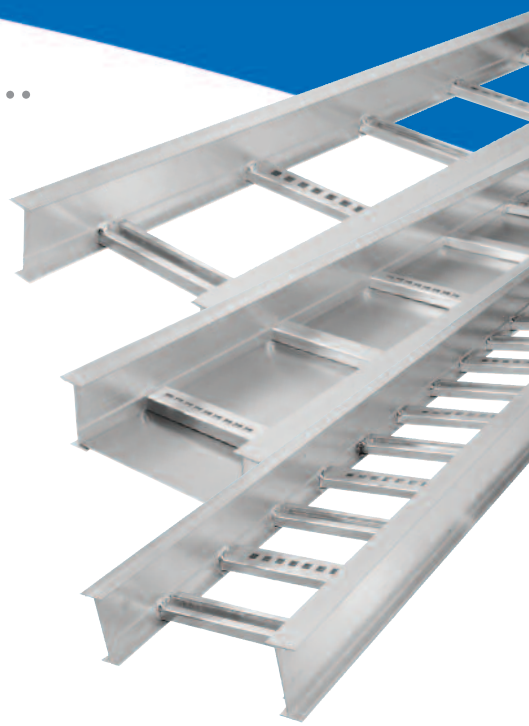
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH1-4	Load (lb./ft.)	239	134	86	60	–	–	–	–
	Deflection (in.)	0.318	0.565	0.884	1.272	–	–	–	–
	Deflection Factor	0.001	0.004	0.010	0.021	–	–	–	–

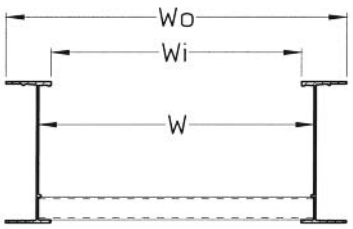
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

4 in. Straight Sections / Series 1-4

Ladder, Ventilated and Solid Trough



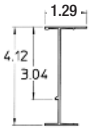


	AH1-4	
W (in.)	**Wo (in.)**	**Wi (in.)**
6	7.46	4.88
9	10.46	7.88
12	13.46	10.88
18	19.46	16.88
24	25.46	22.88
30	31.46	28.88
36	37.46	34.88

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH1-4		Ix = 2.19 in^4 Sx = 1.05 in^3 Area = 0.906 in^2	**12A, 8C**	**C/3 m**	UL Cross Sectional Area : 0.60 in^2

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

4 in. Straight Sections / Series 3-4, 5-4

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH5-4)-24-L09-144

Prefix	Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
	A • Aluminum	**H** • H-Beam	**3** • Series 3 **5** • Series 5	**4** • (4 in.)	**06** • (6 in.) **09** • (9 in.) **12** • (12 in.) **18** • (18 in.) **24** • (24 in.) **30** • (30 in.) **36** • (36 in.)	**L06** • 6 in. rung spacing **L09** • 9 in. rung spacing **L12** • 12 in. rung spacing **V** • Ventilated **S** • Solid Trough	**144** • (12 ft.) **288** • (24 ft.) **3** • (3 meters) **6** • (6 meters)

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

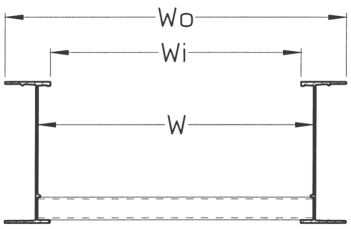
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH3-4	Load (lb./ft.)	522	294	188	131	96	73	58	47
	Deflection (in.)	0.477	0.849	1.326	1.909	2.599	3.395	4.296	5.304
	Deflection Factor	0.001	0.003	0.007	0.015	0.027	0.046	0.074	0.113
AH5-4	Load (lb./ft.)	867	488	312	217	159	122	96	78
	Deflection (in.)	0.505	0.898	1.403	2.021	2.751	3.593	4.547	5.614
	Deflection Factor	0.001	0.002	0.004	0.009	0.017	0.029	0.047	0.072

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

4 in. Straight Sections / Series 3-4, 5-4

Ladder, Ventilated and Solid Trough

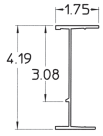
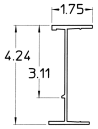


	AH3-4		AH5-4	
W (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)
6	8.38	4.88	8.38	4.88
9	11.38	7.88	11.38	7.88
12	14.38	10.88	14.38	10.88
18	20.38	16.88	20.38	16.88
24	26.38	22.88	26.38	22.88
30	32.38	28.88	32.38	28.88
36	38.38	34.88	38.38	34.88

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH3-4		Ix = 3.34 in^4 Sx = 1.50 in^3 Area = 1.28 in^2	**12C,16B**	**D/6 m**	UL Cross Sectional Area : 1.00 in^2
AH5-4		Ix = 5.32 in^4 Sx = 2.36 in^3 Area = 1.93 in^2	**20B,16C**	**E/6 m**	UL Cross Sectional Area : 1.50 in^2

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

5 in. Straight Sections / Series 2-5, 4-5

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH2-5)-24-L09-144

Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
A • Aluminum	**H** • H-Beam	**2** • Series 2	**5** • (5 in.)	**06** • (6 in.)	**L06** • 6 in. rung spacing	**144** • (12 ft.)
		4 • Series 4		**09** • (9 in.)	**L09** • 9 in. rung spacing	**288** • (24 ft.)
				12 • (12 in.)	**L12** • 12 in. rung spacing	**3** • (3 meters)
				18 • (18 in.)	**V** • Ventilated	**6** • (6 meters)
				24 • (24 in.)	**S** • Solid Trough	
				30 • (30 in.)		
				36 • (36 in.)		
Prefix						

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

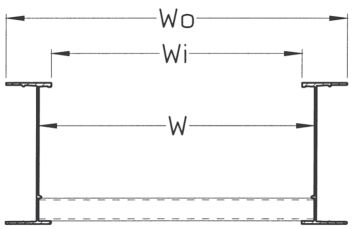
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH2-5	Load (lb./ft.)	511	288	184	128	94	72	57	46
	Deflection (in.)	0.328	0.584	0.912	1.313	1.787	2.334	2.955	3.648
	Deflection Factor	0.001	0.002	0.005	0.010	0.019	0.032	0.052	0.079
AH4-5	Load (lb./ft.)	844	475	304	211	155	119	94	76
	Deflection (in.)	0.337	0.599	0.936	1.348	1.834	2.396	3.033	3.744
	Deflection Factor	0.0004	0.001	0.003	0.006	0.012	0.020	0.032	0.049

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

5 in. Straight Sections / Series 2-5, 4-5

Ladder, Ventilated and Solid Trough

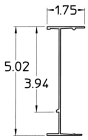
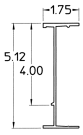


	AH2-5		AH4-5	
W (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)
6	8.39	4.89	8.45	4.95
9	11.39	7.89	11.45	7.95
12	14.39	10.89	14.45	10.95
18	20.39	16.89	20.45	16.95
24	26.39	22.89	26.45	22.95
30	32.39	28.89	32.45	28.95
36	38.39	34.89	38.45	34.95

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH2-5		Ix = 5.236 in⁴ Sx = 1.90 in³ Area = 1.38 in²	**12C,16A**	**D/6 m**	UL Cross Sectional Area : 1.00 in²
AH4-5		Ix = 7.654 in⁴ Sx = 2.78 in³ Area = 1.95 in²	**20B,16C**	**E/6 m**	UL Cross Sectional Area : 1.50 in²

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

6 in. Straight Sections / Series 1-6, 3-6

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH2-6)-24-L09-144

Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
A • Aluminum	**H** • H-Beam	**1** • Series 1	**6** • (6 in.)	**06** • (6 in.)	**L06** • 6 in. rung spacing	**144** • (12 ft.)
		3 • Series 3		**09** • (9 in.)	**L09** • 9 in. rung spacing	**288** • (24 ft.)
				12 • (12 in.)	**L12** • 12 in. rung spacing	**3** • (3 meters)
				18 • (18 in.)	* **V** • Ventilated	**6** • (6 meters)
				24 • (24 in.)	**S** • Solid Trough	
				30 • (30 in.)		
Prefix				**36** • (36 in.)		

* For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

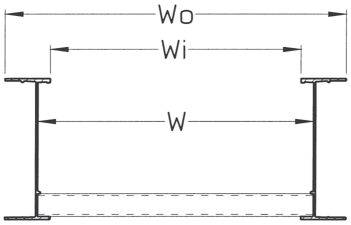
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH1-6	Load (lb./ft.)	511	288	184	128	94	71	56	46
	Deflection (in.)	0.191	0.340	0.531	0.764	1.706	1.251	1.583	2.123
	Deflection Factor	0.0004	0.001	0.003	0.006	0.018	0.018	0.028	0.046
AH3-6	Load (lb./ft.)	889	500	320	222	163	125	99	80
	Deflection (in.)	0.199	0.353	0.552	0.794	1.061	1.386	1.755	2.166
	Deflection Factor	0.0002	0.001	0.002	0.004	0.006	0.011	0.018	0.027

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

6 in. Straight Sections / Series 1-6, 3-6

Ladder, Ventilated and Solid Trough

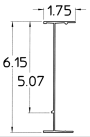
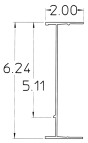


	AH1-6		AH3-6	
W (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)
6	8.37	4.87	8.89	4.89
9	11.37	7.87	11.89	7.89
12	14.37	10.87	14.89	10.89
18	20.37	16.87	20.89	16.89
24	26.37	22.87	26.89	22.89
30	32.37	28.87	32.89	28.89
36	38.37	34.87	38.89	34.89

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH1-6		Ix = 8.472 in^4 Sx = 2.59 in^3 Area = 1.55 in^2	**12C, 16A**	**D/6 M**	UL Cross Sectional Area : 1.00 in^2
AH3-6		Ix = 13.296 in^4 Sx = 3.95 in^3 Area = 2.16 in^2	**20B, 16C**	**E/6 M**	UL Cross Sectional Area : 2.00 in^2

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

6 in. Straight Sections / Series 4-6, 5-6, 6-6, 7-6

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH5-6)-24-L09-144

Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
A • Aluminum	**H** • H-Beam	**4** • Series 4	**6** • (6 in.)	**06** • (6 in.)	**L06** • 6 in. rung spacing	**144** • (12 ft.)
		5 • Series 5		**09** • (9 in.)	**L09** • 9 in. rung spacing	**288** • (24 ft.)
		6 • Series 6		**12** • (12 in.)	**L12** • 12 in. rung spacing	**3** • (3 meters)
		7 • Series 7		**18** • (18 in.)	**V** • Ventilated	**6** • (6 meters)
				24 • (24 in.)	**S** • Solid Trough	
				30 • (30 in.)		
				36 • (36 in.)		
Prefix						

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH4-6	Load (lb./ft.)	1133	638	408	283	208	159	126	102
	Deflection (in.)	0.238	0.424	0.662	0.954	1.298	1.696	2.146	2.649
	Deflection Factor	0.0002	0.001	0.002	0.003	0.006	0.011	0.017	0.026
AH5-6	Load (lb./ft.)	1334	756	484	336	247	189	149	121
	Deflection (in.)	0.249	0.443	0.693	0.997	1.358	1.773	2.244	2.765
	Deflection Factor	0.0002	0.001	0.001	0.003	0.005	0.009	0.015	0.023
AH6-6	Load (lb./ft.)	1889	1063	680	472	347	266	210	170
	Deflection (in.)	0.292	0.520	0.812	1.169	1.592	2.079	2.631	3.249
	Deflection Factor	0.0002	0.0004	0.001	0.002	0.005	0.008	0.012	0.019

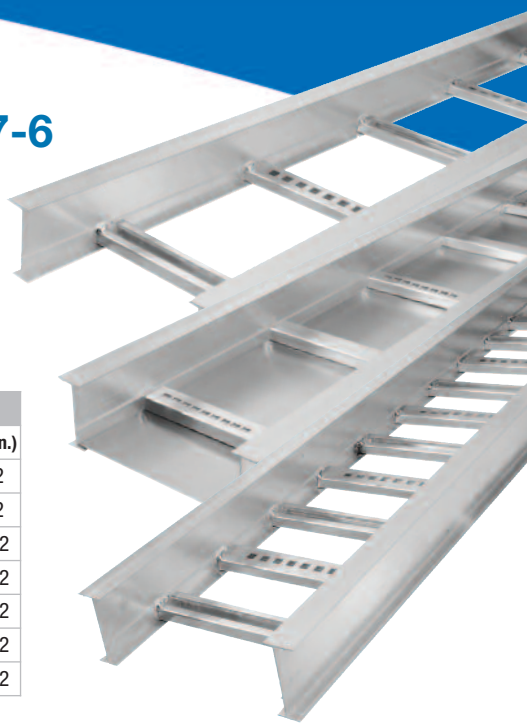
		Support Span (Feet)						
Series		18	20	22	24	26	28	30
AH7-6	Load (lb./ft.)	208	169	140	117	100	86	75
	Deflection (in.)	2.241	2.766	3.347	3.984	4.675	5.422	6.224
	Deflection Factor	0.011	0.016	0.024	0.034	0.047	0.063	0.083

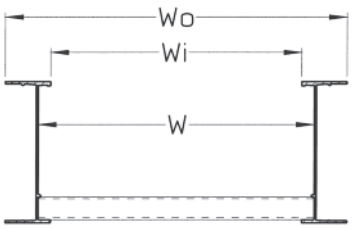
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

6 in. Straight Sections / Series 4-6, 5-6, 6-6, 7-6

Ladder, Ventilated and Solid Trough



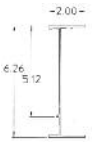
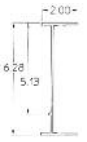
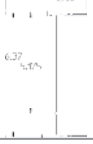


	AH4-6		AH5-6		AH6-6		AH7-6	
W (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)	Wo (in.)	Wi (in.)
6	8.90	4.90	8.93	4.93	9.01	5.01	8.92	4.92
9	11.90	7.90	11.93	7.93	12.01	8.01	11.92	7.92
12	14.90	10.90	14.93	10.93	15.01	11.01	14.92	10.92
18	20.90	16.90	20.93	16.93	21.01	17.01	20.92	16.92
24	26.90	22.90	26.93	22.93	27.01	23.01	26.92	22.92
30	32.90	28.90	32.93	28.93	33.01	29.01	32.92	28.92
36	38.90	34.90	38.93	34.93	39.01	35.01	33.92	34.92

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH4-6		Ix = 13.86 in⁴ Sx = 4.07 in³ Area = 2.32 in²	**20C**	Exceeds **E/6M**	UL Cross Sectional Area : 2.00 in²
AH5-6		Ix = 15.72 in⁴ Sx = 4.66 in³ Area = 2.68 in²	Exceeds **20C**	Exceeds **E/6M**	UL Cross Sectional Area : 2.00 in²
AH6-6		Ix = 18.84 in⁴ Sx = 5.51 in³ Area = 3.25 in²	Exceeds **20C**	Exceeds **E/6M**	UL Cross Sectional Area : 2.00 in²
AH7-6		Ix = 21.96 in⁴ Sx = 6.38 in³ Area = 3.82 in²	Exceeds **20C**	Exceeds **E/6M**	UL Cross Sectional Area : 2.00 in²

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

7 in. Straight Sections / Series 3-7

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

(AH3-7)-24-L09-144

Prefix	Material	Style	Series	Siderail Depth	Width	Bottom Type	Length
	A • Aluminum	**H** • H-Beam	**1** • Serie 1 **3** • Serie 3 **4** • Serie 4	**7** • (7 in.)	**06** • (6 in.) **09** • (9 in.) **12** • (12 in.) **18** • (18 in.) **24** • (24 in.) **30** • (30 in.) **36** • (36 in.)	**L06** • 6 in. rung spacing **L09** • 9 in. rung spacing **L12** • 12 in. rung spacing **V** • Ventilated **S** • Solid Trough	**144** • (12 ft.) **288** • (24 ft.) **3** • (3 meters) **6** • (6 meters)

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.

For Fittings consult pages A50 to A87.

		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
AH3-7	Load (lb./ft.)	1456	819	524	364	267	205	162	131
	Deflection (in.)	0.168	0.298	0.466	0.671	0.913	1.192	1.509	1.863
	Deflection Factor	0.0001	0.0004	0.001	0.002	0.003	0.006	0.009	0.014

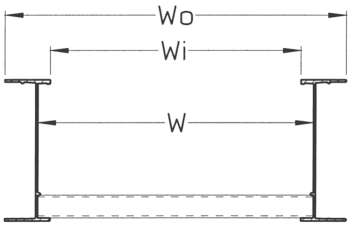
		Support Span (Feet)						
Series		18	20	22	24	26	28	30
AH4-7	Load (lb./ft.)	292	236	195	164	140	121	105
	Deflection (in.)	1.869	2.308	2.793	3.324	3.901	4.524	5.193
	Deflection Factor	0.006	0.010	0.014	0.020	0.028	0.038	0.049
AH1-8	Load (lb./ft.)	522	423	350	294	250	216	188
	Deflection (in.)	2.113	2.609	3.157	3.757	4.409	5.114	5.871
	Deflection Factor	0.004	0.006	0.009	0.013	0.018	0.024	0.031

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Straight Lengths

7 in. Straight Sections / Series 3-7

Ladder, Ventilated and Solid Trough

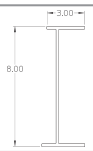
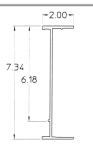
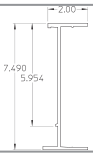


	AH3-7	
W (in.)	Wo (in.)	Wi (in.)
6	9.00	5.00
9	12.00	8.00
12	15.00	11.00
18	21.00	17.00
24	27.00	23.00
30	33.00	29.00
36	39.00	35.00

Technical Specifications

LOAD RATINGS

1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		UL
			NEMA	CSA	
AH1-8		Ix = 58.36 in⁴ Sx = 13.37 in³ Area = 5.86 in²	Exceeds **20C**	Exceeds **E/6 M**	UL Cross Sectional Area : 2.00 in²
AH3-7		Ix = 25.32 in⁴ Sx = 6.35 in³ Area = 3.30 in²	Exceeds **20C**	Exceeds **E/6 M**	UL Cross Sectional Area : 2.00 in²
AH4-7		Ix = 36.85 in⁴ Sx = 9.08 in³ Area = 4.65 in²	Exceeds **20C**	Exceeds **E/6 M**	UL Cross Sectional Area : 2.00 in²

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

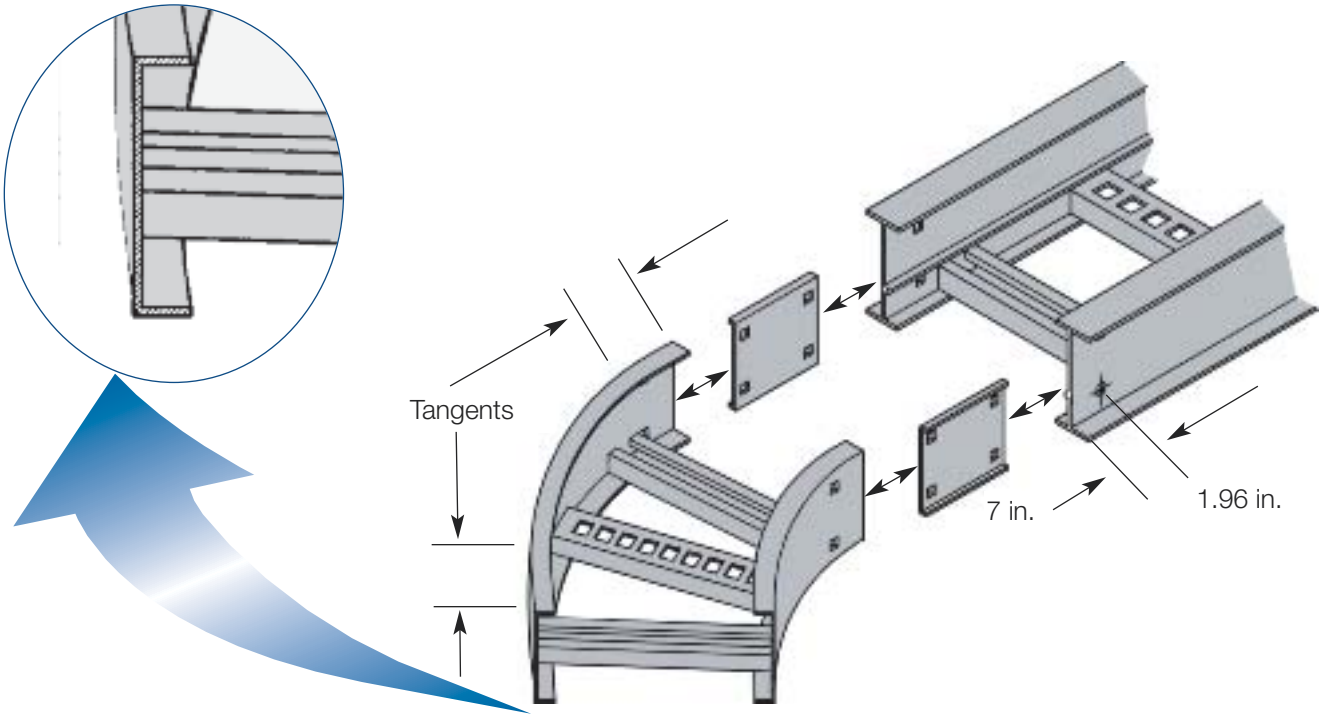
Explaining the Fitting Styles

U-Style

U-Style features fittings constructed with side rail flanges on the inside only (U-Beam)

Features & Benefits

- U-Style and H-Style are interchangeable
- Lowest purchase price
- Easy to install
- Occupies less space in areas where space is restrained
- Easy to align straights
- Splice plate holds components together while hardware is inserted
- Lighter fittings are easy to handle
- Functional design
- Tangents on fittings
- 7 in. Snap-in splice plate



T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

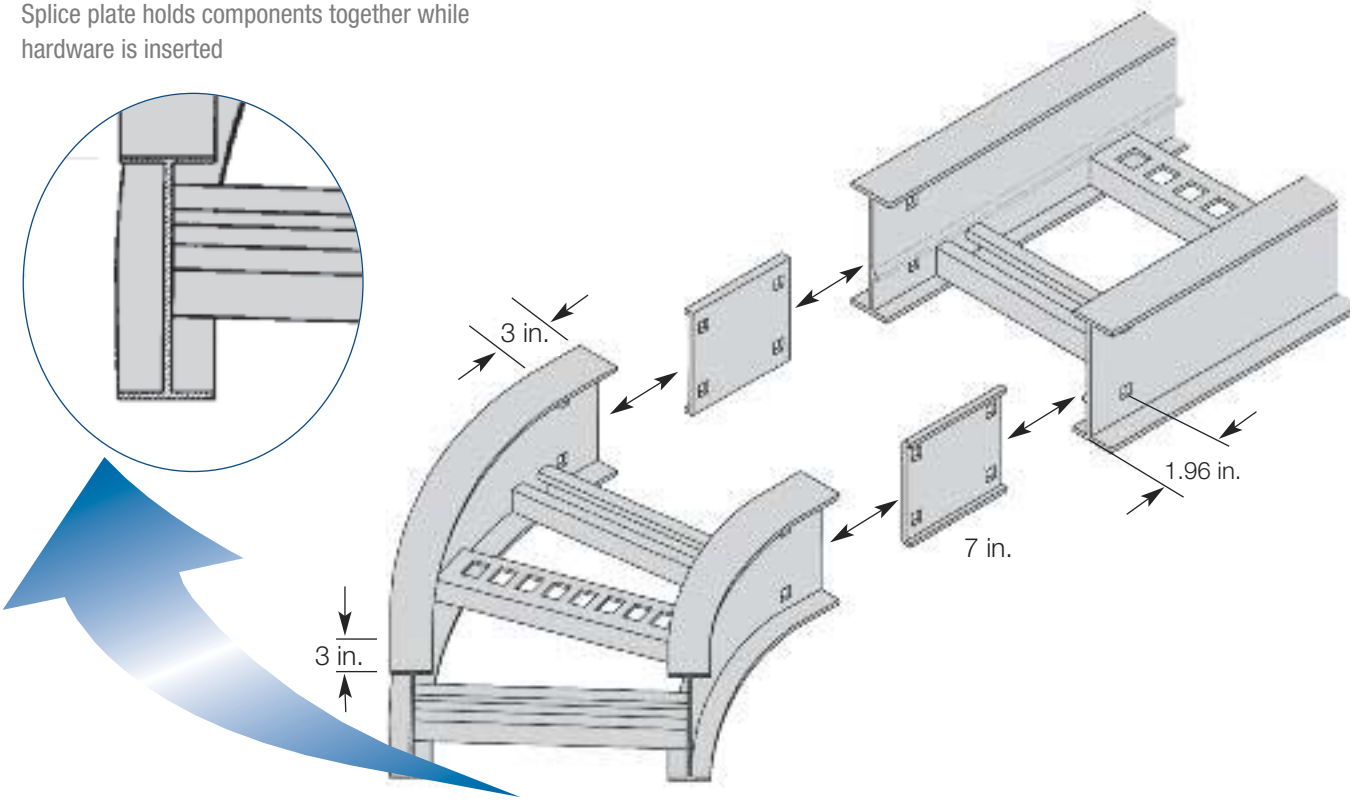
Explaining the Fitting Styles

H-Style

H-Style features fittings constructed with side rail having inner and outer flanges (H-Beam)

Features & Benefits

- Improved system rigidity
- Improved aesthetics and customer appeal
- Easy to install
- Easy to align straights and fittings
- Splice plate holds components together while hardware is inserted
- Premium design
- 3 in. tangents on fittings
- 7 in. Snap-in splice plate



T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

Horizontal Fittings Selection

Fittings in a cable tray system are required to change cable routing direction and to join straight sections and other fittings.

This step of the cable tray selection process requires that the specifier chooses between two distinct styles U and H.

Note: The U-Style and H-Style systems are interchangeable.

U-Style Fitting

A U-shaped extrusion forms the fitting siderail.

U-Style fittings utilize a 7 in. splice plate and the fittings have tangents at the extremities.

This style offers maximum quality versus cost ratios of the installation.

H-Style Fitting

An H-shaped extrusion forms the fitting siderail.

H-Style fittings utilize a 7 in. splice plate and the fittings have 3 in. tangents at the extremities.

This style offers enhanced aesthetics to the end-user and increased system rigidity.

Fitting Number Selection

(AUF-6)-24-L-VO60-12

Prefix	Fitting Material	Fitting Style	Siderail Depth	Width	Bottom Type	Fitting Type	**Angle	†Nominal Radius
	A • Aluminum	**UF** • U-Beam	**4** • (4 in.)	**06** • (6 in.)	* **L** • Ladder	**HB** • Horizontal Bend	**30** • (30°)	**12** • (12 in.)
		HF • H-Beam	**5** • (5 in.)	**09** • (9 in.)	*** **V** • Ventilated	**HT** • Horizontal Tee	**45** • (45°)	**24** • (24 in.)
			6 • (6 in.)	**12** • (12 in.)	**** **S** • Solid Trough	**HX** • Horizontal Cross	**60** • (60°)	**36** • (36 in.)
			7 • (7 in.)	**18** • (18 in.)		**VI** • Vertical Inside Bend	**90** • (90°)	**48** • (48 in.)
				24 • (24 in.)		**VO** • Vertical Outside Bend		
				30 • (30 in.)		**VTD** • Vertical Tee Down		
				36 • (36 in.)		**VTU** • Vertical Tee Up		
						HYR • Horizontal Wye Right		
						HYL • Horizontal Wye Left		
						RT • Horizontal Reducing Tee		
						ET • Horizontal Expanding Tee		
						EX • Horiz. Expand Cross		
						HLR • Horizontal Left Reducer		
						HSR • Horizontal Straight Reducer		
						HRR • Horizontal Right Reducer		
						CS • Cable Support Fitting		

** Angle is required for HB, VI, VO only.

† Radius is not required for the following Fitting Types: **HYR, HYL, HLR, HRR, HSR**

* **Manufactured with 9 in. rung spacing measured at the center line of fitting.**

*** **Manufactured with 4 in. edge to edge rung spacing measured at the center line of fitting.**

**** **Manufactured with flat sheet inserted under rungs with 9 in. rung spacing measured at the center line of fitting.**

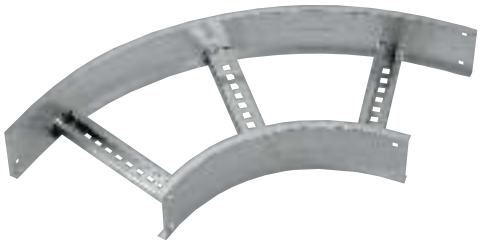
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

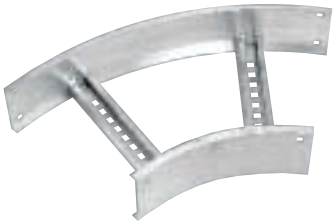
Horizontal Fittings Selection Guide

Horizontal Bends

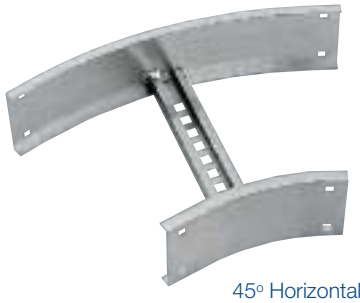
U-Style



Page A60 — 90° Horizontal Bend



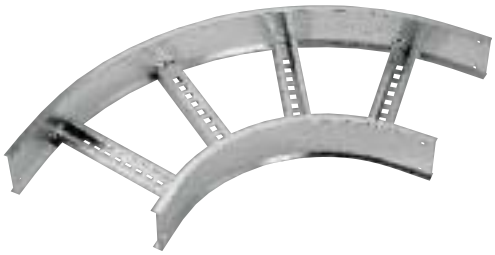
Page A60 — 60° Horizontal Bend



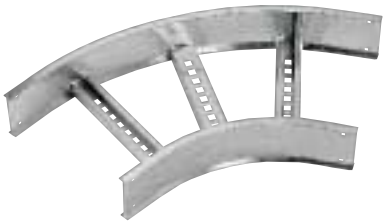
Page A62 — 45° Horizontal Bend

Page A62 — 30° Horizontal Bend

H-Style



Page A61 — 90° Horizontal Bend



Page A61 — 60° Horizontal Bend

Page A63 — 45° Horizontal Bend

Page A63 — 30° Horizontal Bend

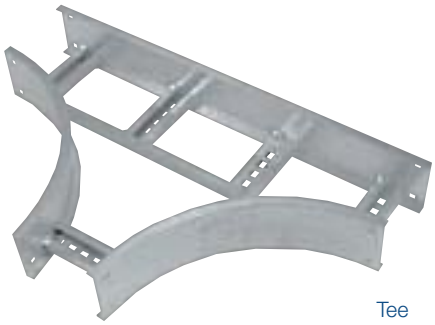
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

Horizontal Fittings Selection Guide

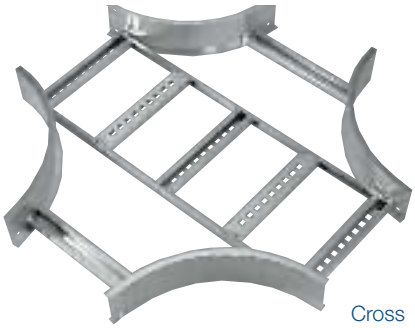
Horizontal Tees, Crosses

U-Style



Tee

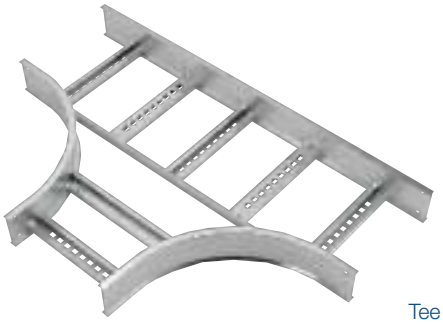
Page A64



Cross

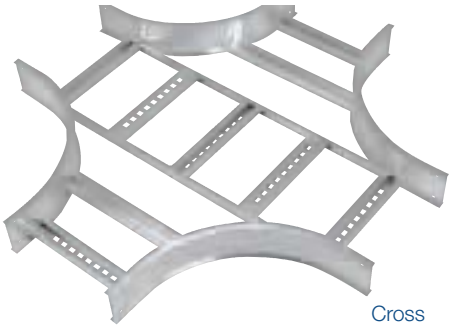
Page A64

H-Style



Tee

Page A65

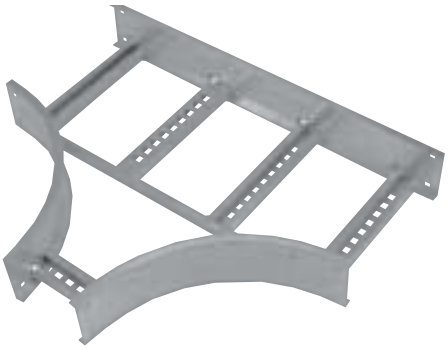


Cross

Page A65

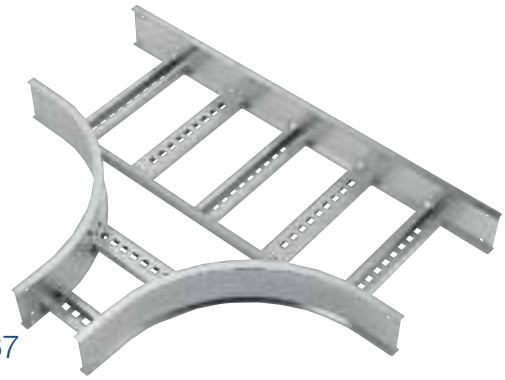
Horizontal Reducing Tees

U-Style



Page A66

H-Style



Page A67

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

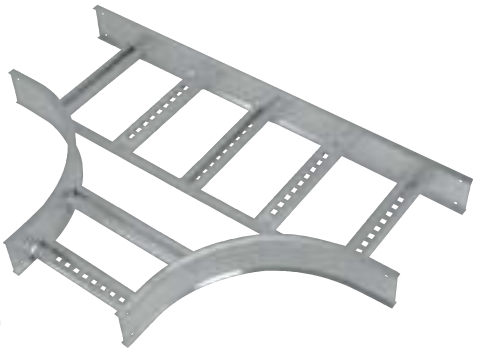
Horizontal Fittings Selection Guide

Horizontal Expanding Tees

U-Style

Page A68

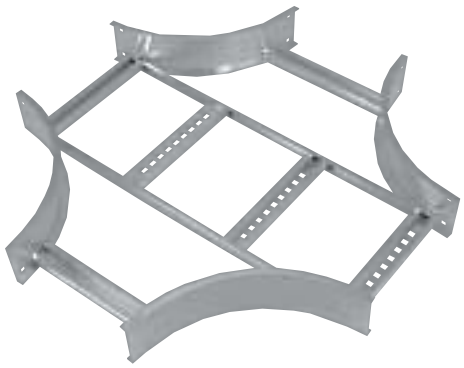
H-Style



Page A69

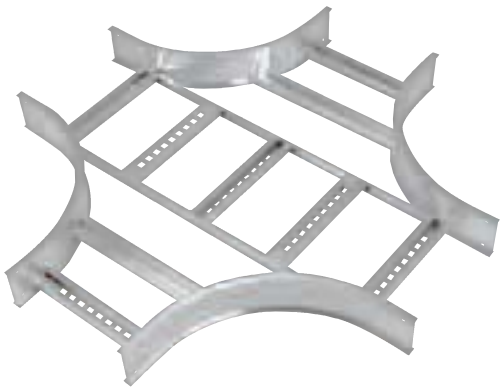
Horizontal Expanding Crosses

U-Style



Page A70

H-Style



Page A71

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

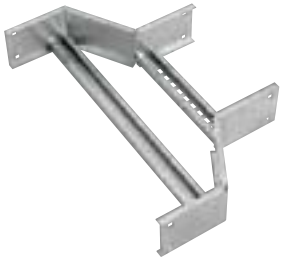
Vertical Fittings Selection Guide

Reducers

U-Style

Offset Reducer - Right

Page A72



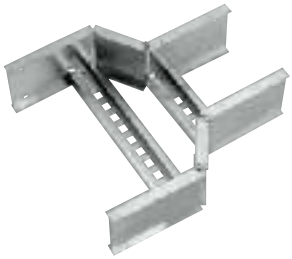
Reducer - Straight

Offset Reducer - Left

H-Style

Offset Reducer - Right

Page A73

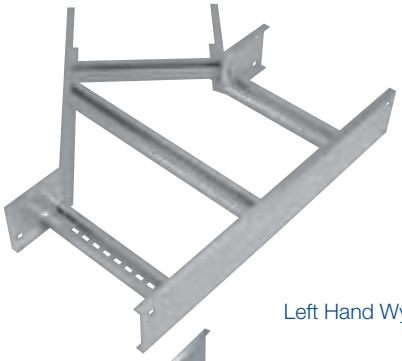


Reducer - Straight

Offset Reducer - Left

Wyes

U-Style



Left Hand Wye

Page A74

Right Hand Wye

Page A74

H-Style

Left Hand Wye

Page A75

Right Hand Wye

Page A75

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

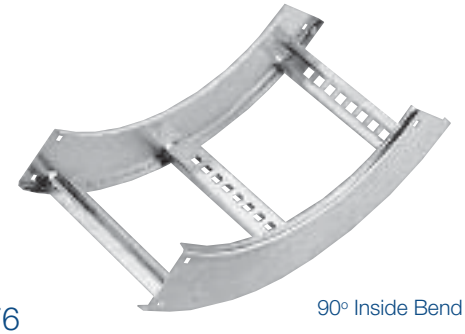
Fittings

Vertical Fittings Selection Guide

U-Style

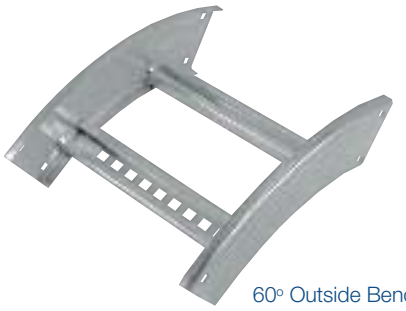
90° Outside Bend

Page A76



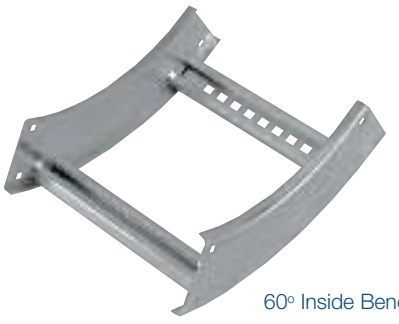
90° Inside Bend

Page A76



60° Outside Bend

Page A78



60° Inside Bend

Page A78

Vertical Bends

H-Style

90° Outside Bend

Page A77

90° Inside Bend

Page A77

60° Outside Bend

Page A79

60° Inside Bend

Page A79

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

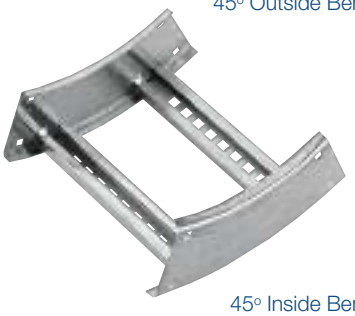
Fittings

Vertical Fittings Selection Guide

Vertical Bends (Cont'd)

U-Style

Page A80 — 45° Outside Bend

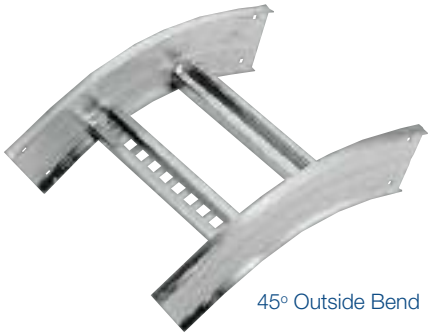


Page A80 — 45° Inside Bend

Page A82 — 30° Outside Bend

Page A82 — 30° Inside Bend

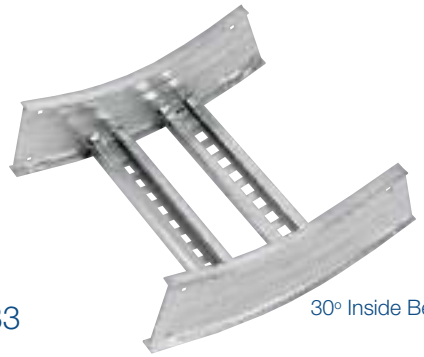
H-Style



Page A81 — 45° Outside Bend

Page A81 — 45° Inside Bend

Page A83 — 30° Outside Bend



Page A83 — 30° Inside Bend

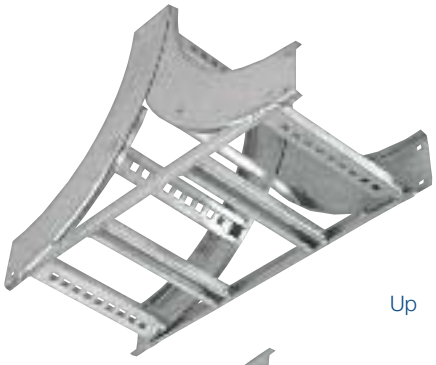
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

Vertical Fittings Selection Guide

Vertical Tees Up / Down

U-Style



Page A84 Up

Page A84 Down

H-Style

Page A85 Up

Page A85 Down

Cable Supports

U-Style

Page A86

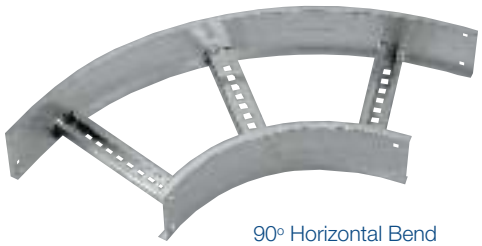
H-Style

Page A87

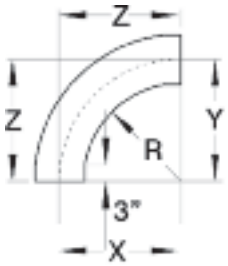
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

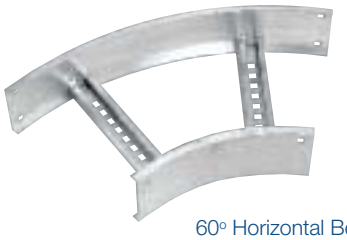
Fittings

U-Style Fittings Horizontal Bends 90º / 60º



90º Horizontal Bend





60º Horizontal Bend

Part Numbering System

AUF-4-24-L-HB60-12

- AUF-4: Fitting Material and Siderail
- 24: Siderail Depth
- L: Bottom Style
- HB60: Fitting Type
- 12: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90º, 60º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Technical Specifications

90º Horizontal BEND — U-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AUF(†)-06-(*)-HB90-12	15	15	15
	9	AUF(†)-09-(*)-HB90-12	16-1/2	16-1/2	16-1/2
	12	AUF(†)-12-(*)-HB90-12	18	18	18
	18	AUF(†)-18-(*)-HB90-12	21	21	21
	24	AUF(†)-24-(*)-HB90-12	24	24	24
	30	AUF(†)-30-(*)-HB90-12	27	27	27
	36	AUF(†)-36-(*)-HB90-12	30	30	30
24	6	AUF(†)-06-(*)-HB90-24	27	27	27
	9	AUF(†)-09-(*)-HB90-24	28-1/2	28-1/2	28-1/2
	12	AUF(†)-12-(*)-HB90-24	30	30	30
	18	AUF(†)-18-(*)-HB90-24	33	33	33
	24	AUF(†)-24-(*)-HB90-24	36	36	36
	30	AUF(†)-30-(*)-HB90-24	39	39	39
	36	AUF(†)-36-(*)-HB90-24	42	42	42
36	6	AUF(†)-06-(*)-HB90-36	39	39	39
	9	AUF(†)-09-(*)-HB90-36	40-1/2	40-1/2	40-1/2
	12	AUF(†)-12-(*)-HB90-36	42	42	42
	18	AUF(†)-18-(*)-HB90-36	45	45	45
	24	AUF(†)-24-(*)-HB90-36	48	48	48
	30	AUF(†)-30-(*)-HB90-36	51	51	51
	36	AUF(†)-36-(*)-HB90-36	54	54	54
48	6	AUF(†)-06-(*)-HB90-48	51	51	51
	9	AUF(†)-09-(*)-HB90-48	52-1/2	52-1/2	52-1/2
	12	AUF(†)-12-(*)-HB90-48	54	54	54
	18	AUF(†)-18-(*)-HB90-48	57	57	57
	24	AUF(†)-24-(*)-HB90-48	60	60	60
	30	AUF(†)-30-(*)-HB90-48	63	63	63
	36	AUF(†)-36-(*)-HB90-48	66	66	66

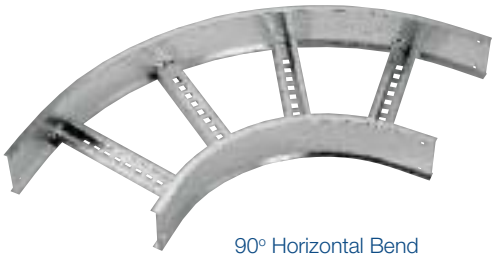
60º Horizontal BEND — U-Style

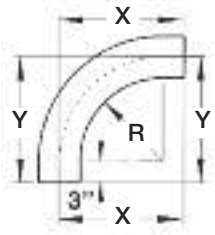
Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AUF(†)-06-(*)-HB60-12	14-7/8	8-5/8	9-15/16
	9	AUF(†)-09-(*)-HB60-12	16-3/16	9-3/8	10-13/16
	12	AUF(†)-12-(*)-HB60-12	17-1/2	10-1/8	11-11/16
	18	AUF(†)-18-(*)-HB60-12	20-1/16	11-5/8	13-3/8
	24	AUF(†)-24-(*)-HB60-12	22-11/16	13-1/8	15-1/8
	30	AUF(†)-30-(*)-HB60-12	25-5/16	14-5/8	16-7/8
	36	AUF(†)-36-(*)-HB60-12	27-7/8	16-1/8	18-9/16
24	6	AUF(†)-06-(*)-HB60-24	25-5/16	14-5/8	16-7/8
	9	AUF(†)-09-(*)-HB60-24	26-9/16	15-3/8	17-3/4
	12	AUF(†)-12-(*)-HB60-24	27-7/8	16-1/8	18-9/16
	18	AUF(†)-18-(*)-HB60-24	30-1/2	17-5/8	20-5/16
	24	AUF(†)-24-(*)-HB60-24	33-1/16	19-1/8	22-1/16
	30	AUF(†)-30-(*)-HB60-24	35-11/16	20-5/8	23-13/16
	36	AUF(†)-36-(*)-HB60-24	38-1/4	22-1/8	25-1/2
36	6	AUF(†)-06-(*)-HB60-36	35-11/16	20-5/8	23-13/16
	9	AUF(†)-09-(*)-HB60-36	37	21-3/8	24-5/8
	12	AUF(†)-12-(*)-HB60-36	38-1/4	22-1/8	25-1/2
	18	AUF(†)-18-(*)-HB60-36	40-7/8	23-5/8	27-2/8
	24	AUF(†)-24-(*)-HB60-36	43-1/2	25-1/8	29
	30	AUF(†)-30-(*)-HB60-36	46-1/16	26-5/8	30-11/16
	36	AUF(†)-36-(*)-HB60-36	48-11/16	28-1/8	32-7/16
48	6	AUF(†)-06-(*)-HB60-48	46-1/16	26-5/8	30-11/16
	9	AUF(†)-09-(*)-HB60-48	47-3/8	27-3/8	31-9/16
	12	AUF(†)-12-(*)-HB60-48	48-11/16	28-1/8	32-7/16
	18	AUF(†)-18-(*)-HB60-48	51-4/16	29-5/8	34-3/16
	24	AUF(†)-24-(*)-HB60-48	53-7/8	31-1/8	35-15/16
	30	AUF(†)-30-(*)-HB60-48	56-7/16	32-5/8	37-5/8
	36	AUF(†)-36-(*)-HB60-48	59-1/16	34-1/8	39-3/8

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

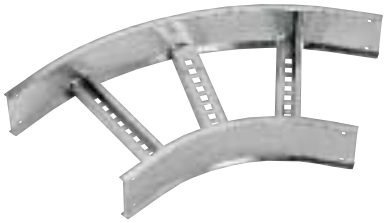
Fittings

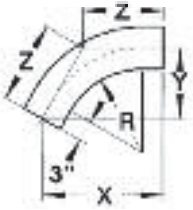
H-Style Fittings Horizontal Bends 90º / 60º





90º Horizontal Bend





60º Horizontal Bend

Technical Specifications

Part Numbering System

AHF-4-24-L-HB60-12

- AHF-4: Fitting Material and Siderail
- 24: Width
- L: Siderail Depth
- HB: Bottom Style
- 60: Fitting Type
- 12: Angle
- Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90º, 60º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

90º Horizontal BEND — H-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y
12	6	AHF(†)-06-(*)-HB90-12	18	18
	9	AHF(†)-09-(*)-HB90-12	19-1/2	19-1/2
	12	AHF(†)-12-(*)-HB90-12	21	21
	18	AHF(†)-18-(*)-HB90-12	24	24
	24	AHF(†)-24-(*)-HB90-12	27	27
	30	AHF(†)-30-(*)-HB90-12	30	30
	36	AHF(†)-36-(*)-HB90-12	33	33
24	6	AHF(†)-06-(*)-HB90-24	30	30
	9	AHF(†)-09-(*)-HB90-24	31-1/2	31-1/2
	12	AHF(†)-12-(*)-HB90-24	33	33
	18	AHF(†)-18-(*)-HB90-24	36	36
	24	AHF(†)-24-(*)-HB90-24	39	39
	30	AHF(†)-30-(*)-HB90-24	42	42
	36	AHF(†)-36-(*)-HB90-24	45	45
36	6	AHF(†)-06-(*)-HB90-36	42	42
	9	AHF(†)-09-(*)-HB90-36	43-1/2	43-1/2
	12	AHF(†)-12-(*)-HB90-36	45	45
	18	AHF(†)-18-(*)-HB90-36	48	48
	24	AHF(†)-24-(*)-HB90-36	51	51
	30	AHF(†)-30-(*)-HB90-36	54	54
	36	AHF(†)-36-(*)-HB90-36	57	57
48	6	AHF(†)-06-(*)-HB90-48	54	54
	9	AHF(†)-09-(*)-HB90-48	55-1/2	55-1/2
	12	AHF(†)-12-(*)-HB90-48	57	57
	18	AHF(†)-18-(*)-HB90-48	60	60
	24	AHF(†)-24-(*)-HB90-48	63	63
	30	AHF(†)-30-(*)-HB90-48	66	66
	36	AHF(†)-36-(*)-HB90-48	69	69

60º Horizontal BEND — H-Style

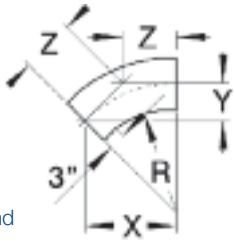
Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AHF(†)-06-(*)-HB60-12	17-1/2	10-1/8	11-11/16
	9	AHF(†)-09-(*)-HB60-12	18-13/16	10-7/8	12-1/2
	12	AHF(†)-12-(*)-HB60-12	20-1/16	11-5/8	13-3/8
	18	AHF(†)-18-(*)-HB60-12	22-11/16	13-1/8	15-1/8
	24	AHF(†)-24-(*)-HB60-12	25-5/16	14-5/8	16-7/8
	30	AHF(†)-30-(*)-HB60-12	27-7/8	16-1/8	18-9/16
	36	AHF(†)-36-(*)-HB60-12	30-1/2	17-5/8	20-5/16
24	6	AHF(†)-06-(*)-HB60-24	27-7/8	16-1/8	18-9/16
	9	AHF(†)-09-(*)-HB60-24	29-3/16	16-7/8	19-7/16
	12	AHF(†)-12-(*)-HB60-24	30-1/2	17-5/8	20-5/16
	18	AHF(†)-18-(*)-HB60-24	33-1/16	19-1/8	22-1/16
	24	AHF(†)-24-(*)-HB60-24	35-11/16	20-5/8	23-13/16
	30	AHF(†)-30-(*)-HB60-24	38-1/4	22-1/8	25-1/2
	36	AHF(†)-36-(*)-HB60-24	40-7/8	23-5/8	27-1/4
36	6	AHF(†)-06-(*)-HB60-36	38-1/4	22-1/8	25-1/2
	9	AHF(†)-09-(*)-HB60-36	39-9/16	22-7/8	26-3/8
	12	AHF(†)-12-(*)-HB60-36	40-7/8	23-5/8	27-1/4
	18	AHF(†)-18-(*)-HB60-36	43-1/2	25-1/8	29
	24	AHF(†)-24-(*)-HB60-36	46-1/16	26-5/8	30-11/16
	30	AHF(†)-30-(*)-HB60-36	48-11/16	28-1/8	32-7/16
	36	AHF(†)-36-(*)-HB60-36	51-1/4	29-5/8	34-3/16
48	6	AHF(†)-06-(*)-HB60-48	48-11/16	28-1/8	32-7/16
	9	AHF(†)-09-(*)-HB60-48	49-15/16	28-7/8	33-5/16
	12	AHF(†)-12-(*)-HB60-48	51-1/4	29-5/8	34-3/16
	18	AHF(†)-18-(*)-HB60-48	53-7/8	31-1/8	35-15/16
	24	AHF(†)-24-(*)-HB60-48	56-7/16	32-5/8	37-5/8
	30	AHF(†)-30-(*)-HB60-48	59-1/16	34-1/8	39-3/8
	36	AHF(†)-36-(*)-HB60-48	61-11/16	35-5/8	41-1/8

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

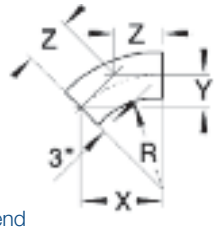
Fittings

U-Style Fittings Horizontal Bends 45º / 30º

45º Horizontal Bend



30º Horizontal Bend



Technical Specifications

Part Numbering System

AUF-4-24-L-HB45-12

- 4 — Fitting Material and Siderail
- 24 — Width
- L — Bottom Style
- HB45 — Fitting Type
- 12 — Nominal Radius
- Siderail Depth
- Angle

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º, 30º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

45º Horizontal BEND — U-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AUF(†)-06-(*)-(+)HB45-12	13-5/8	5-5/8	8
	9	AUF(†)-09-(*)-(+)HB45-12	14-11/16	6-1/16	8-9/16
	12	AUF(†)-12-(*)-(+)HB45-12	15-3/4	6-12	9-3/16
	18	AUF(†)-18-(*)-(+)HB45-12	17-7/8	7-3/8	10-7/16
	24	AUF(†)-24-(*)-(+)HB45-12	20	8-1/4	11-11/16
	30	AUF(†)-30-(*)-(+)HB45-12	22-1/16	9-1/8	12-15/16
	36	AUF(†)-36-(*)-(+)HB45-12	24-3/16	10	14-3/16
24	6	AUF(†)-06-(*)-(+)HB45-24	22-1/16	9-1/8	12-15/16
	9	AUF(†)-09-(*)-(+)HB45-24	23-1/8	9-9/16	13-9/16
	12	AUF(†)-12-(*)-(+)HB45-24	24-3/16	10	14-3/16
	18	AUF(†)-18-(*)-(+)HB45-24	26-5/16	10-15/16	15-7/16
	24	AUF(†)-24-(*)-(+)HB45-24	28-7/16	11-13/16	16-11/16
	30	AUF(†)-30-(*)-(+)HB45-24	30-9/16	12-11/16	17-15/16
	36	AUF(†)-36-(*)-(+)HB45-24	32-11/16	13-9/16	19-1/8
36	6	AUF(†)-06-(*)-(+)HB45-36	30-9/16	12-11/16	17-15/16
	9	AUF(†)-09-(*)-(+)HB45-36	31-5/8	13-1/8	18-9/16
	12	AUF(†)-12-(*)-(+)HB45-36	32-11/16	13-9/16	19-1/8
	18	AUF(†)-18-(*)-(+)HB45-36	34-13/16	14-7/16	20-3/8
	24	AUF(†)-24-(*)-(+)HB45-36	36-15/16	15-5/16	21-5/8
	30	AUF(†)-30-(*)-(+)HB45-36	39-1/16	16-3/16	22-7/8
	36	AUF(†)-36-(*)-(+)HB45-36	41-3/16	17-1/16	24-1/8
48	6	AUF(†)-06-(*)-(+)HB45-48	39-1/16	16-3/16	22-7/8
	9	AUF(†)-09-(*)-(+)HB45-48	40-1/8	16-3/8	23-1/2
	12	AUF(†)-12-(*)-(+)HB45-48	41-3/16	17-1/16	24-1/8
	18	AUF(†)-18-(*)-(+)HB45-48	43-5/16	17-15/16	25-3/8
	24	AUF(†)-24-(*)-(+)HB45-48	45-7/16	18-13/16	26-5/8
	30	AUF(†)-30-(*)-(+)HB45-48	47-9/16	19-11/16	27-7/8
	36	AUF(†)-36-(*)-(+)HB45-48	49-11/16	20-9/16	29-1/8

30º Horizontal BEND — U-Style

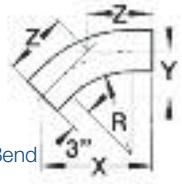
Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AUF(†)-06-(*)-(+)HB30-12	11-5/8	3-18	6-3/16
	9	AUF(†)-09-(*)-(+)HB30-12	12-3/8	3-5/16	6-5/8
	12	AUF(†)-12-(*)-(+)HB30-12	13-1/2	3-1/2	7
	18	AUF(†)-18-(*)-(+)HB30-12	14-5/8	3-15/16	7-13/16
	24	AUF(†)-24-(*)-(+)HB30-12	16-1/8	4-5/16	8-5/8
	30	AUF(†)-30-(*)-(+)HB30-12	17-5/8	4-11/16	9-7/16
	36	AUF(†)-36-(*)-(+)HB30-12	19-1/8	5-1/8	10-1/4
24	6	AUF(†)-06-(*)-(+)HB30-24	17-5/8	4-11/16	9-7/16
	9	AUF(†)-09-(*)-(+)HB30-24	18-3/8	4-15/16	9-13/16
	12	AUF(†)-12-(*)-(+)HB30-24	19-1/8	5-2/16	10-4/16
	18	AUF(†)-18-(*)-(+)HB30-24	20-5/8	5-8/16	11-1/16
	24	AUF(†)-24-(*)-(+)HB30-24	22-1/8	5-15/16	11-13/16
	30	AUF(†)-30-(*)-(+)HB30-24	23-5/8	6-5/16	12-10/16
	36	AUF(†)-36-(*)-(+)HB30-24	25-1/8	6-12/16	13-7/16
36	6	AUF(†)-06-(*)-(+)HB30-36	23-5/8	6-5/16	12-5/8
	9	AUF(†)-09-(*)-(+)HB30-36	24-3/8	6-1/2	13-1/16
	12	AUF(†)-12-(*)-(+)HB30-36	25-1/8	6-3/4	13-7/16
	18	AUF(†)-18-(*)-(+)HB30-36	26-5/8	7-1/4	14-1/4
	24	AUF(†)-24-(*)-(+)HB30-36	28-1/8	7-1/2	15-1/16
	30	AUF(†)-30-(*)-(+)HB30-36	29-5/8	7-15/16	15-7/8
	36	AUF(†)-36-(*)-(+)HB30-36	31-1/8	8-5/16	16-11/16
48	6	AUF(†)-06-(*)-(+)HB30-48	29-5/8	7-15/16	15-7/8
	9	AUF(†)-09-(*)-(+)HB30-48	30-3/8	8-1/8	16-1/4
	12	AUF(†)-12-(*)-(+)HB30-48	31-1/8	8-5/16	16-11/16
	18	AUF(†)-18-(*)-(+)HB30-48	32-5/8	8-3/4	17-1/2
	24	AUF(†)-24-(*)-(+)HB30-48	34-1/8	9-1/8	18-1/4
	30	AUF(†)-30-(*)-(+)HB30-48	35-5/8	9-9/16	19-1/16
	36	AUF(†)-36-(*)-(+)HB30-48	37-1/8	9-15/16	19-7/8

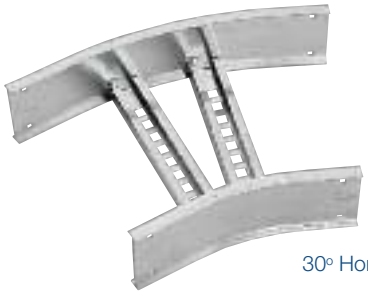
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

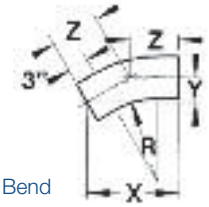
H-Style Fittings Horizontal Bends 45º / 30º

45º Horizontal Bend





30º Horizontal Bend



Technical Specifications

Part Numbering System

AHF-4-24-L-HB45-12

- AHF-4: Fitting Material and Siderail
- 24: Width
- L: Bottom Style
- HB45: Fitting Type
- 12: Nominal Radius

Siderail Depth: 4 in. – 7 in.

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º, 30º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

45º Horizontal BEND — H-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AHF(†)-06-(*)-HB45-12	15-3/4	6-1/2	9-3/16
	9	AHF(†)-09-(*)-HB45-12	16-13/16	6-15/16	9-13/16
	12	AHF(†)-12-(*)-HB45-12	17-7/8	7-3/8	10-7/16
	18	AHF(†)-18-(*)-HB45-12	20	8-1/4	11-11/16
	24	AHF(†)-24-(*)-HB45-12	22-1/16	9-1/8	12-15/16
	30	AHF(†)-30-(*)-HB45-12	24-3/16	10	14-3/16
	36	AHF(†)-36-(*)-HB45-12	26-5/16	10-15/16	15-7/16
24	6	AHF(†)-06-(*)-HB45-24	24-3/16	10	14-3/16
	9	AHF(†)-09-(*)-HB45-24	25-1/4	10-1/2	14-13/16
	12	AHF(†)-12-(*)-HB45-24	26-5/16	10-15/16	15-7/16
	18	AHF(†)-18-(*)-HB45-24	28-7/16	11-13/16	16-11/16
	24	AHF(†)-24-(*)-HB45-24	30-9/16	12-11/16	17-15/16
	30	AHF(†)-30-(*)-HB45-24	32-11/16	13-9/16	19-1/8
	36	AHF(†)-36-(*)-HB45-24	34-13/16	14-7/8	20-3/8
36	6	AHF(†)-06-(*)-HB45-36	32-11/16	13-9/16	19-1/8
	9	AHF(†)-09-(*)-HB45-36	33-3/4	14	19-3/4
	12	AHF(†)-12-(*)-HB45-36	34-13/16	14-7/16	20-3/8
	18	AHF(†)-18-(*)-HB45-36	36-15/16	15-5/16	21-5/8
	24	AHF(†)-24-(*)-HB45-36	39-1/16	16-3/16	22-7/8
	30	AHF(†)-30-(*)-HB45-36	41-3/16	17-1/16	24-1/8
	36	AHF(†)-36-(*)-HB45-36	43-5/16	17-15/16	25-3/8
48	6	AHF(†)-06-(*)-HB45-48	41-3/16	17-1/16	24-1/8
	9	AHF(†)-09-(*)-HB45-48	42-1/4	17-1/2	24-3/4
	12	AHF(†)-12-(*)-HB45-48	43-5/16	17-15/16	25-3/8
	18	AHF(†)-18-(*)-HB45-48	45-7/16	18-13/16	26-5/8
	24	AHF(†)-24-(*)-HB45-48	47-9/16	19-11/16	27-3/4
	30	AHF(†)-30-(*)-HB45-48	49-11/16	20-9/16	29-1/8
	36	AHF(†)-36-(*)-HB45-48	51-13/16	21-7/16	30-5/16

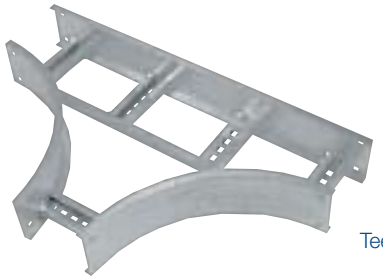
30º Horizontal BEND — H-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	AHF(†)-06-(*)-HB30-12	13-1/8	3-1/2	7
	9	AHF(†)-09-(*)-HB30-12	13-7/8	3-11/16	7-7/16
	12	AHF(†)-12-(*)-HB30-12	14-5/8	3-15/16	7-13/16
	18	AHF(†)-18-(*)-HB30-12	16-1/8	4-5/16	8-5/8
	24	AHF(†)-24-(*)-HB30-12	17-5/8	4-11/16	9-7/8
	30	AHF(†)-30-(*)-HB30-12	19-1/8	5-1/8	10-1/4
	36	AHF(†)-36-(*)-HB30-12	20-5/8	5-1/2	11-1/16
24	6	AHF(†)-06-(*)-HB30-24	19-1/8	5-1/8	10-1/4
	9	AHF(†)-09-(*)-HB30-24	19-7/8	5-5/16	10-5/8
	12	AHF(†)-12-(*)-HB30-24	20-5/8	5-1/2	11-1/16
	18	AHF(†)-18-(*)-HB30-24	22-1/8	5-5/16	11-13/16
	24	AHF(†)-24-(*)-HB30-24	23-5/8	6-5/16	12-5/8
	30	AHF(†)-30-(*)-HB30-24	25-1/8	6-3/4	13-7/16
	36	AHF(†)-36-(*)-HB30-24	26-5/8	7-1/8	14-1/4
36	6	AHF(†)-06-(*)-HB30-36	25-1/8	6-3/4	13-7/16
	9	AHF(†)-09-(*)-HB30-36	25-7/8	6-15/16	13-7/8
	12	AHF(†)-12-(*)-HB30-36	26-5/8	7-1/8	14-1/4
	18	AHF(†)-18-(*)-HB30-36	28-1/8	7-1/2	15-1/16
	24	AHF(†)-24-(*)-HB30-36	29-5/8	7-15/16	15-7/8
	30	AHF(†)-30-(*)-HB30-36	31-1/8	8-5/16	16-11/16
	36	AHF(†)-36-(*)-HB30-36	32-5/8	8-3/4	17-1/2
48	6	AHF(†)-06-(*)-HB30-48	31-1/8	8-5/16	16-11/16
	9	AHF(†)-09-(*)-HB30-48	31-7/8	8-9/16	17-1/16
	12	AHF(†)-12-(*)-HB30-48	32-5/8	8-3/4	17-1/2
	18	AHF(†)-18-(*)-HB30-48	34-1/8	9-1/8	18-1/4
	24	AHF(†)-24-(*)-HB30-48	35-5/8	9-9/16	19-1/16
	30	AHF(†)-30-(*)-HB30-48	37-1/8	9-15/16	19-7/8
	36	AHF(†)-36-(*)-HB30-48	38-5/8	10-5/16	20-11/16

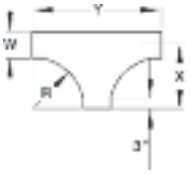
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

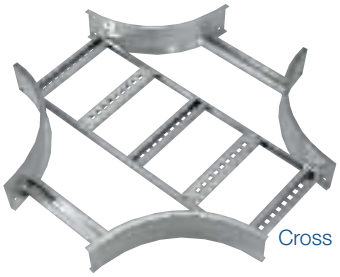
Fittings

U-Style Fittings Horizontal Tee, Cross

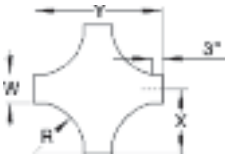


Tee





Cross



Technical Specifications

Part Numbering System

AUF-5-06-L-HT-12

- AUF: Fitting Material and Siderail
- 5: Siderail Depth
- 06: Width
- L: Bottom Style
- HT: Fitting Type
- 12: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Horizontal TEE — U-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Y
12	6	AUF(†)-06-(*)-HT12	15	30
	9	AUF(†)-09-(*)-HT12	16-1/2	33
	12	AUF(†)-12-(*)-HT12	18	36
	18	AUF(†)-18-(*)-HT12	21	42
	24	AUF(†)-24-(*)-HT12	24	48
	30	AUF(†)-30-(*)-HT12	27	54
	36	AUF(†)-36-(*)-HT12	30	60
24	6	AUF(†)-06-(*)-HT24	27	54
	9	AUF(†)-09-(*)-HT24	28-1/2	57
	12	AUF(†)-12-(*)-HT24	30	60
	18	AUF(†)-18-(*)-HT24	33	66
	24	AUF(†)-24-(*)-HT24	36	72
	30	AUF(†)-30-(*)-HT24	39	78
	36	AUF(†)-36-(*)-HT24	42	84
36	6	AUF(†)-06-(*)-HT36	39	78
	9	AUF(†)-09-(*)-HT36	40-1/2	81
	12	AUF(†)-12-(*)-HT36	42	84
	18	AUF(†)-18-(*)-HT36	45	90
	24	AUF(†)-24-(*)-HT36	48	96
	30	AUF(†)-30-(*)-HT36	51	102
	36	AUF(†)-36-(*)-HT36	54	108
48	6	AUF(†)-06-(*)-HT48	51	102
	9	AUF(†)-09-(*)-HT48	52-1/2	105
	12	AUF(†)-12-(*)-HT48	54	108
	18	AUF(†)-18-(*)-HT48	57	114
	24	AUF(†)-24-(*)-HT48	60	120
	30	AUF(†)-30-(*)-HT48	63	126
	36	AUF(†)-36-(*)-HT48	66	132

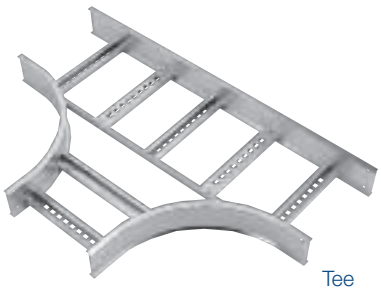
Horizontal CROSS — U-Style

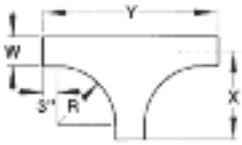
Nominal Radius R	Width	Cat. No.	Dimensions X	Y
12	6	AUF(†)-06-(*)-HX12	15	30
	9	AUF(†)-09-(*)-HX12	16-1/2	33
	12	AUF(†)-12-(*)-HX12	18	36
	18	AUF(†)-18-(*)-HX12	21	42
	24	AUF(†)-24-(*)-HX12	24	48
	30	AUF(†)-30-(*)-HX12	27	54
	36	AUF(†)-36-(*)-HX12	30	60
24	6	AUF(†)-06-(*)-HX24	27	54
	9	AUF(†)-09-(*)-HX24	28-1/2	57
	12	AUF(†)-12-(*)-HX24	30	60
	18	AUF(†)-18-(*)-HX24	33	66
	24	AUF(†)-24-(*)-HX24	36	72
	30	AUF(†)-30-(*)-HX24	39	78
	36	AUF(†)-36-(*)-HX24	42	84
36	6	AUF(†)-06-(*)-HX36	39	78
	9	AUF(†)-09-(*)-HX36	40-1/2	81
	12	AUF(†)-12-(*)-HX36	42	84
	18	AUF(†)-18-(*)-HX36	45	90
	24	AUF(†)-24-(*)-HX36	48	96
	30	AUF(†)-30-(*)-HX36	51	102
	36	AUF(†)-36-(*)-HX36	54	108
48	6	AUF(†)-06-(*)-HX48	51	102
	9	AUF(†)-09-(*)-HX48	52-1/2	105
	12	AUF(†)-12-(*)-HX48	54	108
	18	AUF(†)-18-(*)-HX48	57	114
	24	AUF(†)-24-(*)-HX48	60	120
	30	AUF(†)-30-(*)-HX48	63	126
	36	AUF(†)-36-(*)-HX48	66	132

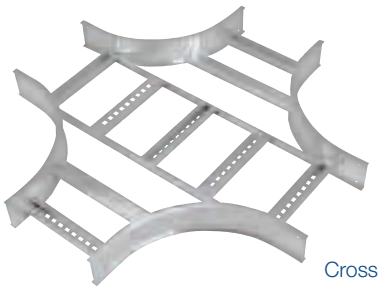
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Tees include 2 pairs / Crosses include 3 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

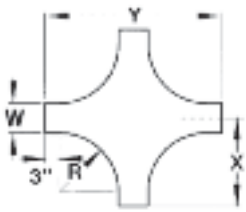
Fittings

H-Style Fittings Horizontal Tee, Cross


Tee




Cross



Technical Specifications

Part Numbering System

AHF-5-06-L-HT-12

- AHF-5: Fitting Material and Siderail
- 06: Width
- L: Bottom Style
- HT: Fitting Type
- 12: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Horizontal TEE — H-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Dimensions Y
12		AHF(†)-06-(*)-HT12	18	36
	9	AHF(†)-09-(*)-HT12	19-1/2	39
	12	AHF(†)-12-(*)-HT12	21	42
	18	AHF(†)-18-(*)-HT12	24	48
	24	AHF(†)-24-(*)-HT12	27	54
	30	AHF(†)-30-(*)-HT12	30	60
	36	AHF(†)-36-(*)-HT12	33	66
24	6	AHF(†)-06-(*)-HT24	30	60
	9	AHF(†)-09-(*)-HT24	31-1/2	63
	12	AHF(†)-12-(*)-HT24	33	66
	18	AHF(†)-18-(*)-HT24	36	72
	24	AHF(†)-24-(*)-HT24	39	78
	30	AHF(†)-30-(*)-HT24	42	84
	36	AHF(†)-36-(*)-HT24	45	90
36	6	AHF(†)-06-(*)-HT36	42	84
	9	AHF(†)-09-(*)-HT36	43-1/2	87
	12	AHF(†)-12-(*)-HT36	45	90
	18	AHF(†)-18-(*)-HT36	48	96
	24	AHF(†)-24-(*)-HT36	51	102
	30	AHF(†)-30-(*)-HT36	54	108
	36	AHF(†)-36-(*)-HT36	57	114
48	6	AHF(†)-06-(*)-HT48	54	108
	9	AHF(†)-09-(*)-HT48	55-1/2	111
	12	AHF(†)-12-(*)-HT48	57	114
	18	AHF(†)-18-(*)-HT48	60	120
	24	AHF(†)-24-(*)-HT48	63	126
	30	AHF(†)-30-(*)-HT48	66	132
	36	AHF(†)-36-(*)-HT48	69	138

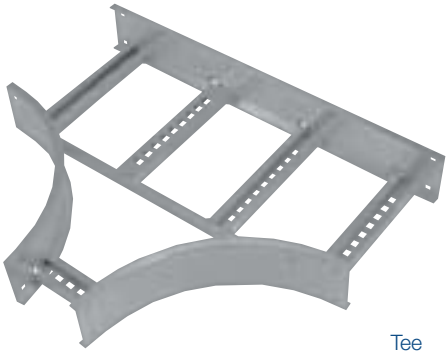
Horizontal CROSS — H-Style

Nominal Radius R	Width	Cat. No.	Dimensions X	Dimensions Y
12	6	AHF(†)-06-(*)-HX12	18	36
	9	AHF(†)-09-(*)-HX12	19-1/2	39
	12	AHF(†)-12-(*)-HX12	21	42
	18	AHF(†)-18-(*)-HX12	24	48
	24	AHF(†)-24-(*)-HX12	27	54
	30	AHF(†)-30-(*)-HX12	30	60
	36	AHF(†)-36-(*)-HX12	33	66
24	6	AHF(†)-06-(*)-HX24	30	60
	9	AHF(†)-09-(*)-HX24	31-1/2	63
	12	AHF(†)-12-(*)-HX24	33	66
	18	AHF(†)-18-(*)-HX24	36	72
	24	AHF(†)-24-(*)-HX24	39	78
	30	AHF(†)-30-(*)-HX24	42	84
	36	AHF(†)-36-(*)-HX24	45	90
36	6	AHF(†)-06-(*)-HX36	42	84
	9	AHF(†)-09-(*)-HX36	43-1/2	87
	12	AHF(†)-12-(*)-HX36	45	90
	18	AHF(†)-18-(*)-HX36	48	96
	24	AHF(†)-24-(*)-HX36	51	102
	30	AHF(†)-30-(*)-HX36	54	108
	36	AHF(†)-36-(*)-HX36	57	114
48	6	AHF(†)-06-(*)-HX48	54	108
	9	AHF(†)-09-(*)-HX48	55-1/2	111
	12	AHF(†)-12-(*)-HX48	57	114
	18	AHF(†)-18-(*)-HX48	60	120
	24	AHF(†)-24-(*)-HX48	63	126
	30	AHF(†)-30-(*)-HX48	66	132
	36	AHF(†)-36-(*)-HX48	69	138

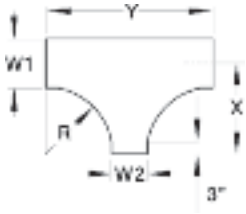
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Tees include 2 pairs / Crosses include 3 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

U-Style Fittings Horizontal Reducing Tee



Tee



Technical Specifications

Part Numbering System

AUF-7-36-24-L-RT-12

- AUF: Fitting Material and Siderail
- 7: Siderail Depth
- 36: Width 1
- 24: Width 2
- L: Bottom Style
- RT: Fitting Type
- 12: Nominal Radius

Selection Guide

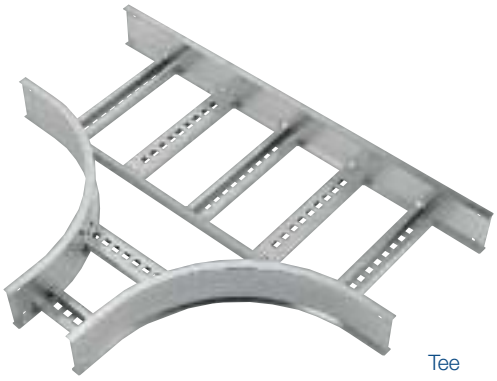
Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Horizontal REDUCING TEE — U-Style										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
36	30	AUF(†)-3630-(*)-RT(+)	30	54	42	78	54	102	66	126
	24	AUF(†)-3624-(*)-RT(+)	30	48	42	72	54	96	66	120
	18	AUF(†)-3618-(*)-RT(+)	30	42	42	66	54	90	66	114
	12	AUF(†)-3612-(*)-RT(+)	30	36	42	60	54	84	66	108
	9	AUF(†)-3609-(*)-RT(+)	30	33	42	57	54	81	66	105
	6	AUF(†)-3606-(*)-RT(+)	30	30	42	54	54	78	66	102
30	24	AUF(†)-3024-(*)-RT(+)	27	48	39	72	51	96	63	120
	18	AUF(†)-3018-(*)-RT(+)	27	42	39	66	51	90	63	114
	12	AUF(†)-3012-(*)-RT(+)	27	36	39	60	51	84	63	108
	9	AUF(†)-3009-(*)-RT(+)	27	33	39	57	51	81	63	105
	6	AUF(†)-3006-(*)-RT(+)	27	30	39	54	51	78	63	102
24	18	AUF(†)-2418-(*)-RT(+)	24	42	36	66	48	90	60	114
	12	AUF(†)-2412-(*)-RT(+)	24	36	36	60	48	84	60	108
	9	AUF(†)-2409-(*)-RT(+)	24	33	36	57	48	81	60	105
	6	AUF(†)-2406-(*)-RT(+)	24	30	36	54	48	78	60	102
18	12	AUF(†)-1812-(*)-RT(+)	21	36	33	60	45	84	57	108
	9	AUF(†)-1809-(*)-RT(+)	21	33	33	57	45	81	57	105
	6	AUF(†)-1806-(*)-RT(+)	21	30	33	54	45	78	57	102
12	9	AUF(†)-1209-(*)-RT(+)	18	33	30	57	42	81	54	105
	6	AUF(†)-1206-(*)-RT(+)	18	30	30	54	42	78	54	102
9	6	AUF(†)-0906-(*)-RT(+)	16-1/2	30	28-1/2	54	40-1/2	78	52-1/2	102

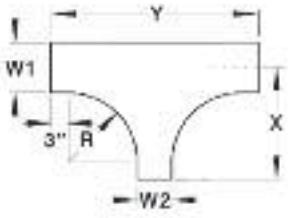
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

H-Style Fittings Horizontal Reducing Tee



Tee



Technical Specifications

Part Numbering System

AHF-7-36-24-L-RT-12

- AHF-7: Fitting Material and Siderail
- 36: Width 1
- 24: Width 2
- L: Bottom Style
- RT: Fitting Type
- 12: Nominal Radius

Siderail Depth

Selection Guide

Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Horizontal REDUCING TEE — H-Style

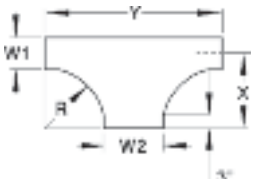
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
36	30	AHF(†)-3630-(*)-RT(+)	33	60	45	84	57	108	69	132
	24	AHF(†)-3624-(*)-RT(+)	33	54	45	78	57	102	69	126
	18	AHF(†)-3618-(*)-RT(+)	33	48	45	72	57	96	69	120
	12	AHF(†)-3612-(*)-RT(+)	33	42	45	66	57	90	69	114
	9	AHF(†)-3609-(*)-RT(+)	33	39	45	63	57	87	69	111
	6	AHF(†)-3606-(*)-RT(+)	33	36	45	60	57	84	69	108
30	24	AHF(†)-3024-(*)-RT(+)	30	54	42	78	54	102	66	126
	18	AHF(†)-3018-(*)-RT(+)	30	48	42	72	54	96	66	120
	12	AHF(†)-3012-(*)-RT(+)	30	42	42	66	54	90	66	114
	9	AHF(†)-3009-(*)-RT(+)	30	39	42	63	54	87	66	111
	6	AHF(†)-3006-(*)-RT(+)	30	36	42	60	54	84	66	108
24	18	AHF(†)-2418-(*)-RT(+)	27	48	39	72	51	96	63	120
	12	AHF(†)-2412-(*)-RT(+)	27	42	39	66	51	90	63	114
	9	AHF(†)-2409-(*)-RT(+)	27	39	39	63	51	87	63	111
	6	AHF(†)-2406-(*)-RT(+)	27	36	39	60	51	84	63	108
18	12	AHF(†)-1812-(*)-RT(+)	24	42	36	66	48	90	60	114
	9	AHF(†)-1809-(*)-RT(+)	24	39	36	63	48	87	60	111
	6	AHF(†)-1806-(*)-RT(+)	24	36	36	60	48	84	60	108
12	9	AHF(†)-1209-(*)-RT(+)	21	39	33	63	45	87	57	111
	6	AHF(†)-1206-(*)-RT(+)	21	36	33	60	45	84	57	108
9	6	AHF(†)-0906-(*)-RT(+)	19-1/2	36	31-1/2	60	43-1/2	84	55-1/2	108

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

U-Style Fittings Horizontal Expanding Tee

Tee



Technical Specifications

Part Numbering System

AUF-4-06-09-L-ET-24

- AUF-4: Fitting Material and Siderail
- 06: Siderail Depth
- 09: Width 1
- L: Width 2
- ET: Bottom Style
- 24: Fitting Type / Nominal Radius

Selection Guide

Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

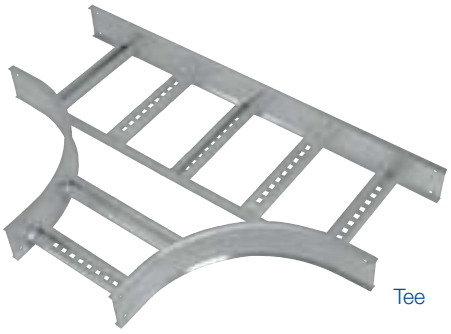
Horizontal EXPANDING TEE — U-Style

Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	AUF(†)-3036-(*)-ET(+)	27	60	39	84	51	108	63	132
24	30	AUF(†)-2430-(*)-ET(+)	24	54	36	78	48	102	60	126
	36	AUF(†)-2436-(*)-ET(+)	24	60	36	84	48	108	60	132
18	24	AUF(†)-1824-(*)-ET(+)	21	48	33	72	45	96	57	120
	30	AUF(†)-1830-(*)-ET(+)	21	54	33	78	45	102	57	126
	36	AUF(†)-1836-(*)-ET(+)	21	60	33	84	45	108	57	132
12	18	AUF(†)-1218-(*)-ET(+)	18	42	30	66	42	90	54	114
	24	AUF(†)-1224-(*)-ET(+)	18	48	30	72	42	96	54	120
	30	AUF(†)-1230-(*)-ET(+)	18	54	30	78	42	102	54	126
	36	AUF(†)-1236-(*)-ET(+)	18	60	30	84	42	108	54	132
9	12	AUF(†)-0912-(*)-ET(+)	16-1/2	36	28-1/2	60	40-1/2	84	52-1/2	108
	18	AUF(†)-0918-(*)-ET(+)	16-1/2	42	28-1/2	66	40-1/2	90	52-1/2	114
	24	AUF(†)-0924-(*)-ET(+)	16-1/2	48	28-1/2	72	40-1/2	96	52-1/2	120
	30	AUF(†)-0930-(*)-ET(+)	16-1/2	54	28-1/2	78	40-1/2	102	52-1/2	126
	36	AUF(†)-0936-(*)-ET(+)	16-1/2	60	28-1/2	84	40-1/2	108	52-1/2	132
6	9	AUF(†)-0609-(*)-ET(+)	15	33	27	57	39	81	51	105
	12	AUF(†)-0612-(*)-ET(+)	15	36	27	60	39	84	51	108
	18	AUF(†)-0618-(*)-ET(+)	15	42	27	66	39	90	51	114
	24	AUF(†)-0624-(*)-ET(+)	15	48	27	72	39	96	51	120
	30	AUF(†)-0630-(*)-ET(+)	15	54	27	78	39	102	51	126
	36	AUF(†)-0636-(*)-ET(+)	15	60	27	84	39	108	51	132

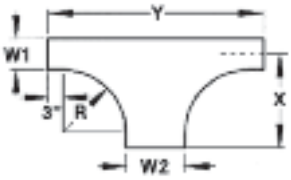
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

H-Style Fittings Horizontal Expanding Tee



Tee



Technical Specifications

Part Numbering System

AHF-4-06-09-L-ET-24

- AHF – Fitting Material and Siderail
- 4 – Siderail Depth
- 06 – Width 1
- 09 – Width 2
- L – Bottom Style
- ET – Fitting Type
- 24 – Nominal Radius

Selection Guide

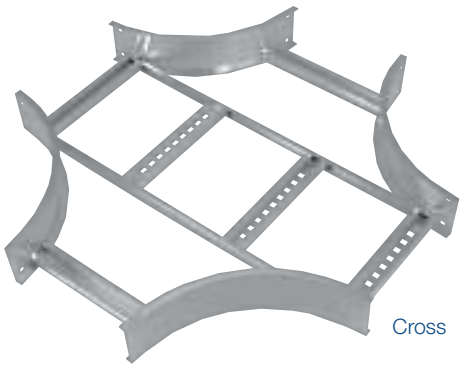
Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **4 in.** – **7 in.**

Horizontal EXPANDING TEE — H-Style										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	AHF(†)-3036-(*)-ET(+)	30	66	42	90	54	114	66	138
24	30	AHF(†)-2430-(*)-ET(+)	27	60	39	84	51	108	63	132
	36	AHF(†)-2436-(*)-ET(+)	27	66	39	90	51	114	63	138
18	24	AHF(†)-1824-(*)-ET(+)	24	54	36	78	48	102	60	126
	30	AHF(†)-1830-(*)-ET(+)	24	60	36	84	48	108	60	132
	36	AHF(†)-1836-(*)-ET(+)	24	66	36	90	48	114	60	138
12	18	AHF(†)-1218-(*)-ET(+)	21	48	33	72	45	96	57	120
	24	AHF(†)-1224-(*)-ET(+)	21	54	33	78	45	102	57	126
	30	AHF(†)-1230-(*)-ET(+)	21	60	33	84	45	108	57	132
	36	AHF(†)-1236-(*)-ET(+)	21	66	33	90	45	114	57	138
9	12	AHF(†)-0912-(*)-ET(+)	19-1/2	42	31-1/2	66	43-1/2	90	55-1/2	114
	18	AHF(†)-0918-(*)-ET(+)	19-1/2	48	31-1/2	72	43-1/2	96	55-1/2	120
	24	AHF(†)-0924-(*)-ET(+)	19-1/2	54	31-1/2	78	43-1/2	102	55-1/2	126
	30	AHF(†)-0930-(*)-ET(+)	19-1/2	60	31-1/2	84	43-1/2	108	55-1/2	132
	36	AHF(†)-0936-(*)-ET(+)	19-1/2	66	31-1/2	90	43-1/2	114	55-1/2	138
6	9	AHF(†)-0609-(*)-ET(+)	18	39	30	63	42	87	54	111
	12	AHF(†)-0612-(*)-ET(+)	18	42	30	66	42	90	54	114
	18	AHF(†)-0618-(*)-ET(+)	18	48	30	72	42	96	54	120
	24	AHF(†)-0624-(*)-ET(+)	18	54	30	78	42	102	54	126
	30	AHF(†)-0630-(*)-ET(+)	18	60	30	84	42	108	54	132
	36	AHF(†)-0636-(*)-ET(+)	18	66	30	90	42	114	54	138

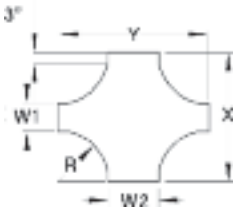
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

U-Style Fittings Horizontal Expanding Cross



Cross



Technical Specifications

Part Numbering System

AUF-5-18-24-L-EX36

- AUF — Fitting Material and Siderail
- 5 — Siderail Depth
- 18 — Width 1
- 24 — Width 2
- L — Bottom Style
- EX — Fitting Type
- 36 — Nominal Radius

Selection Guide

Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

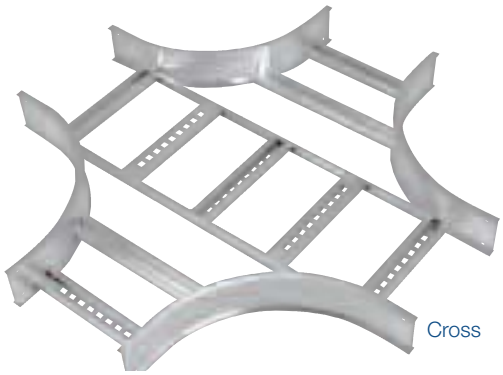
Horizontal EXPANDING CROSS — U-Style

Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	AUF(†)-3036-(*)-EX(+)	54	60	78	84	102	108	126	132
24	30	AUF(†)-2430-(*)-EX(+)	48	54	72	78	96	102	120	126
	36	AUF(†)-2436-(*)-EX(+)	48	60	72	84	96	108	120	132
18	24	AUF(†)-1824-(*)-EX(+)	42	48	66	72	90	96	114	120
	30	AUF(†)-1830-(*)-EX(+)	42	54	66	78	90	102	114	126
	36	AUF(†)-1836-(*)-EX(+)	42	60	66	84	90	108	114	132
12	18	AUF(†)-1218-(*)-EX(+)	36	42	60	66	84	90	108	114
	24	AUF(†)-1224-(*)-EX(+)	36	48	60	72	84	96	108	120
	30	AUF(†)-1230-(*)-EX(+)	36	54	60	78	84	102	108	126
	36	AUF(†)-1236-(*)-EX(+)	36	60	60	84	84	108	108	132
9	12	AUF(†)-0912-(*)-EX(+)	33	36	57	60	81	84	105	108
	18	AUF(†)-0918-(*)-EX(+)	33	42	57	66	81	90	105	114
	24	AUF(†)-0924-(*)-EX(+)	33	48	57	72	81	96	105	120
	30	AUF(†)-0930-(*)-EX(+)	33	54	57	78	81	102	105	126
	36	AUF(†)-0936-(*)-EX(+)	33	60	57	84	81	108	105	132
6	9	AUF(†)-0609-(*)-EX(+)	30	33	54	57	78	81	102	105
	12	AUF(†)-0612-(*)-EX(+)	30	36	54	60	78	84	102	108
	18	AUF(†)-0618-(*)-EX(+)	30	42	54	66	78	90	102	114
	24	AUF(†)-0624-(*)-EX(+)	30	48	54	72	78	96	102	120
	30	AUF(†)-0630-(*)-EX(+)	30	54	54	78	78	102	102	126
	36	AUF(†)-0636-(*)-EX(+)	30	60	54	84	78	108	102	132

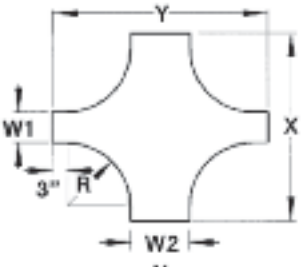
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 3 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

H-Style Fittings Horizontal Expanding Cross



Cross



Technical Specifications

Part Numbering System

AHF-5-30-36-L-EX-36

- AHF – Fitting Material and Siderail
- 5 – Siderail Depth
- 30 – Width 1
- 36 – Width 2
- L – Bottom Style
- EX – Fitting Type
- 36 – Nominal Radius

Selection Guide

Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

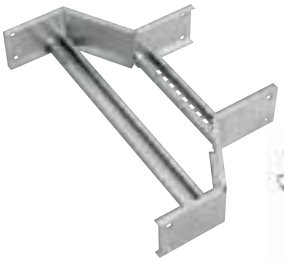
Horizontal EXPANDING CROSS — H-Style										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+)36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	AHF(†)-3036-(*)-EX(+)	60	66	84	90	108	114	132	138
24	30	AHF(†)-2430-(*)-EX(+)	54	60	78	84	102	108	126	132
	36	AHF(†)-2436-(*)-EX(+)	54	66	78	90	102	114	126	138
18	24	AHF(†)-1824-(*)-EX(+)	48	54	72	78	96	102	120	126
	30	AHF(†)-1830-(*)-EX(+)	48	60	72	84	96	108	120	132
	36	AHF(†)-1836-(*)-EX(+)	48	66	72	90	96	114	120	138
12	18	AHF(†)-1218-(*)-EX(+)	42	48	66	72	90	96	114	120
	24	AHF(†)-1224-(*)-EX(+)	42	54	66	78	90	102	114	126
	30	AHF(†)-1230-(*)-EX(+)	42	60	66	84	90	108	114	132
	36	AHF(†)-1236-(*)-EX(+)	42	66	66	90	90	114	114	138
9	12	AHF(†)-0912-(*)-EX(+)	39	42	63	66	87	90	111	114
	18	AHF(†)-0918-(*)-EX(+)	39	48	63	72	87	96	111	120
	24	AHF(†)-0924-(*)-EX(+)	39	54	63	78	87	102	111	126
	30	AHF(†)-0930-(*)-EX(+)	39	60	63	84	87	108	111	132
	36	AHF(†)-0936-(*)-EX(+)	39	66	63	90	87	114	111	138
6	9	AHF(†)-0609-(*)-EX(+)	36	39	60	63	84	87	108	111
	12	AHF(†)-0612-(*)-EX(+)	36	42	60	66	84	90	108	114
	18	AHF(†)-0618-(*)-EX(+)	36	48	60	72	84	96	108	120
	24	AHF(†)-0624-(*)-EX(+)	36	54	60	78	84	102	108	126
	30	AHF(†)-0630-(*)-EX(+)	36	60	60	84	84	108	108	132
	36	AHF(†)-0636-(*)-EX(+)	36	66	60	90	84	114	108	138

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. – 48 in.). Includes 3 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

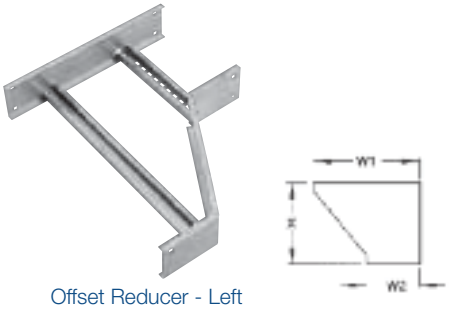
Fittings

U-Style Fittings Reducers

Offset Reducer - Right



Reducer - Straight



Offset Reducer - Left

Technical Specifications

Part Numbering System

AUF-6-36-18-L-HLR

- AUF — Fitting Material and Siderail
- 6 — Siderail Depth
- 36 — Width 1
- 18 — Width 2
- L — Bottom Style
- HLR — Fitting Type

Selection Guide

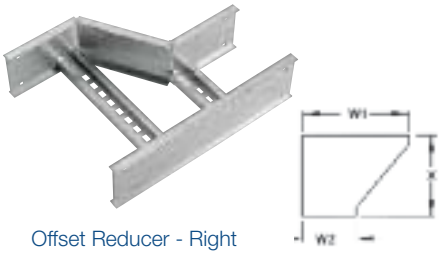
Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

Horizontal REDUCERS — U-Style							
Widths		Left Reducer		Straight Reducer (Concentric)		Right Reducer	
W1	W2	Cat. No.	Dim. X	Cat. No.	Dim. X	Cat. No.	Dim. X
36	30	AUF(†)-36-30-(*)-HLR	15-7/16	AUF(†)-36-30-(*)-HSR	13-3/4	AUF(†)-36-30-(*)-HRR	15-7/16
	24	AUF(†)-36-24-(*)-HLR	18-15/16	AUF(†)-36-24-(*)-HSR	15-7/16	AUF(†)-36-24-(*)-HRR	18-15/16
	18	AUF(†)-36-18-(*)-HLR	22-3/8	AUF(†)-36-18-(*)-HSR	17-3/8	AUF(†)-36-18-(*)-HRR	22-3/8
	12	AUF(†)-36-12-(*)-HLR	25-7/8	AUF(†)-36-12-(*)-HSR	18-5/16	AUF(†)-36-12-(*)-HRR	25-7/8
	9	AUF(†)-36-09-(*)-HLR	27-9/16	AUF(†)-36-09-(*)-HSR	19-13/16	AUF(†)-36-09-(*)-HRR	27-9/16
	6	AUF(†)-36-06-(*)-HLR	29-5/16	AUF(†)-36-06-(*)-HSR	20-11/16	AUF(†)-36-06-(*)-HRR	29-5/16
30	24	AUF(†)-30-24-(*)-HLR	15-7/16	AUF(†)-30-24-(*)-HSR	13-3/4	AUF(†)-30-24-(*)-HRR	15-7/16
	18	AUF(†)-30-18-(*)-HLR	18-15/16	AUF(†)-30-18-(*)-HSR	15-7/16	AUF(†)-30-18-(*)-HRR	18-15/16
	12	AUF(†)-30-12-(*)-HLR	22-3/8	AUF(†)-30-12-(*)-HSR	17-3/16	AUF(†)-30-12-(*)-HRR	22-3/8
	9	AUF(†)-30-09-(*)-HLR	24-1/8	AUF(†)-30-09-(*)-HSR	18-1/16	AUF(†)-30-09-(*)-HRR	24-1/8
	6	AUF(†)-30-06-(*)-HLR	25-7/8	AUF(†)-30-06-(*)-HSR	18-15/16	AUF(†)-30-06-(*)-HRR	25-7/8
24	18	AUF(†)-24-18-(*)-HLR	15-7/16	AUF(†)-24-18-(*)-HSR	13-3/4	AUF(†)-24-18-(*)-HRR	15-7/16
	12	AUF(†)-24-12-(*)-HLR	18-15/16	AUF(†)-24-12-(*)-HSR	15-7/16	AUF(†)-24-12-(*)-HRR	18-15/16
	9	AUF(†)-24-09-(*)-HLR	20-11/16	AUF(†)-24-09-(*)-HSR	16-5/16	AUF(†)-24-09-(*)-HRR	20-11/16
	6	AUF(†)-24-06-(*)-HLR	22-3/8	AUF(†)-24-06-(*)-HSR	17-3/16	AUF(†)-24-06-(*)-HRR	22-3/8
18	12	AUF(†)-18-12-(*)-HLR	15-7/16	AUF(†)-18-12-(*)-HSR	13-3/4	AUF(†)-18-12-(*)-HRR	15-7/16
	9	AUF(†)-18-09-(*)-HLR	17-3/16	AUF(†)-18-09-(*)-HSR	14-5/8	AUF(†)-18-09-(*)-HRR	17-3/16
	6	AUF(†)-18-06-(*)-HLR	18-15/16	AUF(†)-18-06-(*)-HSR	15-7/16	AUF(†)-18-06-(*)-HRR	18-15/16
12	9	AUF(†)-12-09-(*)-HLR	13-3/4	AUF(†)-12-09-(*)-HSR	12-7/8	AUF(†)-12-09-(*)-HRR	13-3/4
	6	AUF(†)-12-06-(*)-HLR	15-7/16	AUF(†)-12-06-(*)-HSR	13-3/4	AUF(†)-12-06-(*)-HRR	15-7/16
9	6	AUF(†)-09-06-(*)-HLR	13-3/4	AUF(†)-09-06-(*)-HSR	12-7/8	AUF(†)-09-06-(*)-HRR	13-3/4

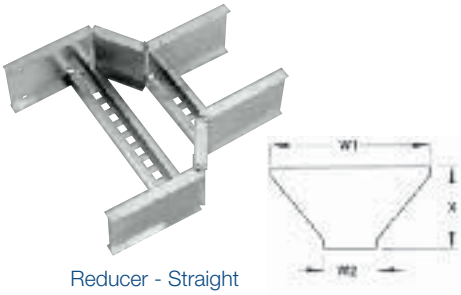
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

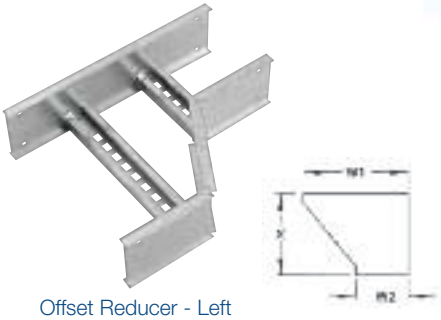
H-Style Fittings Reducers



Offset Reducer - Right



Reducer - Straight



Offset Reducer - Left

Technical Specifications

Part Numbering System

AHF-6-36-18-L-HLR

- AHF: Fitting Material and Siderail
- 6: Siderail Depth
- 36: Width 1
- 18: Width 2
- L: Bottom Style
- HLR: Fitting Type

Selection Guide

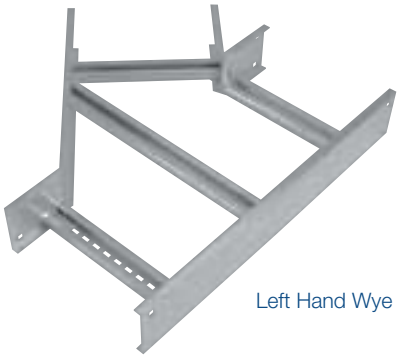
Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

Horizontal REDUCERS — H-Style							
Widths		Left Reducer		Straight Reducer (Concentric)		Right Reducer	
W1	W2	Cat. No.	Dim. X	Cat. No.	Dim. X	Cat. No.	Dim. X
36	30	AHF(†)-36-30-(*)-HLR	15-7/16	AHF(†)-36-30-(*)-HSR	13-3/4	AHF(†)-36-30-(*)-HRR	15-7/16
	24	AHF(†)-36-24-(*)-HLR	18-15/16	AHF(†)-36-24-(*)-HSR	15-7/16	AHF(†)-36-24-(*)-HRR	18-15/16
	18	AHF(†)-36-18-(*)-HLR	22-3/8	AHF(†)-36-18-(*)-HSR	17-3/8	AHF(†)-36-18-(*)-HRR	22-3/8
	12	AHF(†)-36-12-(*)-HLR	25-7/8	AHF(†)-36-12-(*)-HSR	18-5/16	AHF(†)-36-12-(*)-HRR	25-7/8
	9	AHF(†)-36-09-(*)-HLR	27-9/16	AHF(†)-36-09-(*)-HSR	19-13/16	AHF(†)-36-09-(*)-HRR	27-9/16
	6	AHF(†)-36-06-(*)-HLR	29-5/16	AHF(†)-36-06-(*)-HSR	20-11/16	AHF(†)-36-06-(*)-HRR	29-5/16
30	24	AHF(†)-30-24-(*)-HLR	15-7/16	AHF(†)-30-24-(*)-HSR	13-3/4	AHF(†)-30-24-(*)-HRR	15-7/16
	18	AHF(†)-30-18-(*)-HLR	18-15/16	AHF(†)-30-18-(*)-HSR	15-7/16	AHF(†)-30-18-(*)-HRR	18-15/16
	12	AHF(†)-30-12-(*)-HLR	22-3/8	AHF(†)-30-12-(*)-HSR	17-3/16	AHF(†)-30-12-(*)-HRR	22-3/8
	9	AHF(†)-30-09-(*)-HLR	24-1/8	AHF(†)-30-09-(*)-HSR	18-1/16	AHF(†)-30-09-(*)-HRR	24-1/8
	6	AHF(†)-30-06-(*)-HLR	25-7/8	AHF(†)-30-06-(*)-HSR	18-15/16	AHF(†)-30-06-(*)-HRR	25-7/8
24	18	AHF(†)-24-18-(*)-HLR	15-7/16	AHF(†)-24-18-(*)-HSR	13-3/4	AHF(†)-24-18-(*)-HRR	15-7/16
	12	AHF(†)-24-12-(*)-HLR	18-15/16	AHF(†)-24-12-(*)-HSR	15-7/16	AHF(†)-24-12-(*)-HRR	18-15/16
	9	AHF(†)-24-09-(*)-HLR	20-11/16	AHF(†)-24-09-(*)-HSR	16-5/16	AHF(†)-24-09-(*)-HRR	20-11/16
	6	AHF(†)-24-06-(*)-HLR	22-3/8	AHF(†)-24-06-(*)-HSR	17-3/16	AHF(†)-24-06-(*)-HRR	22-3/8
18	12	AHF(†)-18-12-(*)-HLR	15-7/16	AHF(†)-18-12-(*)-HSR	13-3/4	AHF(†)-18-12-(*)-HRR	15-7/16
	9	AHF(†)-18-09-(*)-HLR	17-3/16	AHF(†)-18-09-(*)-HSR	14-5/8	AHF(†)-18-09-(*)-HRR	17-3/16
	6	AHF(†)-18-06-(*)-HLR	18-15/16	AHF(†)-18-06-(*)-HSR	15-7/16	AHF(†)-18-06-(*)-HRR	18-15/16
12	9	AHF(†)-12-09-(*)-HLR	13-3/4	AHF(†)-12-09-(*)-HSR	12-7/8	AHF(†)-12-09-(*)-HRR	13-3/4
	6	AHF(†)-12-06-(*)-HLR	15-7/16	AHF(†)-12-06-(*)-HSR	13-3/4	AHF(†)-12-06-(*)-HRR	15-7/16
9	6	AHF(†)-09-06-(*)-HLR	13-3/4	AHF(†)-09-06-(*)-HSR	12-7/8	AHF(†)-09-06-(*)-HRR	13-3/4

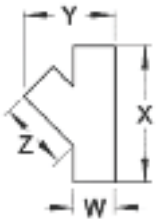
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

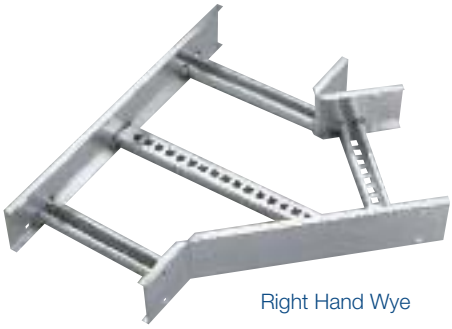
Fittings

U-Style Fittings Horizontal Wye 45º

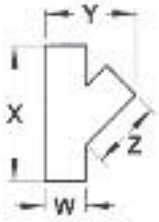


Left Hand Wye





Right Hand Wye



Technical Specifications

Part Numbering System

AUF-6-36-L-HYL

- AUF: Fitting Material and Siderail
- 6: Siderail Depth
- 36: Width
- L: Bottom Style
- HYL: Fitting Type

Selection Guide

Inside Tray Widths:
6, 9, 12, 18, 24, 30, 36

Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

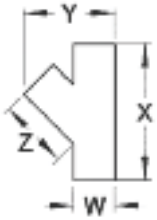
45º Horizontal WYE — U-Style					
Width	Left Hand Wye Cat. No.	Right Hand Wye Cat. No.	Dimensions		
			X	Y	Z
6	AUF(†)-06-(*)-HYL	AUF(†)-06-(*)-HYR	18-5/16	14-13/16	12-7/16
9	AUF(†)-09-(*)-HYL	AUF(†)-09-(*)-HYR	22-1/2	19-15/16	15-7/16
12	AUF(†)-12-(*)-HYL	AUF(†)-12-(*)-HYR	26-3/4	25	18-7/16
18	AUF(†)-18-(*)-HYL	AUF(†)-18-(*)-HYR	35-1/4	35-1/4	24-7/16
24	AUF(†)-24-(*)-HYL	AUF(†)-24-(*)-HYR	43-1/2	45-1/2	30-7/16
30	AUF(†)-30-(*)-HYL	AUF(†)-30-(*)-HYR	52-1/4	55-3/4	36-7/16
36	AUF(†)-36-(*)-HYL	AUF(†)-36-(*)-HYR	60-11/16	66	42-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

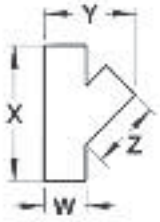
Fittings

H-Style Fittings Horizontal Wye 45º

Left Hand Wye



Right Hand Wye



Technical Specifications

Part Numbering System

AHF-6-36-L-HYL

- AHF: Fitting Material and Siderail
- 6: Siderail Depth
- 36: Width
- L: Bottom Style
- HYL: Fitting Type

Selection Guide

Inside Tray Widths:
6, 9, 12, 18, 24, 30, 36

Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

45º Horizontal WYE — H-Style

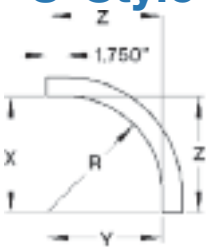
Width	Left Hand Wye Cat. No.	Right Hand Wye Cat. No.	Dimensions		
			X	Y	Z
6	AHF(†)-06-(*)-HYL	AHF(†)-06-(*)-HYR	18-5/16	14-13/16	12-7/16
9	AHF(†)-09-(*)-HYL	AHF(†)-09-(*)-HYR	22-1/2	19-15/16	15-7/16
12	AHF(†)-12-(*)-HYL	AHF(†)-12-(*)-HYR	26-3/4	25	18-7/16
18	AHF(†)-18-(*)-HYL	AHF(†)-18-(*)-HYR	35-1/4	35-1/4	24-7/16
24	AHF(†)-24-(*)-HYL	AHF(†)-24-(*)-HYR	43-1/2	45-1/2	30-7/16
30	AHF(†)-30-(*)-HYL	AHF(†)-30-(*)-HYR	52-1/4	55-3/4	36-7/16
36	AHF(†)-36-(*)-HYL	AHF(†)-36-(*)-HYR	60-11/16	66	42-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

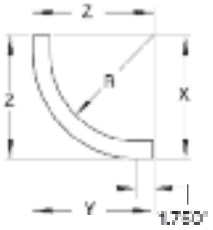
Fittings

U-Style Fittings Vertical Bends 90º

Outside Bend



Inside Bend



Technical Specifications

Part Numbering System

AUF-7-30-L-VI90-36

- AUF-7: Fitting Material and Siderail
- 30: Width
- L: Siderail Depth
- VI: Bottom Style
- 90: Fitting Type
- 36: Degree
- Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90º**
Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

90º Vertical BEND — U-Style

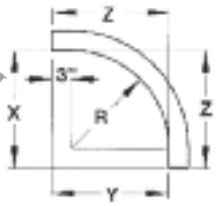
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.											
									5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AUF(†)-06-(*)-(+)90-12	12	12	12	17-15/16	17-15/16	17-15/16	18-13/16	18-13/16	18-13/16	20	20	20	21	21	21
	9	AUF(†)-09-(*)-(+)90-12															
	12	AUF(†)-12-(*)-(+)90-12															
	18	AUF(†)-18-(*)-(+)90-12															
	24	AUF(†)-24-(*)-(+)90-12															
	30	AUF(†)-30-(*)-(+)90-12															
	36	AUF(†)-36-(*)-(+)90-12															
24	6	AUF(†)-06-(*)-(+)90-24	24	24	24	29-15/16	29-15/16	29-15/16	30-13/16	30-13/16	30-13/16	32	32	32	33	33	33
	9	AUF(†)-09-(*)-(+)90-24															
	12	AUF(†)-12-(*)-(+)90-24															
	18	AUF(†)-18-(*)-(+)90-24															
	24	AUF(†)-24-(*)-(+)90-24															
	30	AUF(†)-30-(*)-(+)90-24															
	36	AUF(†)-36-(*)-(+)90-24															
36	6	AUF(†)-06-(*)-(+)90-36	36	36	36	41-15/16	41-15/16	41-15/16	42-13/16	42-13/16	42-13/16	44	44	44	33	33	33
	9	AUF(†)-09-(*)-(+)90-36															
	12	AUF(†)-12-(*)-(+)90-36															
	18	AUF(†)-18-(*)-(+)90-36															
	24	AUF(†)-24-(*)-(+)90-36															
	30	AUF(†)-30-(*)-(+)90-36															
	36	AUF(†)-36-(*)-(+)90-36															
48	6	AUF(†)-06-(*)-(+)90-48	48	48	48	53-15/16	53-15/16	53-15/16	54-13/16	54-13/16	54-13/16	56	56	56	57	57	57
	9	AUF(†)-09-(*)-(+)90-48															
	12	AUF(†)-12-(*)-(+)90-48															
	18	AUF(†)-18-(*)-(+)90-48															
	24	AUF(†)-24-(*)-(+)90-48															
	30	AUF(†)-30-(*)-(+)90-48															
	36	AUF(†)-36-(*)-(+)90-48															

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

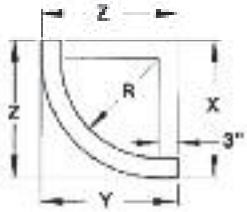
Fittings

H-Style Fittings Vertical Bends 90º


Outside Bend




Inside Bend



Technical Specifications

Part Numbering System

AHF-7-30-L-VI90-36

- AHF-7: Fitting Material and Siderail
- 30: Siderail Depth
- L: Width
- VI: Bottom Style
- 90: Fitting Type
- 36: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90º**
Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

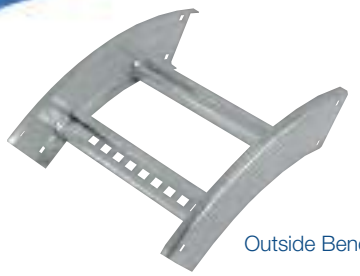
90º Vertical BEND — H-Style

Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AHF(†)-06-(*)-(+)90-12	15	15	15	19-3/16	19-3/16	19-3/16	20-1/16	20-1/16	20-1/16	21-1/4	21-1/4	21-1/4	22-1/4	22-1/4	22-1/4
	9	AHF(†)-09-(*)-(+)90-12															
	12	AHF(†)-12-(*)-(+)90-12															
	18	AHF(†)-18-(*)-(+)90-12															
	24	AHF(†)-24-(*)-(+)90-12															
	30	AHF(†)-30-(*)-(+)90-12															
	36	AHF(†)-36-(*)-(+)90-12															
24	6	AHF(†)-06-(*)-(+)90-24	27	27	27	31-3/16	31-3/16	31-3/16	32-1/16	32-1/16	32-1/16	33-1/4	33-1/4	33-1/4	34-1/4	34-1/4	34-1/4
	9	AHF(†)-09-(*)-(+)90-24															
	12	AHF(†)-12-(*)-(+)90-24															
	18	AHF(†)-18-(*)-(+)90-24															
	24	AHF(†)-24-(*)-(+)90-24															
	30	AHF(†)-30-(*)-(+)90-24															
	36	AHF(†)-36-(*)-(+)90-24															
36	6	AHF(†)-06-(*)-(+)90-36	39	39	39	43-3/16	43-3/16	43-3/16	44-1/16	44-1/16	44-1/16	45-1/4	45-1/4	45-1/4	46-1/4	46-1/4	46-1/4
	9	AHF(†)-09-(*)-(+)90-36															
	12	AHF(†)-12-(*)-(+)90-36															
	18	AHF(†)-18-(*)-(+)90-36															
	24	AHF(†)-24-(*)-(+)90-36															
	30	AHF(†)-30-(*)-(+)90-36															
	36	AHF(†)-36-(*)-(+)90-36															
48	6	AHF(†)-06-(*)-(+)90-48	51	51	51	55-3/16	55-3/16	55-3/16	56-1/16	56-1/16	56-1/16	57-1/4	57-1/4	57-1/4	58-1/4	58-1/4	58-1/4
	9	AHF(†)-09-(*)-(+)90-48															
	12	AHF(†)-12-(*)-(+)90-48															
	18	AHF(†)-18-(*)-(+)90-48															
	24	AHF(†)-24-(*)-(+)90-48															
	30	AHF(†)-30-(*)-(+)90-48															
	36	AHF(†)-36-(*)-(+)90-48															

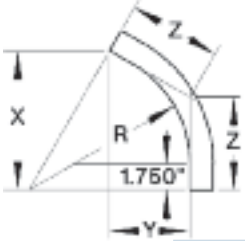
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

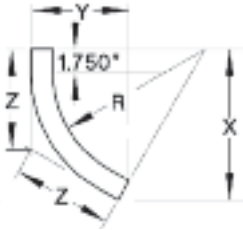
U-Style Fittings Vertical Bends 60º



Outside Bend



Inside Bend



Part Numbering System

AUF-7-36-V-VO60-24

- AUF-7: Fitting Material and Siderail
- 36: Width
- V: Siderail Depth
- VO: Bottom Style
- 60: Fitting Type
- 24: Degree
- Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **60º**
Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

Technical Specifications

60º Vertical BEND — U-Style

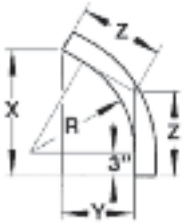
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AUF(†)-06-(*)-(+)60-12	13	7-1/2	8-11/16	16-5/8	11-11/16	11-1/16	17-7/16	12-5/8	11-5/8	18-3/8	13-11/16	12-1/4	19-5/16	14-3/4	12-7/8
	9	AUF(†)-09-(*)-(+)60-12															
	12	AUF(†)-12-(*)-(+)60-12															
	18	AUF(†)-18-(*)-(+)60-12															
	24	AUF(†)-24-(*)-(+)60-12															
	30	AUF(†)-30-(*)-(+)60-12															
	36	AUF(†)-36-(*)-(+)60-12															
24	6	AUF(†)-06-(*)-(+)60-24	23-7/16	13-1/2	15-5/8	27	17-11/16	18	27-13/16	18-5/8	16-9/16	28-3/4	19-11/16	19-3/16	29-11/16	20-3/4	19-13/16
	9	AUF(†)-09-(*)-(+)60-24															
	12	AUF(†)-12-(*)-(+)60-24															
	18	AUF(†)-18-(*)-(+)60-24															
	24	AUF(†)-24-(*)-(+)60-24															
	30	AUF(†)-30-(*)-(+)60-24															
	36	AUF(†)-36-(*)-(+)60-24															
36	6	AUF(†)-06-(*)-(+)60-36	33-13/16	19-1/2	22-9/16	37-7/16	23-11/16	24-15/16	38-3/16	24-5/8	25-7/16	39-3/16	25-11/16	26-1/8	40-1/16	26-3/4	26-11/16
	9	AUF(†)-09-(*)-(+)60-36															
	12	AUF(†)-12-(*)-(+)60-36															
	18	AUF(†)-18-(*)-(+)60-36															
	24	AUF(†)-24-(*)-(+)60-36															
	30	AUF(†)-30-(*)-(+)60-36															
	36	AUF(†)-36-(*)-(+)60-36															
48	6	AUF(†)-06-(*)-(+)60-48	44-3/16	25-1/2	29-7/16	47-13/16	29-11/16	31-7/8	48-9/16	30-5/8	32-3/8	49-9/16	31-11/16	33-1/16	50-7/16	32-3/4	33-5/8
	9	AUF(†)-09-(*)-(+)60-48															
	12	AUF(†)-12-(*)-(+)60-48															
	18	AUF(†)-18-(*)-(+)60-48															
	24	AUF(†)-24-(*)-(+)60-48															
	30	AUF(†)-30-(*)-(+)60-48															
	36	AUF(†)-36-(*)-(+)60-48															

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

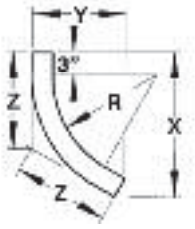
Fittings

H-Style Fittings Vertical Bends 60º

Outside Bend



Inside Bend



Technical Specifications

Part Numbering System

AHF-7-36-V-VO60-24

- AHF-7: Fitting Material and Siderail
- 36: Width
- V: Bottom Style
- VO: Fitting Type
- 60: Degree
- 24: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **60º**
Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

60º Vertical BEND — H-Style

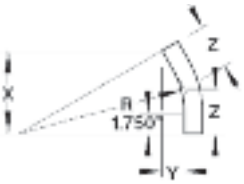
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AHF(†)-06-(*)-(+)60-12	14-7/8	8-5/8	9-15/16	18-1/2	12-3/4	12-5/16	19-5/16	13-11/16	12-7/8	20-5/16	14-13/16	13-1/2	21-1/8	15-13/16	14-1/8
	9	AHF(†)-09-(*)-(+)60-12															
	12	AHF(†)-12-(*)-(+)60-12															
	18	AHF(†)-18-(*)-(+)60-12															
	24	AHF(†)-24-(*)-(+)60-12															
	30	AHF(†)-30-(*)-(+)60-12															
	36	AHF(†)-36-(*)-(+)60-12															
24	6	AHF(†)-06-(*)-(+)60-24	25-5/16	14-5/8	16-7/8	28-7/8	18-3/4	19-1/4	29-11/16	19-11/16	19-13/16	30-11/16	20-13/16	20-7/16	31-9/16	21-13/16	21
	9	AHF(†)-09-(*)-(+)60-24															
	12	AHF(†)-12-(*)-(+)60-24															
	18	AHF(†)-18-(*)-(+)60-24															
	24	AHF(†)-24-(*)-(+)60-24															
	30	AHF(†)-30-(*)-(+)60-24															
	36	AHF(†)-36-(*)-(+)60-24															
36	6	AHF(†)-06-(*)-(+)60-36	35-11/16	20-5/8	23-13/16	39-5/16	24-3/4	26-3/16	40-1/16	25-11/16	26-11/16	41-1/16	26-13/16	27-3/8	41-15/16	27-13/16	27-15/16
	9	AHF(†)-09-(*)-(+)60-36															
	12	AHF(†)-12-(*)-(+)60-36															
	18	AHF(†)-18-(*)-(+)60-36															
	24	AHF(†)-24-(*)-(+)60-36															
	30	AHF(†)-30-(*)-(+)60-36															
	36	AHF(†)-36-(*)-(+)60-36															
48	6	AHF(†)-06-(*)-(+)60-48	46-1/16	26-5/8	30-11/16	49-11/16	30-3/4	33-1/8	50-7/16	31-11/16	33-5/8	51-1/2	32-13/16	34-5/16	52-5/16	33-13/16	34-7/8
	9	AHF(†)-09-(*)-(+)60-48															
	12	AHF(†)-12-(*)-(+)60-48															
	18	AHF(†)-18-(*)-(+)60-48															
	24	AHF(†)-24-(*)-(+)60-48															
	30	AHF(†)-30-(*)-(+)60-48															
	36	AHF(†)-36-(*)-(+)60-48															

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

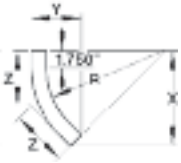
Fittings

U-Style Fittings Vertical Bends 45º

Outside Bend



Inside Bend



Part Numbering System

AUF-5-24-S-VI45-48

- AUF – Fitting Material and Siderail
- 5 – Siderail Depth
- 24 – Width
- S – Bottom Style
- VI – Fitting Type
- 45 – Degree
- 48 – Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

Technical Specifications

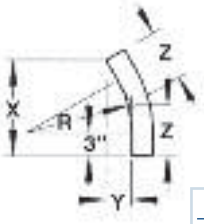
45º Vertical BEND — U-Style																	
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height											
						4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AUF(†)-06-(*)-(+)45-12	11-1/2	4-3/4	6-3/4	14-7/16	8-15/16	8-7/16	15-1/16	9-13/16	8-13/16	15-7/8	10-15/16	9-5/16	16-9/16	12	9-3/4
	9	AUF(†)-09-(*)-(+)45-12															
	12	AUF(†)-12-(*)-(+)45-12															
	18	AUF(†)-18-(*)-(+)45-12															
	24	AUF(†)-24-(*)-(+)45-12															
	30	AUF(†)-30-(*)-(+)45-12															
	36	AUF(†)-36-(*)-(+)45-12															
24	6	AUF(†)-06-(*)-(+)45-24	19-15/16	8-1/4	11-11/16	22-15/16	12-7/16	13-7/16	23-9/16	13-3/8	13-13/16	24-5/16	14-7/16	14-1/4	25-1/16	15-1/2	14-11/16
	9	AUF(†)-09-(*)-(+)45-24															
	12	AUF(†)-12-(*)-(+)45-24															
	18	AUF(†)-18-(*)-(+)45-24															
	24	AUF(†)-24-(*)-(+)45-24															
	30	AUF(†)-30-(*)-(+)45-24															
	36	AUF(†)-36-(*)-(+)45-24															
36	6	AUF(†)-06-(*)-(+)45-36	28-7/16	11-13/16	16-11/16	31-3/8	15-15/16	18-3/8	32-1/16	16-7/8	18-3/4	32-13/16	18	19-1/4	33-9/16	19	19-11/16
	9	AUF(†)-09-(*)-(+)45-36															
	12	AUF(†)-12-(*)-(+)45-36															
	18	AUF(†)-18-(*)-(+)45-36															
	24	AUF(†)-24-(*)-(+)45-36															
	30	AUF(†)-30-(*)-(+)45-36															
	36	AUF(†)-36-(*)-(+)45-36															
48	6	AUF(†)-06-(*)-(+)45-48	36-15/16	15-5/16	21-5/8	39-7/8	19-1/2	23-3/8	40-1/2	20-3/8	23-3/4	41-5/16	21-1/2	24-3/16	42-1/16	22-9/16	24-5/8
	9	AUF(†)-09-(*)-(+)45-48															
	12	AUF(†)-12-(*)-(+)45-48															
	18	AUF(†)-18-(*)-(+)45-48															
	24	AUF(†)-24-(*)-(+)45-48															
	30	AUF(†)-30-(*)-(+)45-48															
	36	AUF(†)-36-(*)-(+)45-48															

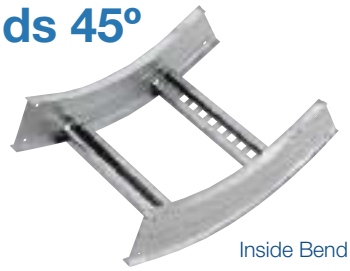
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

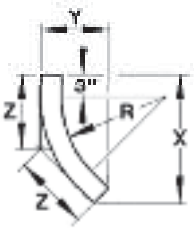
H-Style Fittings Vertical Bends 45º

Outside Bend





Inside Bend



Technical Specifications

Part Numbering System

AHF-5-24-S-VI45-48

- AHF – Fitting Material and Siderail
- 5 – Siderail Depth
- 24 – Width
- S – Bottom Style
- VI – Fitting Type
- 45 – Degree
- 48 – Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in. – 7 in.**

45º Vertical BEND — H-Style

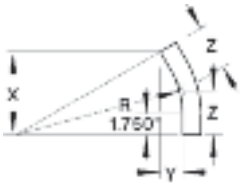
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.											
						4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AHF(†)-06-(*)-(+)45-12	13-5/8	5-5/8	8	16-9/16	9-13/16	9-11/16	17-3/16	10-11/16	10-1/16	18	11-7/8	10-9/16	18-11/16	12-7/8	10-15/16
	9	AHF(†)-09-(*)-(+)45-12															
	12	AHF(†)-12-(*)-(+)45-12															
	18	AHF(†)-18-(*)-(+)45-12															
	24	AHF(†)-24-(*)-(+)45-12															
	30	AHF(†)-30-(*)-(+)45-12															
	36	AHF(†)-36-(*)-(+)45-12															
24	6	AHF(†)-06-(*)-(+)45-24	22-1/16	9-1/8	12-15/16	25-1/16	13-5/16	14-11/16	25-11/16	14-1/4	15-1/16	26-1/2	15-3/8	15-1/2	27-3/16	16-3/8	15-15/16
	9	AHF(†)-09-(*)-(+)45-24															
	12	AHF(†)-12-(*)-(+)45-24															
	18	AHF(†)-18-(*)-(+)45-24															
	24	AHF(†)-24-(*)-(+)45-24															
	30	AHF(†)-30-(*)-(+)45-24															
	36	AHF(†)-36-(*)-(+)45-24															
36	6	AHF(†)-06-(*)-(+)45-36	30-9/16	12-11/16	17-15/16	33-1/2	16-13/16	19-5/8	34-3/16	17-3/4	20	35	18-7/8	20-1/2	35-11/16	19-7/8	20-7/8
	9	AHF(†)-09-(*)-(+)45-36															
	12	AHF(†)-12-(*)-(+)45-36															
	18	AHF(†)-18-(*)-(+)45-36															
	24	AHF(†)-24-(*)-(+)45-36															
	30	AHF(†)-30-(*)-(+)45-36															
	36	AHF(†)-36-(*)-(+)45-36															
48	6	AHF(†)-06-(*)-(+)45-48	39-1/16	16-3/16	22-7/8	42	20-3/8	24-5/8	42- 5/8	21-1/4	25	43-1/2	22-7/16	25-7/16	44-3/16	23-3/8	25-7/8
	9	AHF(†)-09-(*)-(+)45-48															
	12	AHF(†)-12-(*)-(+)45-48															
	18	AHF(†)-18-(*)-(+)45-48															
	24	AHF(†)-24-(*)-(+)45-48															
	30	AHF(†)-30-(*)-(+)45-48															
	36	AHF(†)-36-(*)-(+)45-48															

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

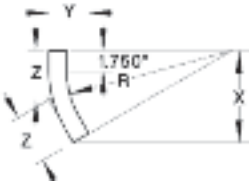
Fittings

U-Style Fittings Vertical Bends 30º

Outside Bend



Inside Bend



Part Numbering System

AUF-6-12-L-VO30-24

- AUF-6: Fitting Material and Siderail
- 12: Siderail Depth
- L: Bottom Style
- VO: Fitting Type
- 30: Degree
- 24: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **30º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

Technical Specifications

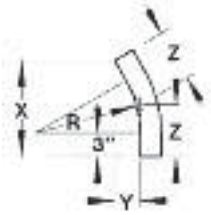
30º Vertical BEND — U-Style																	
Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AUF(†)-06-(*)-(+)30-12	9-1/4	2-1/2	4-15/16	11-3/8	6-11/16	6-1/16	11-13/16	7-9/16	6-5/16	12-3/8	8-11/16	6-5/8	12-7/8	9-3/4	6-7/8
	9	AUF(†)-09-(*)-(+)30-12															
	12	AUF(†)-12-(*)-(+)30-12															
	18	AUF(†)-18-(*)-(+)30-12															
	24	AUF(†)-24-(*)-(+)30-12															
	30	AUF(†)-30-(*)-(+)30-12															
	36	AUF(†)-36-(*)-(+)30-12															
24	6	AUF(†)-06-(*)-(+)30-24	15-1/4	4-1/16	8-3/16	17-3/8	8-1/4	9-5/16	17-13/16	9-3/16	9-9/16	18-3/8	10-1/4	9-13/16	18-7/8	11-5/16	10-1/8
	9	AUF(†)-09-(*)-(+)30-24															
	12	AUF(†)-12-(*)-(+)30-24															
	18	AUF(†)-18-(*)-(+)30-24															
	24	AUF(†)-24-(*)-(+)30-24															
	30	AUF(†)-30-(*)-(+)30-24															
	36	AUF(†)-36-(*)-(+)30-24															
36	6	AUF(†)-06-(*)-(+)30-36	21-1/4	5-11/16	11-3/8	23-3/8	9-7/8	12-1/2	23-13/16	10-3/4	12-3/4	24-3/8	11-7/8	13-1/16	24-7/8	12-15/16	13-5/16
	9	AUF(†)-09-(*)-(+)30-36															
	12	AUF(†)-12-(*)-(+)30-36															
	18	AUF(†)-18-(*)-(+)30-36															
	24	AUF(†)-24-(*)-(+)30-36															
	30	AUF(†)-30-(*)-(+)30-36															
	36	AUF(†)-36-(*)-(+)30-36															
48	6	AUF(†)-06-(*)-(+)30-48	21-1/4	7-5/16	14-5/8	29-3/8	11-1/2	15-3/4	29-13/16	12-3/8	16	30-3/8	13-1/2	16-1/4	30-7/8	14-9/16	16-9/16
	9	AUF(†)-09-(*)-(+)30-48															
	12	AUF(†)-12-(*)-(+)30-48															
	18	AUF(†)-18-(*)-(+)30-48															
	24	AUF(†)-24-(*)-(+)30-48															
	30	AUF(†)-30-(*)-(+)30-48															
	36	AUF(†)-36-(*)-(+)30-48															

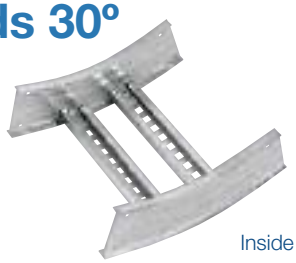
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

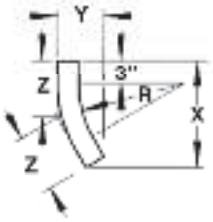
H-Style Fittings Vertical Bends 30°

Outside Bend





Inside Bend



Technical Specifications

Part Numbering System

AHF-6-12-L-VO30-24

- AHF-6: Fitting Material and Siderail
- 12: Siderail Depth
- L: Width
- VO: Bottom Style
- 30: Fitting Type
- 24: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **30°**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

30° Vertical BEND — H-Style

Nominal Radius			(+) VO Siderail Height 4 in. – 7 in.			(+) VI Siderail Height 4 in.											
						4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	AHF(†)-06-(*)-(+)30-12	11-5/8	3-1/8	6-3/16	13-11/16	7-5/16	7-5/16	14-1/8	8-3/16	7-9/16	14-11/16	9-3/8	7-7/8	13-11/16	10-5/16	8-1/8
	9	AHF(†)-09-(*)-(+)30-12															
	12	AHF(†)-12-(*)-(+)30-12															
	18	AHF(†)-18-(*)-(+)30-12															
	24	AHF(†)-24-(*)-(+)30-12															
	30	AHF(†)-30-(*)-(+)30-12															
	36	AHF(†)-36-(*)-(+)30-12															
24	6	AHF(†)-06-(*)-(+)30-24	17-5/8	4-11/16	9-7/16	19-11/16	8-7/8	10-9/16	20-1/8	9-13/16	10-13/16	20-11/16	10-15/16	11-1/8	19-11/16	11-15/16	11-3/8
	9	AHF(†)-09-(*)-(+)30-24															
	12	AHF(†)-12-(*)-(+)30-24															
	18	AHF(†)-18-(*)-(+)30-24															
	24	AHF(†)-24-(*)-(+)30-24															
	30	AHF(†)-30-(*)-(+)30-24															
	36	AHF(†)-36-(*)-(+)30-24															
36	6	AHF(†)-06-(*)-(+)30-36	23-5/8	6-5/16	12-5/8	25-11/16	10-1/2	13-6/8	26-1/8	11-3/8	14	26-11/16	12-9/16	14-5/16	25-11/16	13-9/16	14-9/16
	9	AHF(†)-09-(*)-(+)30-36															
	12	AHF(†)-12-(*)-(+)30-36															
	18	AHF(†)-18-(*)-(+)30-36															
	24	AHF(†)-24-(*)-(+)30-36															
	30	AHF(†)-30-(*)-(+)30-36															
	36	AHF(†)-36-(*)-(+)30-36															
48	6	AHF(†)-06-(*)-(+)30-48	29-5/8	7-15/16	15-7/8	31-11/16	12-1/8	17	32-1/8	13	17-1/4	32-11/16	14-3/16	17-9/16	31-11/16	15-1/8	17-13/16
	9	AHF(†)-09-(*)-(+)30-48															
	12	AHF(†)-12-(*)-(+)30-48															
	18	AHF(†)-18-(*)-(+)30-48															
	24	AHF(†)-24-(*)-(+)30-48															
	30	AHF(†)-30-(*)-(+)30-48															
	36	AHF(†)-36-(*)-(+)30-48															

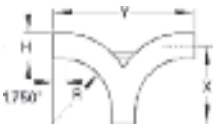
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

U-Style Fittings Vertical Tee Up/Down

Up

Down



Technical Specifications

Part Numbering System

AUF-6-24-L-VTD-12

- AUF-6: Fitting Material and Siderail
- 24: Siderail Depth
- L: Width
- VTD: Bottom Style
- 12: Fitting Type
- Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

Vertical TEE Up/Down — U-Style

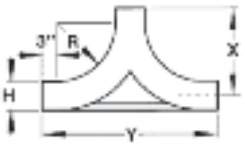
Nominal Radius				Siderail Height "H"							
				4 in.		5 in.		6 in.		7 in.	
R	Width	Cat. No.	Cat. No.	X	Y	X	Y	X	Y	X	Y
12	6	AUF(†)-06-(*)-VTU12	AUF(†)-06-(*)-VTD12	15-13/16	31-11/16	16-5/16	32-9/16	16-7/8	33-3/4	17-3/8	34-3/4
	9	AUF(†)-09-(*)-VTU12	AUF(†)-09-(*)-VTD12								
	12	AUF(†)-12-(*)-VTU12	AUF(†)-12-(*)-VTD12								
	18	AUF(†)-18-(*)-VTU12	AUF(†)-18-(*)-VTD12								
	24	AUF(†)-24-(*)-VTU12	AUF(†)-24-(*)-VTD12								
	30	AUF(†)-30-(*)-VTU12	AUF(†)-30-(*)-VTD12								
	36	AUF(†)-36-(*)-VTU12	AUF(†)-36-(*)-VTD12								
24	6	AUF(†)-06-(*)-VTU24	AUF(†)-06-(*)-VTD24	27-13/16	55-11/16	28-5/16	56-9/16	28-7/8	57-3/4	29-3/8	58-3/4
	9	AUF(†)-09-(*)-VTU24	AUF(†)-09-(*)-VTD24								
	12	AUF(†)-12-(*)-VTU24	AUF(†)-12-(*)-VTD24								
	18	AUF(†)-18-(*)-VTU24	AUF(†)-18-(*)-VTD24								
	24	AUF(†)-24-(*)-VTU24	AUF(†)-24-(*)-VTD24								
	30	AUF(†)-30-(*)-VTU24	AUF(†)-30-(*)-VTD24								
	36	AUF(†)-36-(*)-VTU24	AUF(†)-36-(*)-VTD24								
36	6	AUF(†)-06-(*)-VTU36	AUF(†)-06-(*)-VTD36	39-13/16	79-11/16	40-5/16	80-9/16	40-7/8	81-3/4	41-3/8	82-3/4
	9	AUF(†)-09-(*)-VTU36	AUF(†)-09-(*)-VTD36								
	12	AUF(†)-12-(*)-VTU36	AUF(†)-12-(*)-VTD36								
	18	AUF(†)-18-(*)-VTU36	AUF(†)-18-(*)-VTD36								
	24	AUF(†)-24-(*)-VTU36	AUF(†)-24-(*)-VTD36								
	30	AUF(†)-30-(*)-VTU36	AUF(†)-30-(*)-VTD36								
	36	AUF(†)-36-(*)-VTU36	AUF(†)-36-(*)-VTD36								
48	6	AUF(†)-06-(*)-VTU48	AUF(†)-06-(*)-VTD48	51-13/16	103-11/16	52-5/16	104-9/16	52-7/8	105-3/4	53-3/8	106-3/4
	9	AUF(†)-09-(*)-VTU48	AUF(†)-09-(*)-VTD48								
	12	AUF(†)-12-(*)-VTU48	AUF(†)-12-(*)-VTD48								
	18	AUF(†)-18-(*)-VTU48	AUF(†)-18-(*)-VTD48								
	24	AUF(†)-24-(*)-VTU48	AUF(†)-24-(*)-VTD48								
	30	AUF(†)-30-(*)-VTU48	AUF(†)-30-(*)-VTD48								
	36	AUF(†)-36-(*)-VTU48	AUF(†)-36-(*)-VTD48								

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

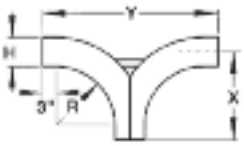
Fittings

H-Style Fittings Vertical Tee Up/Down

Up



Down



Technical Specifications

Part Numbering System

AHF-6-24-L-VTD-12

- AHF-6: Fitting Material and Siderail
- 24: Siderail Depth
- L: Width
- VTD: Bottom Style
- 12: Fitting Type
- Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

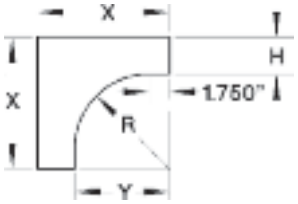
Vertical TEE Up/Down — H-Style

Nominal Radius				Siderail Height "H"							
				4 in.		5 in.		6 in.		7 in.	
R	Width	Cat. No.	Cat. No.	X	Y	X	Y	X	Y	X	Y
12	6	AHF(†)-06-(*)-VTU12	AHF(†)-06-(*)-VTD12	17-1/16	34-3/16	17-9/16	35-1/16	18-1/8	36-1/4	18-5/8	37-1/4
	9	AHF(†)-09-(*)-VTU12	AHF(†)-09-(*)-VTD12								
	12	AHF(†)-12-(*)-VTU12	AHF(†)-12-(*)-VTD12								
	18	AHF(†)-18-(*)-VTU12	AHF(†)-18-(*)-VTD12								
	24	AHF(†)-24-(*)-VTU12	AHF(†)-24-(*)-VTD12								
	30	AHF(†)-30-(*)-VTU12	AHF(†)-30-(*)-VTD12								
	36	AHF(†)-36-(*)-VTU12	AHF(†)-36-(*)-VTD12								
24	6	AHF(†)-06-(*)-VTU24	AHF(†)-06-(*)-VTD24	29-1/16	58-3/16	29-9/16	59-1/16	30-1/8	60-1/4	30-5/8	61-1/4
	9	AHF(†)-09-(*)-VTU24	AHF(†)-09-(*)-VTD24								
	12	AHF(†)-12-(*)-VTU24	AHF(†)-12-(*)-VTD24								
	18	AHF(†)-18-(*)-VTU24	AHF(†)-18-(*)-VTD24								
	24	AHF(†)-24-(*)-VTU24	AHF(†)-24-(*)-VTD24								
	30	AHF(†)-30-(*)-VTU24	AHF(†)-30-(*)-VTD24								
	36	AHF(†)-36-(*)-VTU24	AHF(†)-36-(*)-VTD24								
36	6	AHF(†)-06-(*)-VTU36	AHF(†)-06-(*)-VTD36	41-1/16	82-3/16	41-9/16	83-1/16	42-1/8	84-1/4	42-5/8	85-1/4
	9	AHF(†)-09-(*)-VTU36	AHF(†)-09-(*)-VTD36								
	12	AHF(†)-12-(*)-VTU36	AHF(†)-12-(*)-VTD36								
	18	AHF(†)-18-(*)-VTU36	AHF(†)-18-(*)-VTD36								
	24	AHF(†)-24-(*)-VTU36	AHF(†)-24-(*)-VTD36								
	30	AHF(†)-30-(*)-VTU36	AHF(†)-30-(*)-VTD36								
	36	AHF(†)-36-(*)-VTU36	AHF(†)-36-(*)-VTD36								
48	6	AHF(†)-06-(*)-VTU48	AHF(†)-06-(*)-VTD48	53-1/16	106-3/16	53-9/16	107-1/16	54-1/8	108-1/4	54-5/8	109-1/4
	9	AHF(†)-09-(*)-VTU48	AHF(†)-09-(*)-VTD48								
	12	AHF(†)-12-(*)-VTU48	AHF(†)-12-(*)-VTD48								
	18	AHF(†)-18-(*)-VTU48	AHF(†)-18-(*)-VTD48								
	24	AHF(†)-24-(*)-VTU48	AHF(†)-24-(*)-VTD48								
	30	AHF(†)-30-(*)-VTU48	AHF(†)-30-(*)-VTD48								
	36	AHF(†)-36-(*)-VTU48	AHF(†)-36-(*)-VTD48								

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

U-Style Fittings Cable Support



Technical Specifications

Part Numbering System

AUF-5-24-V-CS-12

- AUF: Fitting Material and Siderail
- 5: Siderail Depth
- 24: Width
- V: Bottom Style
- CS: Fitting Type
- 12: Nominal Radius

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

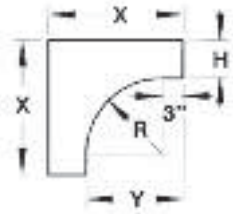
Cable Support Fitting - U-Style

Nominal Radius			Siderail Height "H"							
			4 in.		5 in.		6 in.		7 in.	
R	Width	Cat. No.	X	Y	X	Y	X	Y	X	Y
12	6	AUF(†)-06-(*)-CS12	17-15/16	13-3/4	18-13/16	13-3/4	20	13-3/4	21	13-3/4
	9	AUF(†)-09-(*)-CS12								
	12	AUF(†)-12-(*)-CS12								
	18	AUF(†)-18-(*)-CS12								
	24	AUF(†)-24-(*)-CS12								
	30	AUF(†)-30-(*)-CS12								
	36	AUF(†)-36-(*)-CS12								
24	6	AUF(†)-06-(*)-CS24	29-15/16	25-3/4	30-13/16	25-3/4	32	25-3/4	33	25-3/4
	9	AUF(†)-09-(*)-CS24								
	12	AUF(†)-12-(*)-CS24								
	18	AUF(†)-18-(*)-CS24								
	24	AUF(†)-24-(*)-CS24								
	30	AUF(†)-30-(*)-CS24								
	36	AUF(†)-36-(*)-CS24								
36	6	AUF(†)-06-(*)-CS36	41-15/16	37-3/4	42-13/16	37-3/4	44	37-3/4	45	37-3/4
	9	AUF(†)-09-(*)-CS36								
	12	AUF(†)-12-(*)-CS36								
	18	AUF(†)-18-(*)-CS36								
	24	AUF(†)-24-(*)-CS36								
	30	AUF(†)-30-(*)-CS36								
	36	AUF(†)-36-(*)-CS36								
48	6	AUF(†)-06-(*)-CS48	53-15/16	49-3/4	54-13/16	49-3/4	56	49-3/4	57	49-3/4
	9	AUF(†)-09-(*)-CS48								
	12	AUF(†)-12-(*)-CS48								
	18	AUF(†)-18-(*)-CS48								
	24	AUF(†)-24-(*)-CS48								
	30	AUF(†)-30-(*)-CS48								
	36	AUF(†)-36-(*)-CS48								

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Fittings

H-Style Fittings Cable Support



Technical Specifications

Part Numbering System

AHF-5-24-V-CS-12

- AHF-5: Fitting Material and Siderail
- 24: Width
- V: Fitting Type
- CS: Bottom Style
- 12: Nominal Radius

Siderail Depth

Selection Guide

Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L–** Ladder, **V–** Ventilated, **S–** Solid
Siderail Depth: **4 in.– 7 in.**

Cable Support Fitting - H-Style

Nominal Radius			Siderail Height "H"							
			4 in.		5 in.		6 in.		7 in.	
R	Width	Cat. No.	X	Y	X	Y	X	Y	X	Y
12	6	AHF(†)-06-(*)-CS12	19-3/16	15	20-1/16	15	21-1/4	15	22-1/4	15
	9	AHF(†)-09-(*)-CS12								
	12	AHF(†)-12-(*)-CS12								
	18	AHF(†)-18-(*)-CS12								
	24	AHF(†)-24-(*)-CS12								
	30	AHF(†)-30-(*)-CS12								
	36	AHF(†)-36-(*)-CS12								
24	6	AHF(†)-06-(*)-CS24	31-3/16	27	32-1/16	27	33-1/4	27	34-1/4	27
	9	AHF(†)-09-(*)-CS24								
	12	AHF(†)-12-(*)-CS24								
	18	AHF(†)-18-(*)-CS24								
	24	AHF(†)-24-(*)-CS24								
	30	AHF(†)-30-(*)-CS24								
	36	AHF(†)-36-(*)-CS24								
36	6	AHF(†)-06-(*)-CS36	43-3/16	39	44-1/16	39	45-1/4	39	46-1/4	39
	9	AHF(†)-09-(*)-CS36								
	12	AHF(†)-12-(*)-CS36								
	18	AHF(†)-18-(*)-CS36								
	24	AHF(†)-24-(*)-CS36								
	30	AHF(†)-30-(*)-CS36								
	36	AHF(†)-36-(*)-CS36								
48	6	AHF(†)-06-(*)-CS48	55-3/16	51	56-1/16	51	57-1/4	51	58-1/4	51
	9	AHF(†)-09-(*)-CS48								
	12	AHF(†)-12-(*)-CS48								
	18	AHF(†)-18-(*)-CS48								
	24	AHF(†)-24-(*)-CS48								
	30	AHF(†)-30-(*)-CS48								
	36	AHF(†)-36-(*)-CS48								

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.
T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Accessories

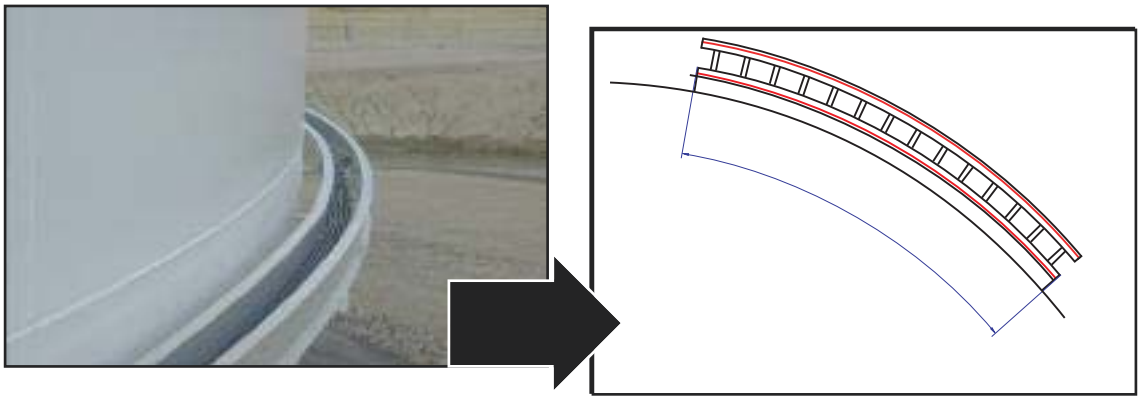
Large Radius Aluminum

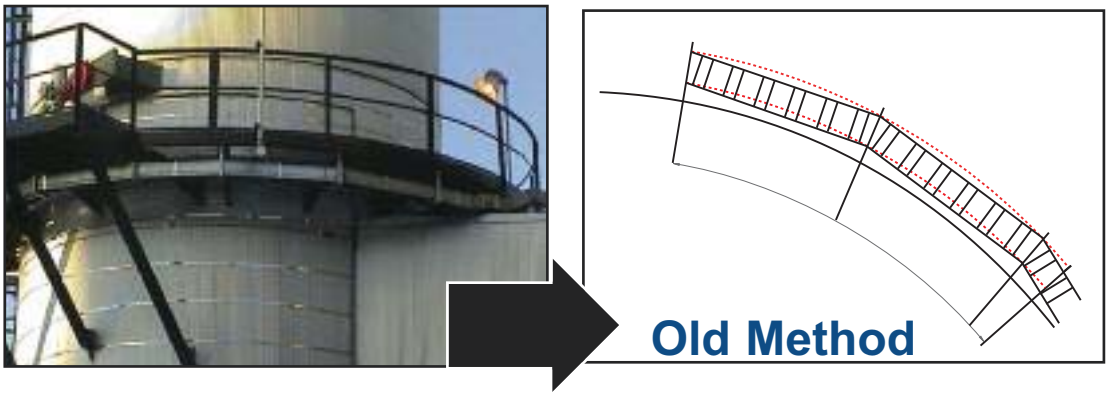
This cable tray design offers a custom-built cable support system for each petrochemical project tank or tower. This cable tray system is usually installed around the outer perimeter of the catwalks and stairs which are mounted on the tank or vessel.

Thomas & Betts takes pride in manufacturing a complete system to meet your most rigorous requirements. Our cable support systems reduce the costly and labor-intensive modifications required to assemble straight sections, splice plates and accessories to fit your tank or vessel.

Thomas & Betts Large Radius Aluminum cable tray systems mount flawlessly with no extra cutting, set-up or surplus material. With the option of pre-assembly of this cable tray system prior to erection of the tank or vessel, you can drastically reduce installing time.

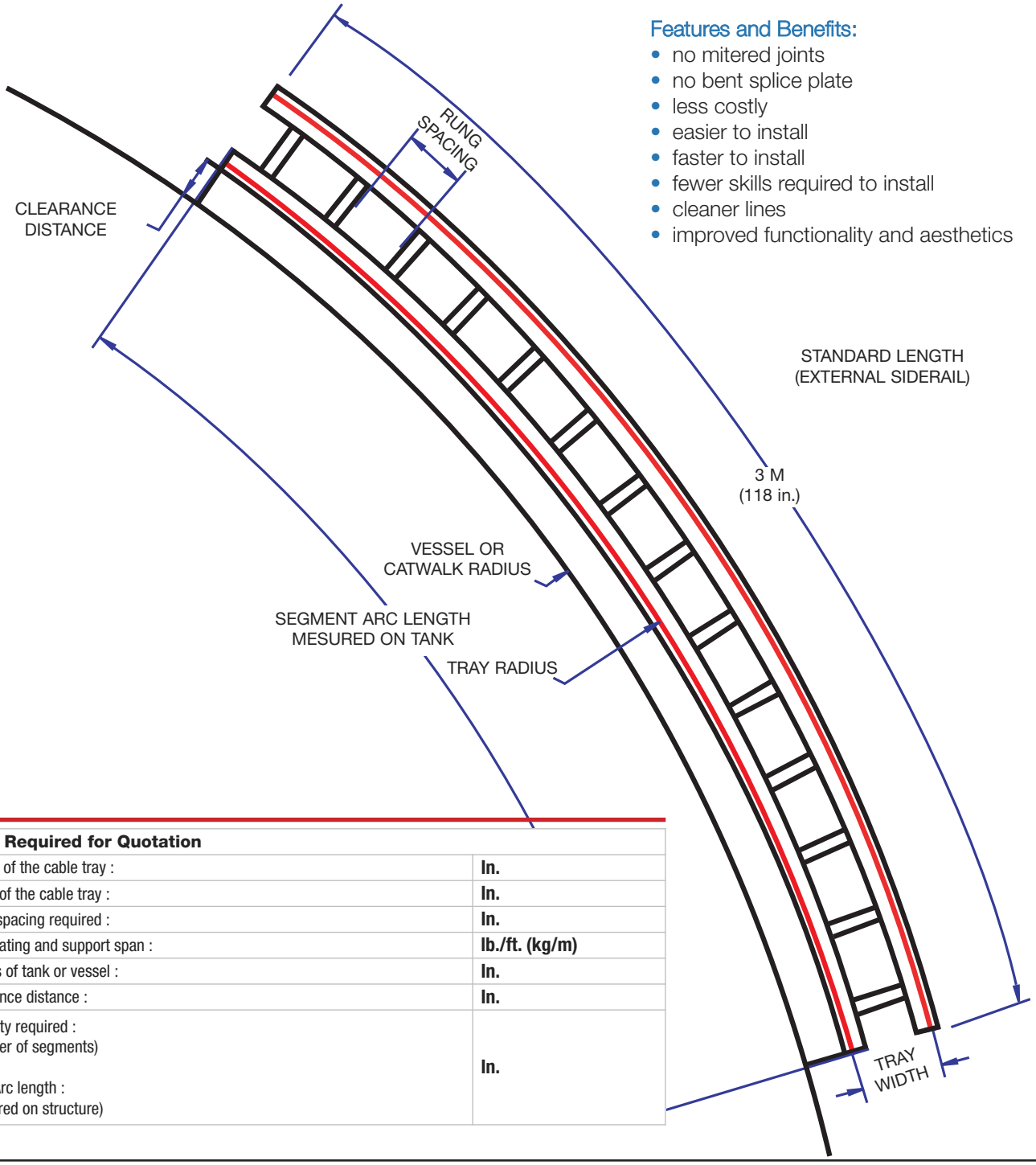
Technical Specifications





Accessories

Large Radius Aluminum / Cable Tray



Features and Benefits:

- no mitered joints
- no bent splice plate
- less costly
- easier to install
- faster to install
- fewer skills required to install
- cleaner lines
- improved functionality and aesthetics

Data Required for Quotation	
Height of the cable tray :	**In.**
Width of the cable tray :	**In.**
Rung spacing required :	**In.**
Load rating and support span :	**lb./ft. (kg/m)**
Radius of tank or vessel :	**In.**
Clearance distance :	**In.**
Quantity required : (number of segments) or Total Arc length : (mesured on structure)	**In.**

Covers

Number Selection

Tray Covers

— Tray covers are available for all classes of tray. They should be installed where falling objects may damage cables or where vertical tray run is accessible by pedestrian or vehicular traffic.

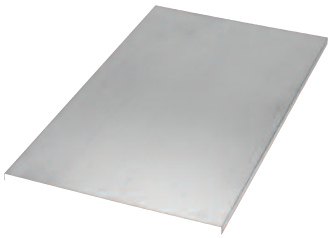
Cover mounting hardware must be ordered separately.

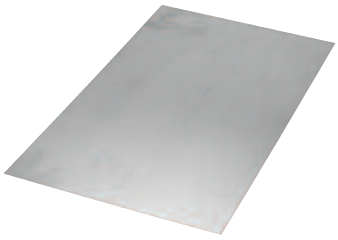
Solid Covers

— These covers provide maximum mechanical protection for cables with limited heat build up. Solid covers are available with or without flange.

Flanged covers have 1/2 in. flange.

Cover mounting hardware must be ordered separately.





Ventilated Flanged Covers

— This design offers excellent mechanical protection while allowing heat produced by cables to dissipate.

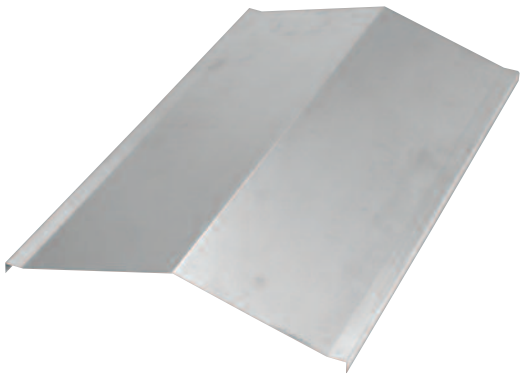
Cover mounting hardware must be ordered separately.

For extreme applications : Peaked flanged covers, peaked ventilated covers

— Peaked covers offer mechanical protection, reduce pooling of liquids on the cover and the accumulation of snow or ice.

Peaked covers have 15° rise.

Cover mounting hardware must be ordered separately.



T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Straight Cover Number Selection

(ABW-1-12)-SNC-72

Material
ABW • Aluminum

Prefix

Cover Series
1 • For tray series: AH14
2 • For tray series: AH34, AH54, AH25, AH45, AH16, AH47, AH18
3 • For tray series: AH36, AH46, AH56, AH66, AH76, AH37

Width
06 • (6 in.)
09 • (9 in.)
12 • (12 in.)
18 • (18 in.)
24 • (24 in.)
30 • (30 in.)
36 • (36 in.)

Cover Type
SNC • Solid Non-Flanged Cover
SFC • Solid Flanged Cover
VFC • Ventilated Flanged Cover
***PFC** • Peaked Flanged Cover
***PVC** • Peaked Ventilated Flanged Cover

Length
72 • (72 in.)
3 • (3 m)

* Peaked covers greater than 18 in. wide available in 72 in. and 3 m lengths only.

Fitting Cover Number Selection

AUW-12-SNC-HB90-24

Material
A • Aluminum

Prefix

Fitting Style
UW • U-Beam
HW • H-Beam

Width
06 • (6 in.)
09 • (9 in.)
12 • (12 in.)
18 • (18 in.)
24 • (24 in.)
30 • (30 in.)
36 • (36 in.)

Cover Type
SNC •
Solid Non-Flanged Cover
SFC •
Solid Flanged Cover
VFC •
Ventilated Flanged Cover

Fitting Type
HB • Horizontal Bend
VI • Vertical Inside Bend

Degree
30 • (30°)
45 • (45°)
60 • (60°)
90 • (90°)

Radius
12 • (12 in.)
24 • (24 in.)
36 • (36 in.)
48 • (48 in.)

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Fitting Cover Number Selection

AUW-18-12-SNC-RT-12

Material	Fitting Style	Width 1	Width 2	Cover Type	Fitting Type	Radius*
A • Aluminum	**UW** • U-Beam	**06** • (6 in.)	**06** • (6 in.)	**SNC** • Solid Non-Flanged Cover	**RT** • Horizontal Reduce Tee	**12** • (12 in.)
	HW • H-Beam	**09** • (9 in.)	**09** • (9 in.)	**SFC** • Solid Flanged Cover	**ET** • Horizontal Expand Tee	**24** • (24 in.)
		12 • (12 in.)	**12** • (12 in.)	**VFC** • Ventilated Flanged Cover	**EX** • Horizontal Expand Cross	**36** • (36 in.)
		18 • (18 in.)	**18** • (18 in.)		**HSR** • Horizontal Straight Reducer	**48** • (48 in.)
		24 • (24 in.)	**24** • (24 in.)		**HLR** • Horizontal Left Reducer	
		30 • (30 in.)	**30** • (30 in.)		**HRR** • Horizontal Right Reducer	
		36 • (36 in.)	**36** • (36 in.)		**HT** • Horizontal Tee	
					HX • Horizontal Cross	
					VTU • Vertical Tee Up	
					HYR • Horizontal Wye Right	
					HYL • Horizontal Wye Left	
Prefix						

NOTE: For ET and EX, W2 > W1. For RT, HSR, HLR, HRR, W1 > W2.

* Radius not required for HSR, HLR, HRR, HYR, HYL

Fitting Cover Number Selection

AUW-4-12-SNC-VO90-24

Material	Fitting Style	Siderail Height	Width	Cover Type	Fitting Type	*Degree	Radius
A • Aluminum	**UW** • U-Beam	**4** • (4 in.)	**06** • (6 in.)	**SNC** • Solid Non-Flanged Cover	**VO** • Vertical Outside Bend	**30** • (30°)	**12** • (12 in.)
	HW • H-Beam	**5** • (5 in.)	**09** • (9 in.)	**SFC** • Solid Flanged Cover	**VTD** • Vertical Tee Down	**45** • (45°)	**24** • (24 in.)
		6 • (6 in.)	**12** • (12 in.)	**VFC** • Ventilated Flanged Cover	**CS** • Cable Support	**60** • (60°)	**36** • (36 in.)
		7 • (7 in.)	**18** • (18 in.)			**90** • (90°)	**48** • (48 in.)
			24 • (24 in.)				
			30 • (30 in.)				
			36 • (36 in.)				
Prefix							

* Not required for VTD nor for CS

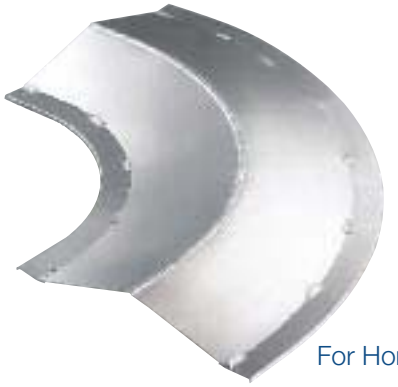
Note: For Peaked fitting covers refer to pages A93 to A95.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Peaked Covers For Extreme Applications

Horizontal Bend / Vertical Inside Bend



For Horizontal Bend

Aluminum Number Selection

AUW-12-PFC-HB-90-24

Material	Fitting Style	Width	Cover Type	Fitting Type	Degree	Nominal Radius
A • Aluminum	**UW** • U-Beam	**06** • (6 in.)	**PFC** • Peaked Flanged Cover	**HB** • Horizontal Bend	**30** • (30º)	**12** • (12 in.)
	HW • H-Beam	**09** • (9 in.)	**PVC** • Peaked Ventilated Flanged Cover	**VI** • Vertical Inside Bend	**45** • (45º)	**24** • (24 in.)
		12 • (12 in.)			**60** • (60º)	**36** • (36 in.)
		18 • (18 in.)			**90** • (90º)	**48** • (48 in.)
		24 • (24 in.)				
		30 • (30 in.)				
		36 • (36 in.)				
Prefix						

Note: Pre-Galvanized not available

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Peaked Covers For Extreme Applications

Vertical Outside Bend

For Vertical Outside Bend

Aluminum Number Selection

AUW-4-12-PFC-VO-90-24

Material	Fitting Style	Siderail Height	Width	Cover Type	Fitting Type	Degree	Nominal Radius
A • Aluminum	**UW** • U-Beam	**4** • (4 in.)	**06** • (6 in.)	**PFC** • Peaked Flanged Cover	**VO** • Vertical Outside Bend	**30** • (30°)	**12** • (12 in.)
	HW • H-Beam	**5** • (5 in.)	**09** • (9 in.)	**PVC** • Peaked Ventilated Flanged Cover		**45** • (45°)	**24** • (24 in.)
		6 • (6 in.)	**12** • (12 in.)			**60** • (60°)	**36** • (36 in.)
		7 • (7 in.)	**18** • (18 in.)			**90** • (90°)	**48** • (48 in.)
Prefix			**24** • (24 in.)				
			30 • (30 in.)				
			36 • (36 in.)				

Note: Pre-Galvanized not available

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Peaked Covers For Extreme Applications

Horizontal Tee

For Horizontal Tee

Aluminum Number Selection

AUW-12-PFC-HT-24

Material	Fitting Style	Width	Cover Type	Fitting Type	Nominal Radius
A • Aluminum	**UW** • U-Beam	**06** • (6 in.)	**PFC** • Peaked Flanged Cover	**HT** • Horizontal Tee	**12** • (12 in.)
	HW • H-Beam	**09** • (9 in.)	**PVC** • Peaked Ventilated Flanged Cover		**24** • (24 in.)
		12 • (12 in.)			**36** • (36 in.)
		18 • (18 in.)			**48** • (48 in.)
		24 • (24 in.)			
		30 • (30 in.)			
		36 • (36 in.)			
Prefix					

Note: Pre-Galvanized not available

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Accessories For Covers

Quantity of Standard Cover Clamps Required			
Straight section (6 ft.)	4 pcs.	Tees	6 pcs.
Straight section (12 ft./ 3 m)	6 pcs.	Crosses	8 pcs.
Horizontal and Vertical Bends	4 pcs.		

Note: When using the Heavy-Duty Cover Clamp, only half the quantity of pieces are required.

IMPORTANT NOTE: "B" in Cat. No. indicates this accessory can be used for both styles.

Economical Cover Clamp

Rigid indoor cover clamp for flat and flanged covers.

Cat. No.	Material	Siderail Height
ABW-SCC	Zinc Plated Steel	All Sizes

Cannot be used with U-Style fittings. Can be used with straights and AH fittings only.

Universal Fitting Cover Clamp

Rigid indoor cover clamp for flat and flanged covers.

Cat. No.	Material	Siderail Height (in.)
ABW(*)FCC	Zinc Plated Steel	4
		5
		6
		7

(*) Insert siderail height.

Heavy-Duty Cover Clamp

Wraparound design offers added protection for rugged applications and outdoor conditions. Hardware included.

Cat. No.	Material	Siderail Height (in.)	Width of Tray (in.)
ABW4(*)FCC	Aluminum	4	06
ABW5(*)HCC		5	09
ABW6(*)HCC		6	12
ABW7(*)HCC		7	18
			24
			30
			36
			42

(*) Insert width of tray.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Accessories For Covers

Extreme Heavy-Duty Cover Clamp

Wraparound design offers added protection for rugged applications and outdoor conditions. Hardware included.

Cat. No.	Material	Siderail Height (in.)	Width of Tray (in.)
ABW4(*)ECC	Aluminum	4	06
ABW5(*)ECC		5	09
ABW6(*)ECC		6	12
ABW7(*)ECC		7	18
			24
			30
			36

(*) Insert width of tray.

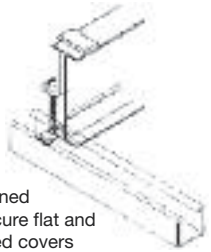
Heavy-Duty Peaked Cover Clamp

Wraparound design formed to fit peaked cover for outdoor applications. Hardware included.

Cat. No.	Material	Siderail Height (in.)	Width of Tray (in.)
ABW4(*)HPC	Aluminum	4	06
ABW5(*)HPC		5	09
ABW6(*)HPC		6	12
ABW7(*)HPC		7	18
			24
			30
			36

(*) Insert width of tray.

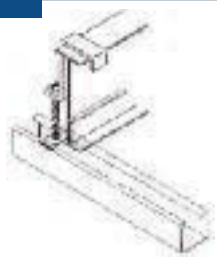
Combination Hold Down Cover Clamp



Designed to secure flat and flanged covers with hold down feature.

Cat. No.	Material	Siderail Height (in.)
ABW-4-CCC	Aluminum	4
ABW-5-CCC		5
ABW-6-CCC		6
ABW-7-CCC		7

Hold Down Clamp



Designed to secure cable tray to support system.

Cat. No.	Material	Siderail Height (in.)
ABW(*)HDC	Aluminum	4
		5
		6
		7

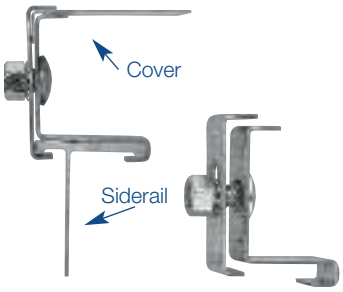
Note: Hardware included
(*) Insert siderail height.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Covers

Accessories For Covers

Raised Cover Clamp



Designed to raise cover above tray for added ventilation.

Cat. No.	Material	*Cover Series	+Cover Offset (in.)
ABW(*) (+) RCC	Zinc Plated Steel	1, 2, 3	1
			2
			3

(*) Cover Series.
(+) Cover offset.

Peaked End Cap

Used for transition between peaked covers to straight covers.

Cat. No.	Material	Width of Tray (in.)
ABW(*)PEC	Aluminum	6
		9
		12
		18
		24
		30
		36

(*) Insert width of tray.

Flat Joint Strip

Strip used for joining covers end to end.

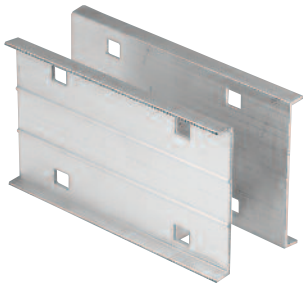
Cat. No.		Width of Tray (in.)
ABW(*)SCS	Plastic	6
		9
		12
		18
		24
		30
		36

(*) Insert width of tray.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Splice Plates

Snap-In Splice Plate



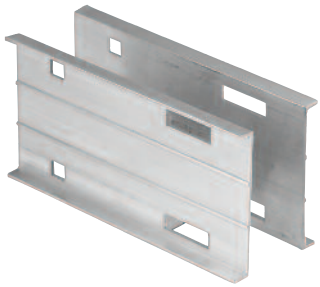
Designed to lock into place for easy alignment and installation.

Packaged in pairs with zinc plated hardware.

Provided as standard with each straight and fitting.

Cat. No.	Material	Siderail Height (in.)
ABW-4-SSP	Aluminum	4
ABW-5-SSP		5
ABW-6-SSP		6
ABW-7-SSP		7

Snap-In Expansion Splice Plate

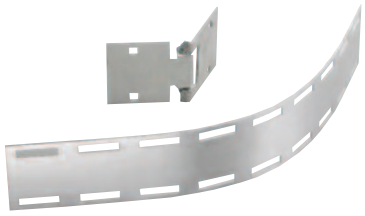


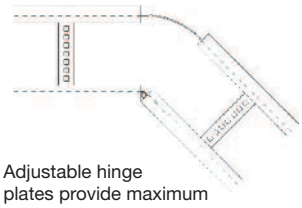
Allows for a 1 in. expansion or contraction of tray system.

Packaged in pairs with zinc plated hardware.

Cat. No.	Material	Siderail Height (in.)
ABW-4-ESP	Aluminum	4
ABW-5-ESP		5
ABW-6-ESP		6
ABW-7-ESP		7

Horizontal Adjustable Plate





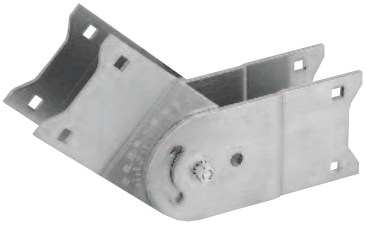
Adjustable hinge plates provide maximum horizontal installation flexibility.

Furnished in pairs with hardware.

Cat. No.	Material	Siderail Height (in.)	For Tray Width
ABW(*)24HSP	Aluminum	4 5 6 7	6 in. to 24 in. inclusive
ABW(*)36HSP			30 in. to 36 in. inclusive

(*) Insert Siderail Height.

Vertical Adjustable Plate



Hinged vertical plates provide maximum flexibility for changes in elevation.

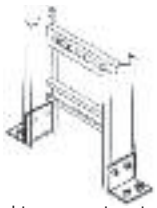
Furnished in pairs with hardware.

Cat. No.	Material	Siderail Height (in.)
ABW-4-VSP	Aluminum	4
ABW-5-VSP		5
ABW-6-VSP		6
ABW-7-VSP		7

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Splice Plates

Box to Tray Plates



Designed to secure tray to electrical panels or boxes, walls or end supports.

Furnished in pairs with hardware.

Cat. No.	Material	Siderail Height (in.)
ABW-4-BSP	Aluminum	4
ABW-5-BSP		5
ABW-6-BSP		6
ABW-7-BSP		7

Closure End Plate

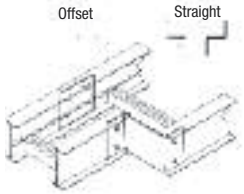
Provides closure for any tray end.

Packaged with hardware.

Cat. No.	Material	Siderail Height (in.)	Widths of Tray (in.)
ABW-4(*)-CEP	Aluminum	4	06
ABW-5(*)-CEP		5	09
ABW-6(*)-CEP		6	12
ABW-7(*)-CEP		7	18
			24
			30
			36

(*) Insert width of Tray.

Reducing Splice Plate



Used in pairs to provide a straight reduction or used with a standard splice plate for an offset reduction.

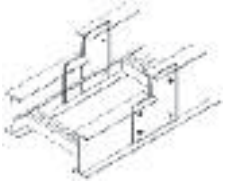
Packaged with hardware.

Cat. No.	Material	Siderail Height (in.)
ABW-4(*)-RSP	Aluminum	4
ABW-5(*)-RSP		5
ABW-6(*)-RSP		6
ABW-7(*)-RSP		7

NOTE: (*) For offset reduction: insert width to be reduced.
For straight reduction: insert 1/2 width to be reduced (2 required).

Example: ABW-403-RSP = 3 in. offset reducer.

Step Down Splice Plate



Connects siderails of different heights.

Hardware included.

Cat. No.	Material	Siderail Height (in.)
ABW(*)(**)SDS	Aluminum	4
		5
		6
		7

(*) Siderail Height 1.
(**) Siderail Height 2.
NOTE: Siderail Height 1 is greater then Siderail Height 2.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Splice Plates

Mid-Span Splice Plate

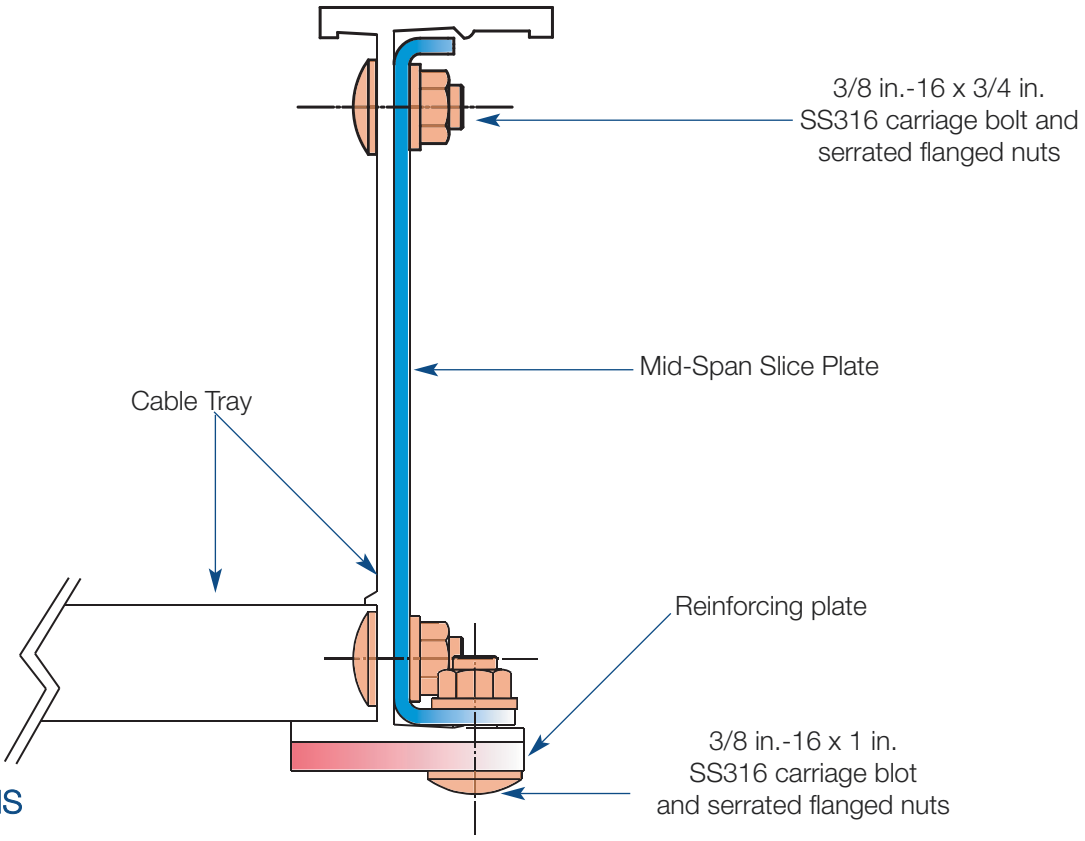
Aluminum Mid-Span Splice Plate

Features:

- Factory pre-drilled side rails for above series easy installation.
- Allows random connexion location.
- Tested loading 160 lb./ft., based on a 20 ft. simple beam test with 1.5 safety factor (tested with AH66 series).
- Supplied with stainless steel type 316 hardware.
- Available on ladder, vented or solid tray style.
- Only available in the following series of aluminum tray: AH46, AH56, AH66 and AH76*.

*(20 ft. Support Span only).

The Splice Plate



Part #: ABW6SSPMS

Splice Plates

Mid-Span Splice Plate

Typical Installation of Mid-Span Splice Plate

These heavy-duty splice plates are designed to allow random splice location, including the midspan for 20 ft. support spans. These splices are available for all long-span, ladder, vented or solid tray style.

Ordering Information

Straight Section Number Selection

(AMS4-6)-24-L09-6

Material Style	Series	Siderail Depth	Width	Bottom Type	Length
AMS • Mid-Span Splice	**4** • Series 4	**6** • (6 in.)	**06** • (6 in.)	**L06** • 6 in. rung spacing	**6** • (6 meters)
	5 • Series 5		**09** • (9 in.)	**L09** • 9 in. rung spacing	**288** • (24 ft.)
	6 • Series 6		**12** • (12 in.)	**L12** • 12 in. rung spacing	
	7 • Series 7		**18** • (18 in.)	**V** • Ventilated	
			24 • (24 in.)	**S** • Solid Trough	
			30 • (30 in.)		
			36 • (36 in.)		
Prefix					

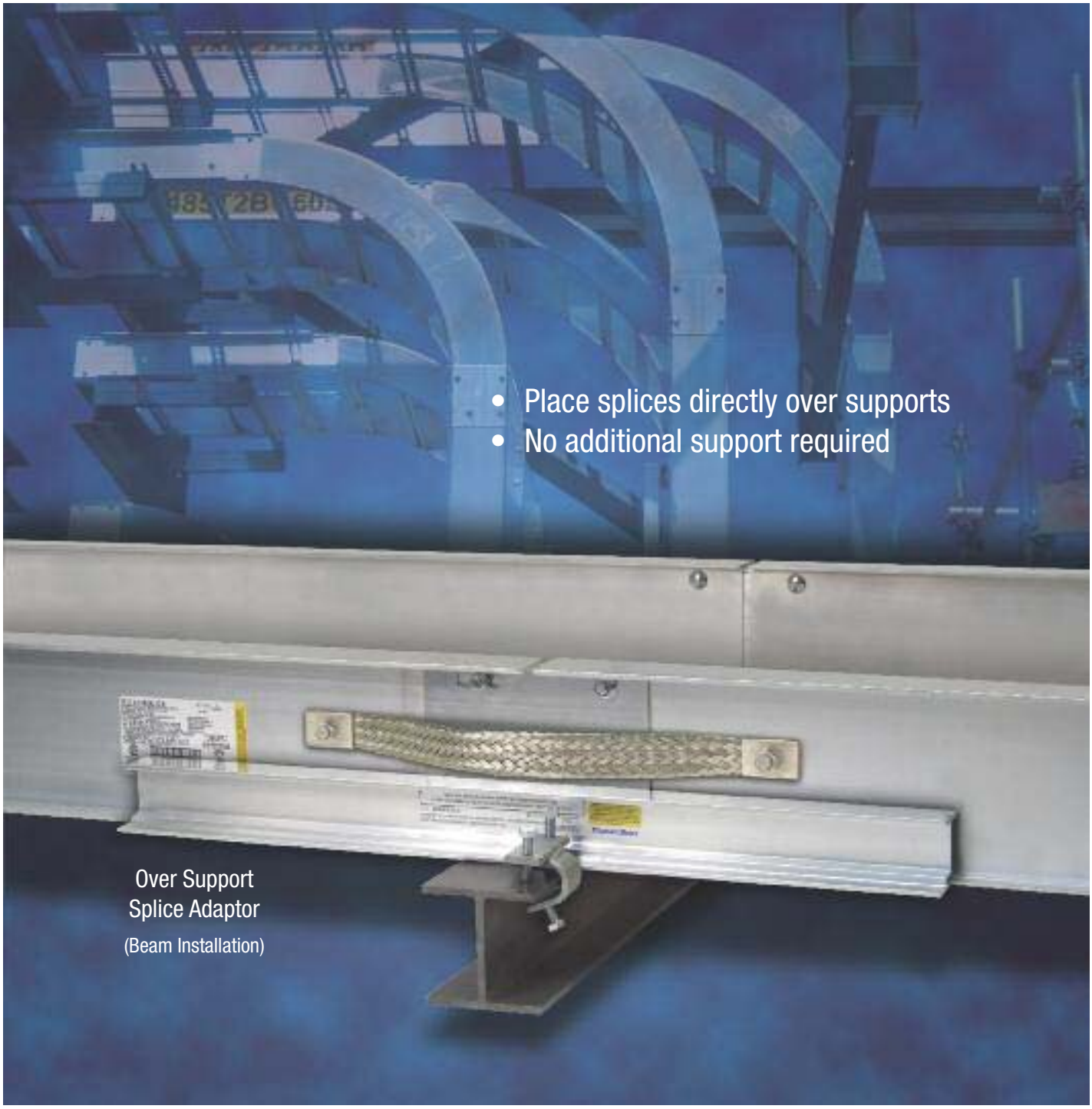
To order straight sections with Mid-Span Splice Plate, replace “AH” in the standard part number with “AMS”.

Example: AH6624L12-6

AMS6624L12-6

Splice Plates

Over Support Splice Adaptor



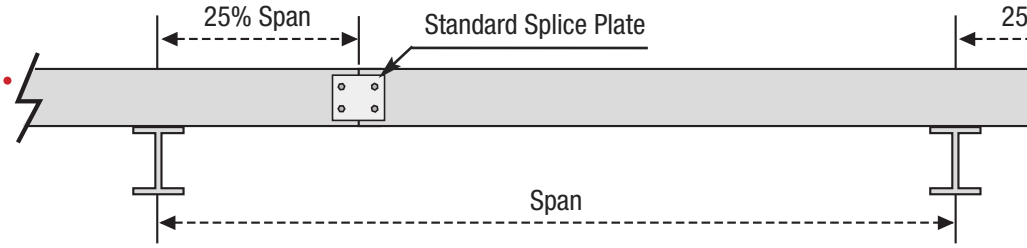
Splice Plates

Over Support Splice Adaptor

Standard 1/4 Span Typical Installation

Supports are placed at 1/4 span (25%).

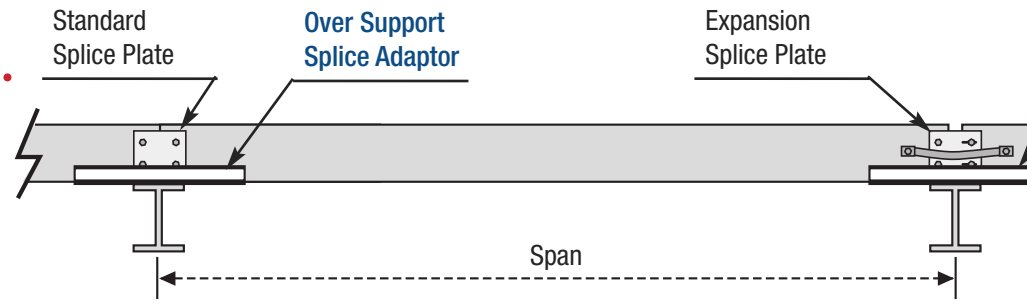
Expansion joints need extra support at 1/2 span to prevent excessive deformation of the tray under heavy loads.



New Over Support Typical Installation

Supports are placed right under the joints of the installation.

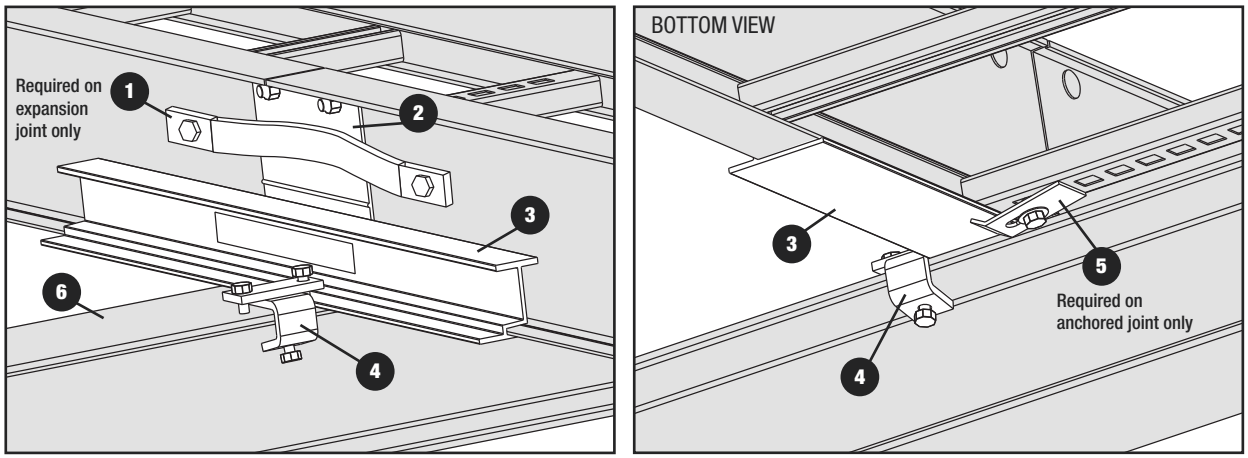
The splice adaptor allows a wider distribution of the support, therefore minimizing the stress and deflection of the assembly.



NOTE: Independent of the installation method chosen, AU/AH46 straight sections are CSA approved for Class E loading. (100%)

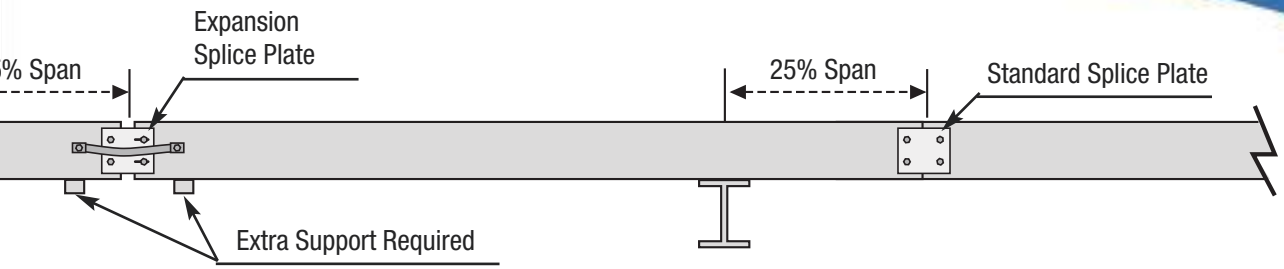
Over Support Splice Adaptor

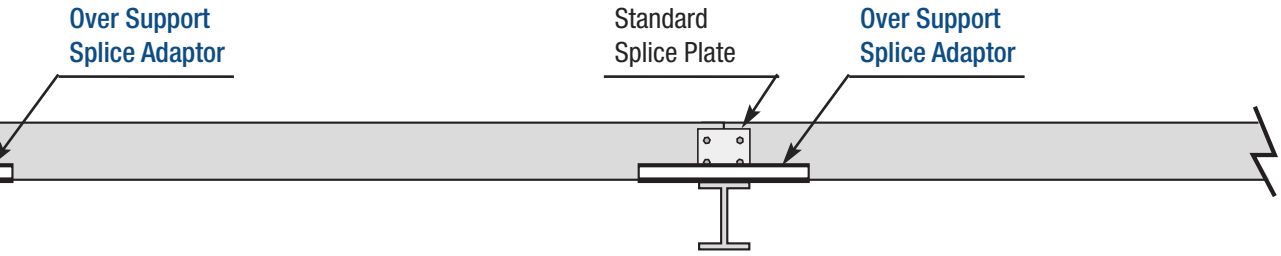
Beam Installation – ABW46-OSS-B



Installation Components

1. Bonding jumper
2. Splice plate
3. Over support splice adaptor
4. Beam clamp
5. Hold down clamp
6. Structural beam
7. Strut (see right page)

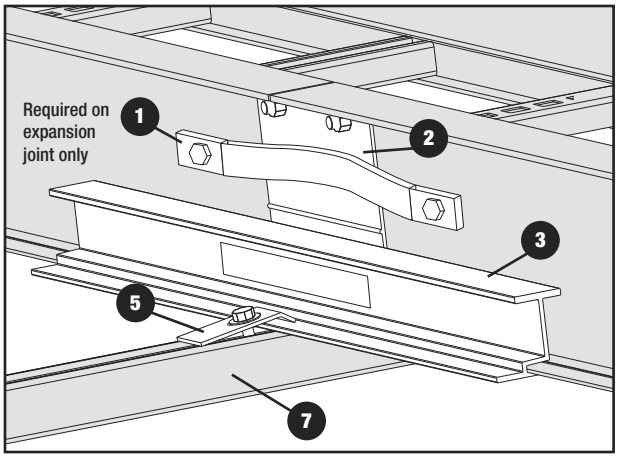


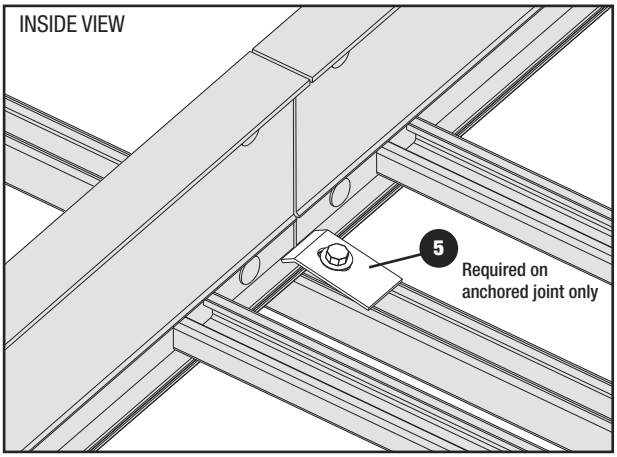


NEMA VE2: Splice joints should be designed and placed so as to maximize the rigidity of the cable tray over support. Splice plates and adaptors are part of a system specifically designed for placement directly over supports.

Over Support Splice Adaptor

Strut Installation – ABW46-OSS-S





Cable Tray Installation

- Every second splice must be an expansion joint.
- For gap setting at expansion joint, refer to NEMA chart on next page.
- For use with T&B Cable Tray series AH46.
- Max. load of 80 lb/ft, 20 ft span.
- Every joint must have a pair of over support splice adaptors (both standard splices and expansion splices)

Splice Plates

Over Support Splice Adaptor

ABW46-OSS-B

Over Support Splice Adaptor – Beam Installation

Expansion over support beam 29 in.

SHWCTC, Heavy-Duty hold down clamp (complete with mounting hardware)

HGW-SHC, Standard hold down clamp

E142-3/8x100EG, 3/8 in. - 16 x 1 in. hex cap screws

AC100-3/8EGC, 3/8 in. strut nut

NOTE: Every expansion joint requires the use of a bonding jumper such as FBD16-1 (16 in., 600 amps)

ABW46-OSS-S

Over Support Splice Adaptor – Strut Installation

Expansion over support beam 29 in.

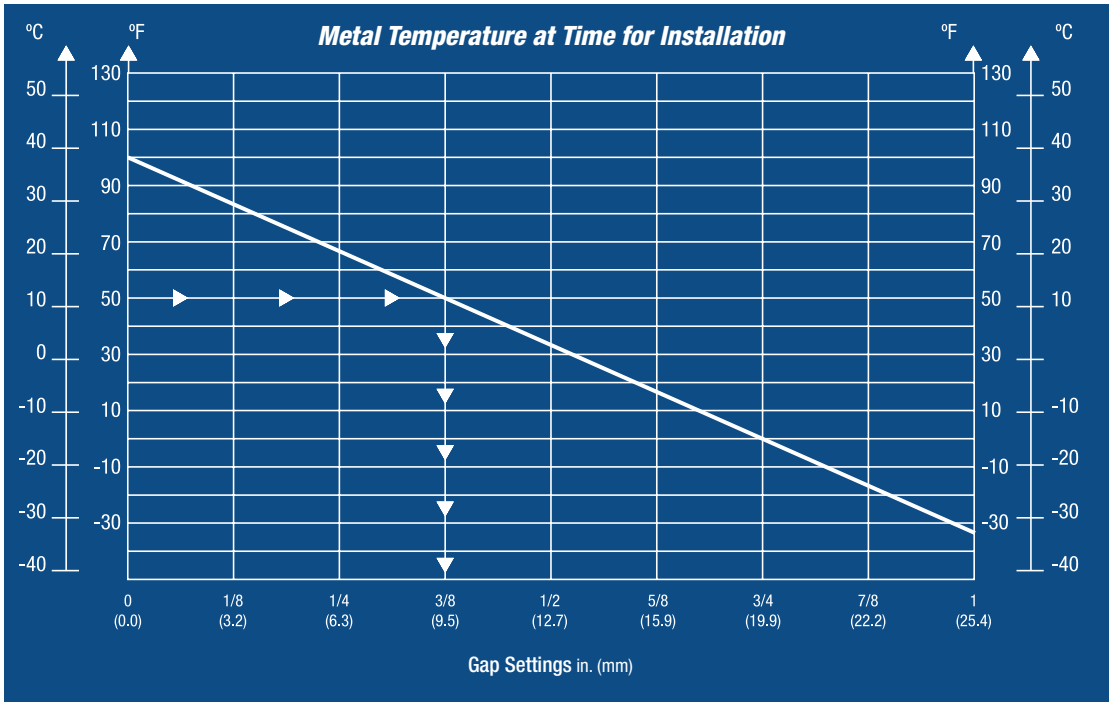
HGW-SHC, Standard hold down clamp

E142-3/8x100EG, 3/8 in. - 16 x 1 in. hex cap screws

AC100-3/8EGC, 3/8 in. strut nut

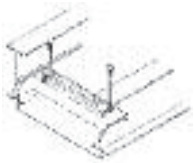
NOTE: Every expansion joint requires the use of a bonding jumper such as FBD16-1 (16 in., 600 amps)

Expansion Plate Gap Chart



Cable Protection

Drop-Out



Designed to provide a smooth radiused surface at any position on the tray or trough bottom.

Drop-Outs are easily attached using hardware provided.

Standard radius 4 in.

Cat. No.	Description / Material	Widths of Tray (in.)
ABW(*)DO	For ladder and ventilated tray / Aluminum	6
		9
		12
		18
		24
		30
		36

(*) Insert Width of Tray.

Wall Penetration Sleeve

Sold with cover

Designed to pass through walls and fire walls.

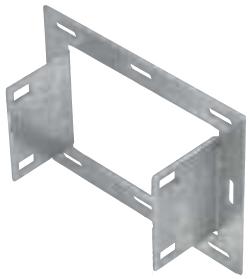
Hardware included.

IMPORTANT:
Not fire rated.
Fire stop not included.

Cat. No.	Material	Siderail Height (in.)	Widths of Tray (in.)
ABW(*)(**)WPS	Aluminum	4	06
		5	09
		6	12
		7	18
			24
			30
			36

(*) Insert Siderail Height.
(**) Insert Width of Tray.

Frame Type Tray to Box Plate



Designed to secure tray to electrical enclosures and panels.

Hardware included.

Cat. No.	Material	Siderail Height (in.)	Widths of Tray (in.)
ABW(*)(**)FBP	Aluminum	4	06
		5	09
		6	12
		7	18
			24
			30
			36

(*) Insert Siderail Height.
(**) Insert Width of Tray.

Nylon Expansion Pad

Allows for thermal expansion and contraction of cable trays over supports.

Cat. No.	Material
ABW-NSP	Natural Nylon

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Barrier Strips

Barrier Strips

Aluminum barrier strips provide a method of separating cables in tray and trough systems. Easily installed using supplied hardware.

72 in. barriers are flexible for use with horizontal fittings.

Cat. No.	Designed for Siderail Height (in.)	Length
ABW-4-SBH-72	4	72 in.
ABW-5-SBH-72	5	
ABW-6-SBH-72	6	
ABW-7-SBH-72	7	
ABW-4-SB-(*)	4	144 in.
ABW-5-SB-(*)	5	3 m
ABW-6-SB-(*)	6	
ABW-7-SB-(*)	7	

NOTE: 72 in. barriers provided with 3 SPW10SCR.
144 in., 3 m barriers provided with 6 SPW10SCR.
(*) Insert length.

Inside / Outside Vertical Bend Barriers

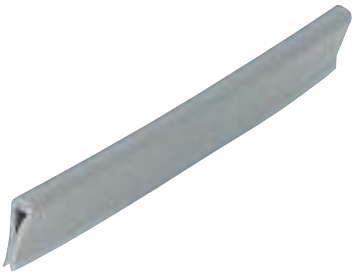
Preformed to fit all standard aluminum vertical bends.

Provided with hardware.

Inside Bend Cat. No.	Outside Bend Cat. No.	Designed for Siderail Height (in.)
AUW(*)VIB-(**)-(+)	AUW(*)VOB-(**)-(+)	4
AUW(*)VIB-(**)-(+)	AUW(*)VOB-(**)-(+)	5
AUW(*)VIB-(**)-(+)	AUW(*)VOB-(**)-(+)	6
AUW(*)VIB-(**)-(+)	AUW(*)VOB-(**)-(+)	7
AHW(*)VIB-(**)-(+)	AHW(*)VOB-(**)-(+)	4
AHW(*)VIB-(**)-(+)	AHW(*)VOB-(**)-(+)	5
AHW(*)VIB-(**)-(+)	AHW(*)VOB-(**)-(+)	6
AHW(*)VIB-(**)-(+)	AHW(*)VOB-(**)-(+)	7

(**) Insert Bend Angle (+) Insert Bend Radius (*) Insert Siderail Height.

Barrier Strip Splice



Alignment splice for joining connecting barrier strips.

Cat. No.	Material
ABW-BSS	Plastic

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Clamps and Hardware

Standard Hold Down Clamp

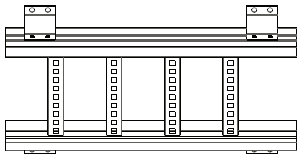
Designed for most indoor installations.

Easy to use and install.

Order 3/8 in. hardware separately.

Cat. No.	Material
SPW-SHC	Zinc Plated Steel
SSW-SHC	316 Stainless

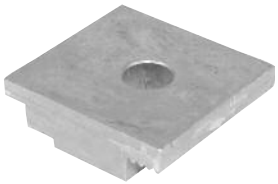
Hold Down Clamp



For vertical applications

Cat. No.	Material
ABW-HDCS	Aluminum
ABW-HDCD	

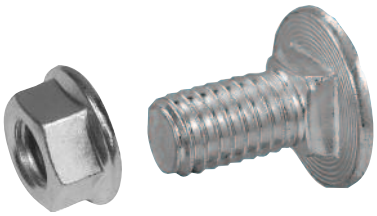
Combination Hold Down / Expansion Guide Clamp



Order 3/8 in. hardware separately.

Cat. No.	Material
ABW-HEC	Aluminum

Aluminum Tray Hardware



Square shoulder self-positioning carriage bolt.

Cat. No.	Material	Description
SPW-1/4-CB	Zinc Plated Steel	1/4 in. Carriage Bolt
SPW-3/8-CB	Zinc Plated Steel	3/8 in. Carriage Bolt
SPW-1/4-HN	Zinc Plated Steel	1/4 in. Hex. Nut
SPW-3/8-HN	Zinc Plated Steel	3/8 in. Hex. Nut
SPW-3/8-HWK*	Zinc Plated Steel	Zinc Plated Steel Hardware Kit
SSW-3/8-CB	316 Stainless	3/8 in. Carriage Bolt
SSW-3/8-HN	316 Stainless	3/8 in. Hex. Nut
SSW-3/8-HWK*	316 Stainless	316 Stainless Steel Hardware Kit

* Contains 8 bolts and 8 nuts.

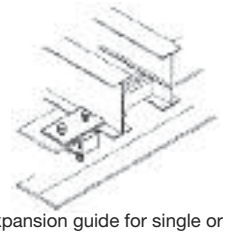
Self-Drilling – Tapping Screw

Cat. No.	Material	Description
SPW-10-SCR	Zinc Plated Steel	Self-Drilling – Tapping Screw
SSW-10-SCR	Stainless Steel	Self-Drilling – Tapping Screw

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Clamps and Hardware

Cable Tray Guide



Expansion guide for single or double runs of cable tray.

No need to field drill of channel or I-beam.

Cat. No.	Material
SPW-CTG	Zinc Plated Steel
SHW-CTG	Steel Hot Dip

Cable Tray Clamp

Clamps for single run of cable tray.

No need to field drill the channel or I-beam.

Cat. No.	Material
SPW-CTC	Zinc Plated Steel
SHW-CTC	Steel Hot Dip

Vertical Tray Hanger

Cat. No.	Material	Siderail Height (in.)
ABW(*)VTH	Aluminum	4
		5
		6
		7

* Insert siderail height.

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Table of Contents

Straight Lengths

Tray Bottom

Ladder, Ventilated and Solid Trough

Ladder

— Formed siderails are welded to 1-5/8 in. wide rungs to provide maximum rigidity and strength. Rung design includes exclusive Ty-Rap® cable tie slots on 1 in. centers.

Ventilated

— A fabricated structure consisting of integral or separate longitudinal rails and a bottom having openings sufficient for the passage of air and utilizing 75% or less of the plan area of the surface to support cables. The maximum open spacings between cable support surfaces of transverse elements do not exceed 102 mm (4 in.) in the direction parallel to the tray side rails (rung to rung).

Note: For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Solid Trough

— Solid sheet welded to steel siderails below rungs. This design offers added cable protection.

Straight Lengths

Number Selection

How to Create Part Numbers

Thomas & Betts has created a numbering system based on the order of selection criteria. For example the first selection issue is the environment which the cable tray will be subjected to. This selection will lead to the best material for your application. For complete details on cable tray selection process, see page A8 in the technical section.

Methods

1. Select the material best suited to your environment. Refer to technical section page A8.
2. Determine the tray series using the NEMA/CSA Load/Span Designations page A16, and Sizing Cable Tray page A23.
3. Select nominal depth and width of tray based on Cable Loading. See Sizing Cable Tray page A23.
4. Select the bottom type based on cables and spacing requirements.
5. The last number is the length of the cable tray in meters or inches.

Straight Section Number Selection

SH3624L09144

Material	Series	Siderail Height (in.)	Width	Bottom Type	* Length
SP • Pre-Galvanized **SH** • Hot Dip Galvanized after fabrication **SS** • Stainless Steel 316	**1** • Series 1	3-5/8	**06** • (6 in.) **09** • (9 in.) **12** • (12 in.) **18** • (18 in.) **24** • (24 in.) **30** • (30 in.) **36** • (36 in.)	**L06** • 6 in. rung spacing **L09** • 9 in. rung spacing **L12** • 12 in. rung spacing ** **V** • Ventilated **S** • Solid Trough	**3** • (3 meters) **6** • (6 meters) **144** • (12 ft.) **288** • (24 ft.)
	1 • Series 1 **3** • Series 3	4			
	2 • Series 2 **4** • Series 4 **5** • Series 5	5			
	1 • Series 1 **3** • Series 3 **4** • Series 4	6			
	3 • Series 3	7			

Prefix

* Series 1-3 and 1-4 are not available in 6 meter and 288 in. lengths.
** For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Straight Lengths

3-5/8 in. Straight Sections
Series 1-3

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

SH1324L09-3

Material
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized after fabrication
- **SS** • Stainless Steel 316

Prefix

Series
- **1** • Series 1

Siderail Height
- **3** • (3-5/8 in.)

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **L06** • 6 in. rung spacing
- **L09** • 9 in. rung spacing
- **L12** • 12 in. rung spacing
- ***V** • Ventilated
- **S** • Solid Trough

Length
- **3** • (3 meters)
- **144** • (12 ft.)

* For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

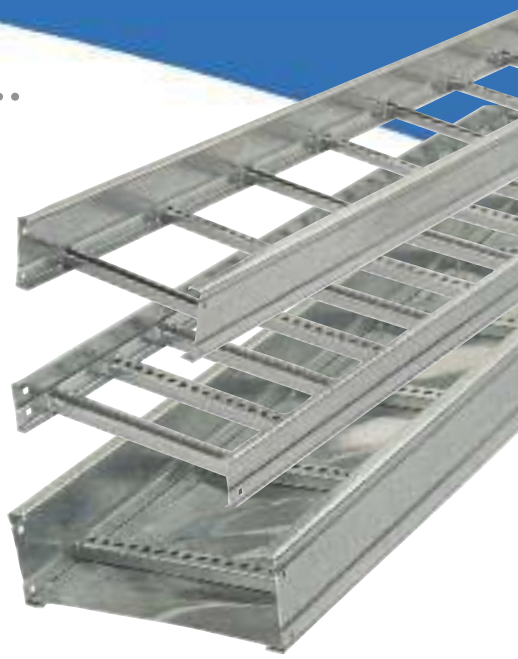
Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

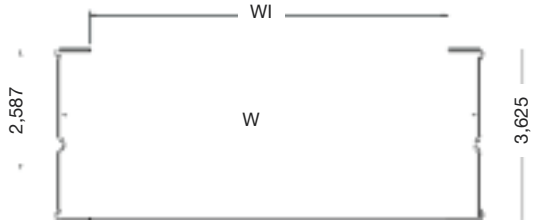
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
SP1-3 SH1-3 SS1-3	Load (lb./ft.)	200	112.5	72	50	–	–	–	–
	Deflection (in.)	0.250	0.445	0.695	1.001	–	–	–	–
	Deflection Factor	0.0013	0.0040	0.0097	0.0097	–	–	–	–

Straight Lengths

3-5/8 in. Straight Sections
Series 1-3

Ladder, Ventilated and Solid Trough

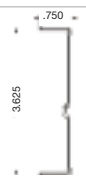




SP1-3, SH1-3, SS1-3	
W (in.)	**Wi (in.)**
6	4.5
9	7.5
12	10.5
18	16.5
24	22.5
30	28.5
36	34.5

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		
			NEMA	CSA	UL
SP1-3 **SH1-3** **SS1-3**		Ix = 0.804 in^4 Sx = 0.444 in^3 Area = 0.488 in^2	**12A**	**C/3M**	UL Cross Sectional Area : 0.40 in^2

Straight Lengths

4 in. Straight Sections
Series 1-4, 3-4

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

SH3424L09144

Material
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized after fabrication
- **SS** • Stainless Steel 316

Prefix

Series
- **1** • Series 1
- **3** • Series 3

Siderail Height
- **4** • (4 in.)

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **L06** • 6 in. rung spacing
- **L09** • 9 in. rung spacing
- **L12** • 12 in. rung spacing
- ** **V** • Ventilated
- **S** • Solid Trough

***Length**
- **3** • (3 meters)
- **6** • (6 meters)
- **144** • (12 ft.)
- **288** • (24 ft.)

* Series 1-4 not available in 6 meters or 288 in. lengths.
** For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

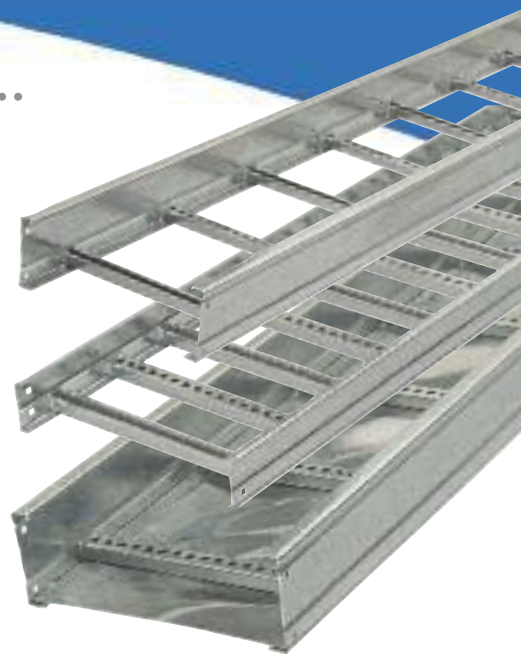
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
SP1-4 SH1-4 SS1-4	Load (lb./ft.)	420	236	151	105	–	–	–	–
	Deflection (in.)	0.420	0.473	0.756	1.155	–	–	–	–
	Deflection Factor	0.001	0.002	0.005	0.011	–	–	–	–
SP3-4 SH3-4 SS3-4	Load (lb./ft.)	556	313	200	139	102	78	62	50
	Deflection (in.)	0.193	0.344	0.537	0.773	1.052	1.375	1.740	2.148
	Deflection Factor	0.0003	0.0011	0.0027	0.0056	0.0103	0.0176	0.0282	0.0430

Straight Lengths

4 in. Straight Sections
Series 1-4, 3-4

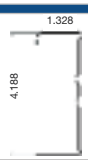
Ladder, Ventilated and Solid Trough

SP1-4, SH1-4, SS1-4 SP3-4, SH3-4, SS3-4	
W (in.)	**Wi (in.)**
6	3.34
9	6.34
12	9.34
18	15.34
24	21.34
30	27.34
36	33.34



Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		
			NEMA	CSA	UL
SP1-4 **SH1-4** **SS1-4**		Ix = 1.974 in⁴	**12C**	**D/3M**	UL Cross Sectional Area : 0.70 in²
		Sx = 0.788 in³			
		Area = 0.682 in²			
SP3-4 **SH3-4** **SS3-4**		Ix = 2.224 in⁴	**20A**	**D/6M**	UL Cross Sectional Area : 0.70 in²
		Sx = 1.022 in³			
		Area = 1.080 in²			

Straight Lengths

5 in. Straight Sections
Series 2-5, 4-5, 5-5

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

SH2524L09144

Material
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized after fabrication
- **SS** • Stainless Steel 316

Prefix

Series
- **2** • Series 2
- **4** • Series 4
- **5** • Series 5

Siderail Height
- **5** • (5 in.)

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **L06** • 6 in. rung spacing
- **L09** • 9 in. rung spacing
- **L12** • 12 in. rung spacing
- **V** • Ventilated
- **S** • Solid Trough

Length
- **3** • (3 meters)
- **6** • (6 meters)
- **144** • (12 ft.)
- **288** • (24 ft.)

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

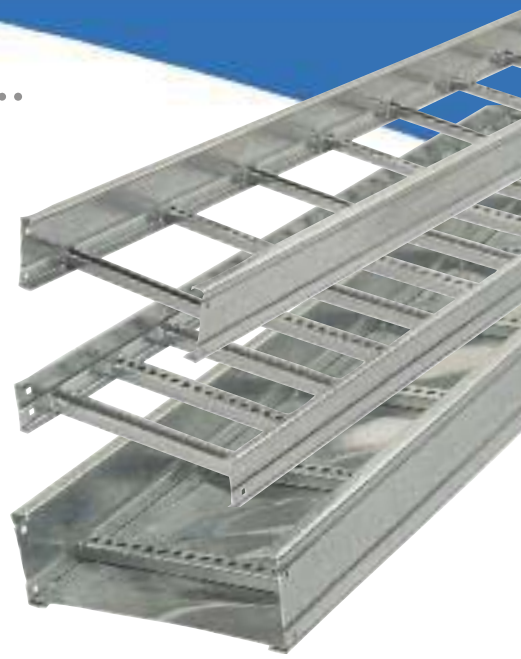
Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

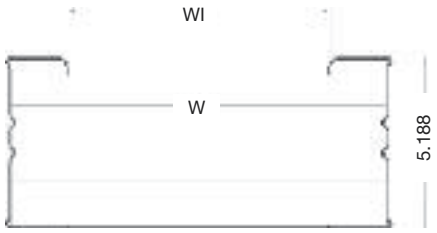
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
SP2-5 SH2-5 SS2-5	Load (lb./ft.)	556	313	200	139	102	78	62	50
	Deflection (in.)	0.193	0.344	0.537	0.773	1.052	1.375	1.740	2.148
	Deflection Factor	0.0003	0.0011	0.0027	0.0056	0.0103	0.0176	0.0282	0.0430
SP4-5 SH4-5 SS4-5	Load (lb./ft.)	833	469	298	208	153	117	92	75
	Deflection (in.)	0.223	0.397	0.617	0.894	1.217	1.589	1.998	2.483
	Deflection Factor	0.003	0.0008	0.0021	0.0043	0.0079	0.0136	0.0217	0.0331
SP5-5 SH5-5 SS5-5	Load (lb./ft.)	111	625	298	278	204	156	92	100
	Deflection (in.)	0.241	0.429	0.499	0.964	1.312	1.714	.617	2.678
	Deflection Factor	0.0002	0.0007	0.0017	0.0035	0.0064	0.0110	0.0176	0.0268

Straight Lengths

5 in. Straight Sections
Series 2-5, 4-5, 5-5

Ladder, Ventilated and Solid Trough





SP2-5, SH2-5, SS2-5 SP4-5, SH4-5, SS4-5 SP5-5, SH5-5, SS5-5	
W (in.)	**Wi (in.)**
6	3.34
9	6.34
12	9.34
18	15.34
24	21.34
30	27.34
36	33.34

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		
			NEMA	CSA	UL
SP2-5 **SH2-5** **SS2-5**		Ix = 2.89 in^4 Sx = 1.09 in^3 Area = 0.778 in^2	**20A**	**D/6M**	UL Cross Sectional Area : 0.70 in^2
SP4-5 **SH4-5** **SS4-5**		Ix = 3.75 in^4 Sx = 1.40 in^3 Area = 1.018 in^2	**20B**	**E/6M**	UL Cross Sectional Area : 1.00 in^2
SP5-5 **SH5-5** **SS5-5**		Ix = 4.635 in^4 Sx = 1.732 in^3 Area = 1.24 in^2	**20C**	**–**	UL Cross Sectional Area : 1.00 in^2

Straight Lengths

6 in. Straight Sections
Series 1-6, 3-6, 4-6

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

SH3624L12-6

Material	Series	Siderail Height	Width	Bottom Type	*Length
SP • Pre-Galvanized	**1** • Series 1	**6** • (6 in.)	**06** • (6 in.)	**L06** • 6 in. rung spacing	**3** • (3 meters)
SH • Hot Dip Galvanized after fabrication	**3** • Series 3		**09** • (9 in.)	**L09** • 9 in. rung spacing	**6** • (6 meters)
SS • Stainless Steel 316	**4** • Series 4		**12** • (12 in.)	**L12** • 12 in. rung spacing	**144** • (12 ft.)
			18 • (18 in.)	** **V** • Ventilated	**288** • (24 ft.)
			24 • (24 in.)	**S** • Solid Trough	
			30 • (30 in.)		
			36 • (36 in.)		
Prefix					

** For load ratings of CSA Class C/NEMA 12C or less, please see an alternative ventilated series of cable tray called - One-Piece found on pages A153 to A185 of this catalogue.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

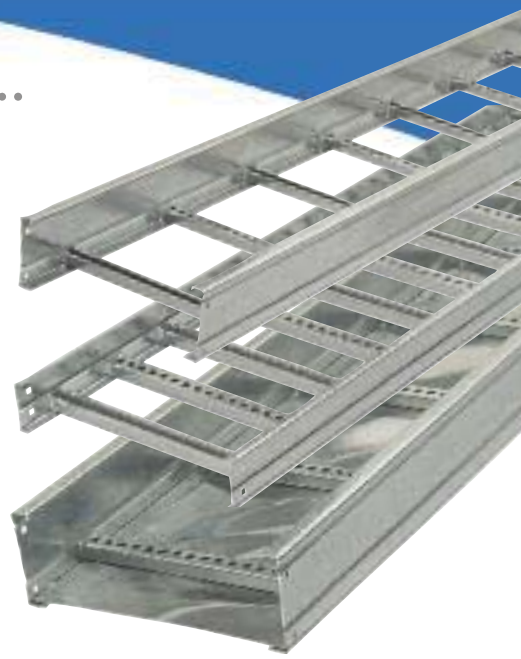
Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

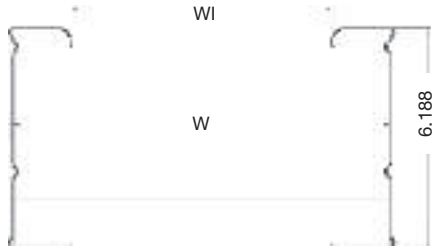
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
SP1-6 SH1-6 SS1-6	Load (lb./ft.)	556	313	200	139	102	78	62	50
	Deflection (in.)	0.126	0.224	0.349	0.503	0.685	0.895	1.132	1.398
	Deflection Factor	0.0002	0.0007	0.0017	0.0036	0.0067	0.0115	0.0183	0.0280
SP3-6 SH3-6 SS3-6	Load (lb./ft.)	833	469	300	208	153	117	93	75
	Deflection (in.)	0.156	0.277	0.433	0.624	0.849	1.109	1.404	1.733
	Deflection Factor	0.0002	0.0006	0.0014	0.0030	0.0055	0.0095	0.0152	0.0231
SP4-6 SH4-6 SS4-6	Load (lb./ft.)	1289	725	464	322	237	181	143	116
	Deflection (in.)	0.181	0.321	0.502	0.723	0.984	1.285	1.626	2.008
	Deflection Factor	0.0001	0.0004	0.0011	0.0022	0.0042	0.0071	0.0114	0.0173

Straight Lengths

6 in. Straight Sections
Series 1-6, 3-6, 4-6

Ladder, Ventilated and Solid Trough

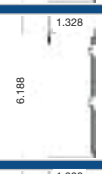




SP1-6, SH1-6, SS1-6 SP3-6, SH3-6, SS3-6 SP4-6, SH4-6, SS4-6	
W (in.)	**Wi (in.)**
6	3.34
9	6.34
12	9.34
18	15.34
24	21.34
30	27.34
36	33.34

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		
			NEMA	CSA	UL
SP1-6 **SH1-6** **SS1-6**		Ix = 4.44 in⁴ Sx = 1.39 in³ Area = 0.874 in²	**20A**	**D/6M**	UL Cross Sectional Area : 0.70 in²
SP3-6 **SH3-6** **SS3-6**		Ix = 5.373 in⁴ Sx = 1.70 in³ Area = 1.40 in²	**20B**	**E/6M**	UL Cross Sectional Area : 1.00 in²
SP4-6 **SH4-6** **SS4-6**		Ix = 7.173 in⁴ Sx = 2.250 in³ Area = 1.40 in²	**Exceeds 20C**	**–**	UL Cross Sectional Area : 1.00 in²

Straight Lengths

7 in. Straight Sections
Series 3-7

Ladder, Ventilated and Solid Trough

Straight Section Number Selection

SH3724L09288

Material
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized after fabrication
- **SS** • Stainless Steel 316

Prefix

Series
- **3** • Series 3

Siderail Height
- **7** • (7 in.)

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **L06** • 6 in. rung spacing
- **L09** • 9 in. rung spacing
- **L12** • 12 in. rung spacing
- **V** • Ventilated
- **S** • Solid Trough

Length
- **3** • (3 meters)
- **6** • (6 meters)
- **144** • (12 ft.)
- **288** • (24 ft.)

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with rungs spaced on 12 in. centers with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

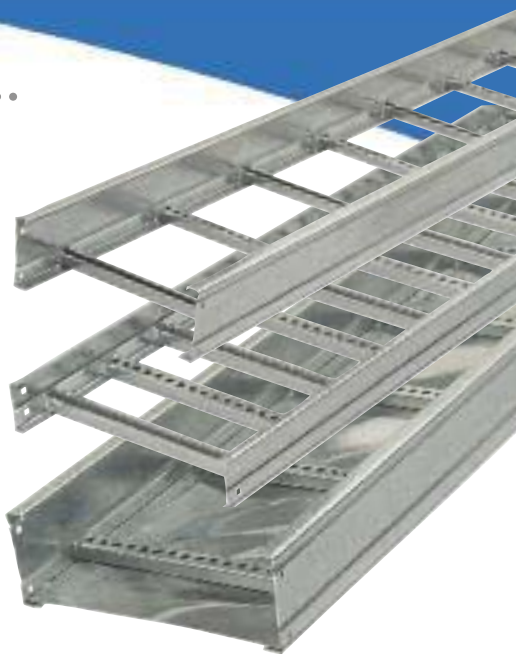
Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

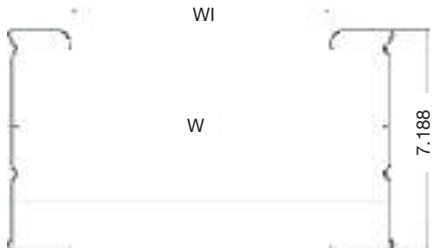
		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
SP3-7	Load (lb./ft.)	1333	750	480	333	245	188	148	120
SH3-7	Deflection (in.)	0.133	0.225	0.480	0.667	0.735	1.125	1.333	1.680
SS3-7	Deflection Factor	0.0001	0.0003	0.001	0.002	0.003	0.006	0.009	0.014

Straight Lengths

7 in. Straight Sections
Series 3-7

Ladder, Ventilated and Solid Trough





SP3-7, SH3-7, SS3-7	
W (in.)	**Wi (in.)**
6	3.34
9	6.34
12	9.34
18	15.34
24	21.34
30	27.34
36	33.34

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray (siderail, rung, etc.) above and beyond published load class.

Series	Dimensions	Siderail Design Factors • 1 Pair	Classifications		
			NEMA	CSA	UL
SP3-7 **SH3-7** **SS3-7**		Ix = 10.411 in^4	**Exceeds 20C**	–	UL Cross Sectional Area : 1.50 in^2
		Sx = 2.820 in^3			
		Area = 1.54 in^2			

Fittings

Fittings Number Selection

Fittings Number Selection

SHF624LVO9024

Fitting Material

- **SPF** • Pre-Galvanized Fittings
- **SHF** • Hot Dip Galvanized Fittings
- **SSF** • Stainless Steel 316

Prefix

Siderail Depth

- **3** • (3-5/8 in.)
- **4** • (4 in.)
- **5** • (5 in.)
- **6** • (6 in.)
- **7** • (7 in.)

Width

- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type

- * **L** • Ladder
- *** **V** • Ventilated
- ****S** • Solid Trough

Fitting Type

- **HB** • Horizontal Bend
- **HT** • Horizontal Tee
- **HX** • Horizontal Cross
- **VI** • Vertical Inside Bend
- **VO** • Vertical Outside Bend
- **VTD** • Vertical Tee Down
- **VTU** • Vertical Tee Up
- **HYR** • Horizontal Wye Right
- **HYL** • Horizontal Wye Left
- **RT** • Horizontal Reducing Tee
- **ET** • Horizontal Expanding Tee
- **EX** • Horiz. Expand Cross
- **HLR** • Horizontal Left Reducer
- **HSR** • Horizontal Straight Reducer
- **HRR** • Horizontal Right Reducer
- **CS** • Cable Support Fitting

Angle

- **30** • (30°)
- **45** • (45°)
- **60** • (60°)
- **90** • (90°)

Nominal Radius

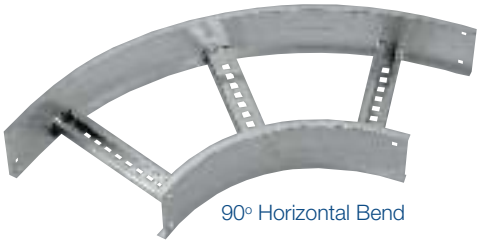
- **12** • (12 in.)
- **24** • (24 in.)
- **36** • (36 in.)
- **48** • (48 in.)

** Angle is required for HB, VI, VO only.
† Radius is not required for the following Fitting Types: **HYR, HYL, HLR, HRR, HSR**

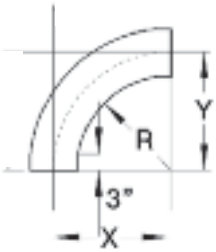
* Manufactured with 9 in. rung spacing measured at the center line of fitting.
*** Manufactured with 4 in. edge to edge rung spacing measured at the center line of fitting.
**** Manufactured with flat sheet inserted under rungs with 9 in. rung spacing measured at the center line of fitting.

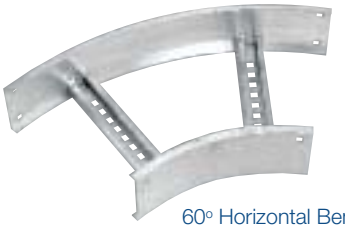
Fittings

Horizontal Bends 90º / 60º



90º Horizontal Bend





60º Horizontal Bend

Part Numbering System

SHF 4 24 L HB90 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 24 — Width
- L — Bottom Style
- HB90 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90º, 60º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

90º Horizontal BEND

Nominal Radius R	Nominal Radius Width	Cat. No.	Dimensions X	Dimensions Y
12	6	Prefix(†)-06-(*)-HB90-12	15	15
	9	Prefix(†)-09-(*)-HB90-12	16-1/2	16-1/2
	12	Prefix(†)-12-(*)-HB90-12	18	18
	18	Prefix(†)-18-(*)-HB90-12	21	21
	24	Prefix(†)-24-(*)-HB90-12	24	24
	30	Prefix(†)-30-(*)-HB90-12	27	27
	36	Prefix(†)-36-(*)-HB90-12	30	30
24	6	Prefix(†)-06-(*)-HB90-24	27	27
	9	Prefix(†)-09-(*)-HB90-24	28-1/2	28-1/2
	12	Prefix(†)-12-(*)-HB90-24	30	30
	18	Prefix(†)-18-(*)-HB90-24	33	33
	24	Prefix(†)-24-(*)-HB90-24	36	36
	30	Prefix(†)-30-(*)-HB90-24	39	39
	36	Prefix(†)-36-(*)-HB90-24	42	42
36	6	Prefix(†)-06-(*)-HB90-36	39	39
	9	Prefix(†)-09-(*)-HB90-36	40-1/2	40-1/2
	12	Prefix(†)-12-(*)-HB90-36	42	42
	18	Prefix(†)-18-(*)-HB90-36	45	45
	24	Prefix(†)-24-(*)-HB90-36	48	48
	30	Prefix(†)-30-(*)-HB90-36	51	51
	36	Prefix(†)-36-(*)-HB90-36	54	54
48	6	Prefix(†)-06-(*)-HB90-48	51	51
	9	Prefix(†)-09-(*)-HB90-48	52-1/2	52-1/2
	12	Prefix(†)-12-(*)-HB90-48	54	54
	18	Prefix(†)-18-(*)-HB90-48	57	57
	24	Prefix(†)-24-(*)-HB90-48	60	60
	30	Prefix(†)-30-(*)-HB90-48	63	63
	36	Prefix(†)-36-(*)-HB90-48	66	66

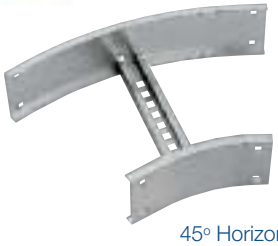
60º Horizontal BEND

Nominal Radius R	Nominal Radius Width	Cat. No.	Dimensions X	Dimensions Y	Dimensions Z
12	6	Prefix(†)-06-(*)-HB60-12	14-7/8	8-5/8	9-15/16
	9	Prefix(†)-09-(*)-HB60-12	16-3/16	9-3/8	10-13/16
	12	Prefix(†)-12-(*)-HB60-12	17-1/2	10-1/8	11-11/16
	18	Prefix(†)-18-(*)-HB60-12	20-1/16	11-5/8	13-3/8
	24	Prefix(†)-24-(*)-HB60-12	22-11/16	13-1/8	15-1/8
	30	Prefix(†)-30-(*)-HB60-12	25-5/16	14-5/8	16-7/8
	36	Prefix(†)-36-(*)-HB60-12	27-7/8	16-1/8	18-9/16
24	6	Prefix(†)-06-(*)-HB60-24	25-5/16	14-5/8	16-7/8
	9	Prefix(†)-09-(*)-HB60-24	26-9/16	15-3/8	17-3/4
	12	Prefix(†)-12-(*)-HB60-24	27-7/8	16-1/8	18-9/16
	18	Prefix(†)-18-(*)-HB60-24	30-1/2	17-5/8	20-5/16
	24	Prefix(†)-24-(*)-HB60-24	33-1/16	19-1/8	22-1/16
	30	Prefix(†)-30-(*)-HB60-24	35-11/16	20-5/8	23-13/16
	36	Prefix(†)-36-(*)-HB60-24	38-1/4	22-1/8	25-1/2
36	6	Prefix(†)-06-(*)-HB60-36	35-11/16	20-5/8	23-13/16
	9	Prefix(†)-09-(*)-HB60-36	37	21-3/8	24-5/8
	12	Prefix(†)-12-(*)-HB60-36	38-1/4	22-1/8	25-1/2
	18	Prefix(†)-18-(*)-HB60-36	40-7/8	23-5/8	27-2/8
	24	Prefix(†)-24-(*)-HB60-36	43-1/2	25-1/8	29
	30	Prefix(†)-30-(*)-HB60-36	46-1/16	26-5/8	30-11/16
	36	Prefix(†)-36-(*)-HB60-36	48-11/16	28-1/8	32-7/16
48	6	Prefix(†)-06-(*)-HB60-48	46-1/16	26-5/8	30-11/16
	9	Prefix(†)-09-(*)-HB60-48	47-3/8	27-3/8	31-9/16
	12	Prefix(†)-12-(*)-HB60-48	48-11/16	28-1/8	32-7/16
	18	Prefix(†)-18-(*)-HB60-48	51-4/16	29-5/8	34-3/16
	24	Prefix(†)-24-(*)-HB60-48	53-7/8	31-1/8	35-15/16
	30	Prefix(†)-30-(*)-HB60-48	56-7/16	32-5/8	37-5/8
	36	Prefix(†)-36-(*)-HB60-48	59-1/16	34-1/8	39-3/8

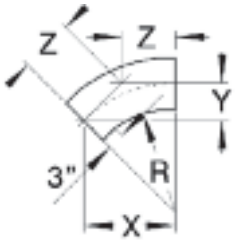
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

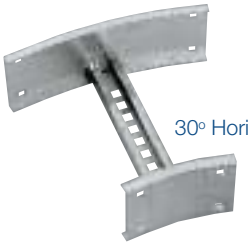
Fittings

Horizontal Bends 45º / 30º

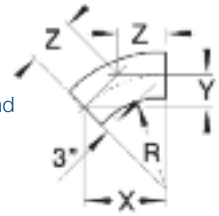


45º Horizontal Bend





30º Horizontal Bend



Part Numbering System

SHF 4 24 L HB45 12

- SHF: Prefix (SPF, SHF, SSF)
- 4: Siderail Depth
- 24: Width
- L: Bottom Style
- HB45: Fitting Type, Angle
- 12: Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.) ,SHF (Hot Dip) ,SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º, 30º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

45º Horizontal BEND

Nominal Radius R	Nominal Radius Width	Cat. No.	Dimensions X	Dimensions Y	Dimensions Z
12	6	Prefix(†)-06-(*)-(+)HB45-12	13-5/8	5-5/8	8
	9	Prefix(†)-09-(*)-(+)HB45-12	14-11/16	6-1/16	8-9/16
	12	Prefix(†)-12-(*)-(+)HB45-12	15-3/4	6-12	9-3/16
	18	Prefix(†)-18-(*)-(+)HB45-12	17-7/8	7-3/8	10-7/16
	24	Prefix(†)-24-(*)-(+)HB45-12	20	8-1/4	11-11/16
	30	Prefix(†)-30-(*)-(+)HB45-12	22-1/16	9-1/8	12-15/16
	36	Prefix(†)-36-(*)-(+)HB45-12	24-3/16	10	14-3/16
24	6	Prefix(†)-06-(*)-(+)HB45-24	22-1/16	9-1/8	12-15/16
	9	Prefix(†)-09-(*)-(+)HB45-24	23-1/8	9-9/16	13-9/16
	12	Prefix(†)-12-(*)-(+)HB45-24	24-3/16	10	14-3/16
	18	Prefix(†)-18-(*)-(+)HB45-24	26-5/16	10-15/16	15-7/16
	24	Prefix(†)-24-(*)-(+)HB45-24	28-7/16	11-13/16	16-11/16
	30	Prefix(†)-30-(*)-(+)HB45-24	30-9/16	12-11/16	17-15/16
	36	Prefix(†)-36-(*)-(+)HB45-24	32-11/16	13-9/16	19-1/8
36	6	Prefix(†)-06-(*)-(+)HB45-36	30-9/16	12-11/16	17-15/16
	9	Prefix(†)-09-(*)-(+)HB45-36	31-5/8	13-1/8	18-9/16
	12	Prefix(†)-12-(*)-(+)HB45-36	32-11/16	13-9/16	19-1/8
	18	Prefix(†)-18-(*)-(+)HB45-36	34-13/16	14-7/16	20-3/8
	24	Prefix(†)-24-(*)-(+)HB45-36	36-15/16	15-5/16	21-5/8
	30	Prefix(†)-30-(*)-(+)HB45-36	39-1/16	16-3/16	22-7/8
	36	Prefix(†)-36-(*)-(+)HB45-36	41-3/16	17-1/16	24-1/8
48	6	Prefix(†)-06-(*)-(+)HB45-48	39-1/16	16-3/16	22-7/8
	9	Prefix(†)-09-(*)-(+)HB45-48	40-1/8	16-3/8	23-1/2
	12	Prefix(†)-12-(*)-(+)HB45-48	41-3/16	17-1/16	24-1/8
	18	Prefix(†)-18-(*)-(+)HB45-48	43-5/16	17-15/16	25-3/8
	24	Prefix(†)-24-(*)-(+)HB45-48	45-7/16	18-13/16	26-5/8
	30	Prefix(†)-30-(*)-(+)HB45-48	47-9/16	19-11/16	27-7/8
	36	Prefix(†)-36-(*)-(+)HB45-48	49-11/16	20-9/16	29-1/8

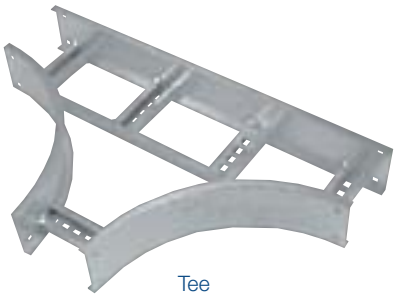
30º Horizontal BEND

Nominal Radius R	Nominal Radius Width	Cat. No.	Dimensions X	Dimensions Y	Dimensions Z
12	6	Prefix(†)-06-(*)-(+)HB30-12	11-5/8	3-1/8	6-3/16
	9	Prefix(†)-09-(*)-(+)HB30-12	12-3/8	3-5/16	6-5/8
	12	Prefix(†)-12-(*)-(+)HB30-12	13-1/2	3-1/2	7
	18	Prefix(†)-18-(*)-(+)HB30-12	14-5/8	3-15/16	7-13/16
	24	Prefix(†)-24-(*)-(+)HB30-12	16-1/8	4-5/16	8-5/8
	30	Prefix(†)-30-(*)-(+)HB30-12	17-5/8	4-11/16	9-7/16
	36	Prefix(†)-36-(*)-(+)HB30-12	19-1/8	5-1/8	10-1/4
24	6	Prefix(†)-06-(*)-(+)HB30-24	17-5/8	4-11/16	9-7/16
	9	Prefix(†)-09-(*)-(+)HB30-24	18-3/8	4-15/16	9-13/16
	12	Prefix(†)-12-(*)-(+)HB30-24	19-1/8	5-2/16	10-4/16
	18	Prefix(†)-18-(*)-(+)HB30-24	20-5/8	5-8/16	11-1/16
	24	Prefix(†)-24-(*)-(+)HB30-24	22-1/8	5-15/16	11-13/16
	30	Prefix(†)-30-(*)-(+)HB30-24	23-5/8	6-5/16	12-10/16
	36	Prefix(†)-36-(*)-(+)HB30-24	25-1/8	6-12/16	13-7/16
36	6	Prefix(†)-06-(*)-(+)HB30-36	23-5/8	6-5/16	12-5/8
	9	Prefix(†)-09-(*)-(+)HB30-36	24-3/8	6-1/2	13-1/16
	12	Prefix(†)-12-(*)-(+)HB30-36	25-1/8	6-3/4	13-7/16
	18	Prefix(†)-18-(*)-(+)HB30-36	26-5/8	7-1/4	14-1/4
	24	Prefix(†)-24-(*)-(+)HB30-36	28-1/8	7-1/2	15-1/16
	30	Prefix(†)-30-(*)-(+)HB30-36	29-5/8	7-15/16	15-7/8
	36	Prefix(†)-36-(*)-(+)HB30-36	31-1/8	8-5/16	16-11/16
48	6	Prefix(†)-06-(*)-(+)HB30-48	29-5/8	7-15/16	15-7/8
	9	Prefix(†)-09-(*)-(+)HB30-48	30-3/8	8-1/8	16-1/4
	12	Prefix(†)-12-(*)-(+)HB30-48	31-1/8	8-5/16	16-11/16
	18	Prefix(†)-18-(*)-(+)HB30-48	32-5/8	8-3/4	17-1/2
	24	Prefix(†)-24-(*)-(+)HB30-48	34-1/8	9-1/8	18-1/4
	30	Prefix(†)-30-(*)-(+)HB30-48	35-5/8	9-9/16	19-1/16
	36	Prefix(†)-36-(*)-(+)HB30-48	37-1/8	9-15/16	19-7/8

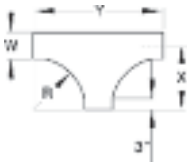
(†) Insert siderail depth. (*) Insert bottom style to complete Ca. No. Includes 1 pair of splice plates with hardware.

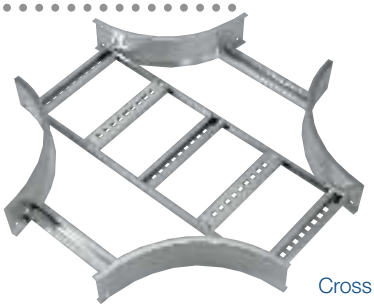
Fittings

Horizontal Tee, Cross

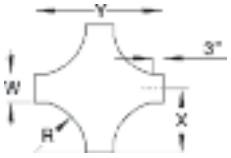


Tee





Cross



Part Numbering System

SHF 4 24 L HT 12

- SHF: Prefix (SPF, SHF, SSF)
- 4: Siderail Depth
- 24: Width
- L: Bottom Style
- HT: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip) ,SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

Horizontal TEE

Nominal Radius R	Width	Cat. No.	Dimensions X	Y
12	6	Prefix(†)-06-(*)-HT12	15	30
	9	Prefix(†)-09-(*)-HT12	16-1/2	33
	12	Prefix(†)-12-(*)-HT12	18	36
	18	Prefix(†)-18-(*)-HT12	21	42
	24	Prefix(†)-24-(*)-HT12	24	48
	30	Prefix(†)-30-(*)-HT12	27	54
	36	Prefix(†)-36-(*)-HT12	30	60
24	6	Prefix(†)-06-(*)-HT24	27	54
	9	Prefix(†)-09-(*)-HT24	28-1/2	57
	12	Prefix(†)-12-(*)-HT24	30	60
	18	Prefix(†)-18-(*)-HT24	33	66
	24	Prefix(†)-24-(*)-HT24	36	72
	30	Prefix(†)-30-(*)-HT24	39	78
	36	Prefix(†)-36-(*)-HT24	42	84
36	6	Prefix(†)-06-(*)-HT36	39	78
	9	Prefix(†)-09-(*)-HT36	40-1/2	81
	12	Prefix(†)-12-(*)-HT36	42	84
	18	Prefix(†)-18-(*)-HT36	45	90
	24	Prefix(†)-24-(*)-HT36	48	96
	30	Prefix(†)-30-(*)-HT36	51	102
	36	Prefix(†)-36-(*)-HT36	54	108
48	6	Prefix(†)-06-(*)-HT48	51	102
	9	Prefix(†)-09-(*)-HT48	52-1/2	105
	12	Prefix(†)-12-(*)-HT48	54	108
	18	Prefix(†)-18-(*)-HT48	57	114
	24	Prefix(†)-24-(*)-HT48	60	120
	30	Prefix(†)-30-(*)-HT48	63	126
	36	Prefix(†)-36-(*)-HT48	66	132

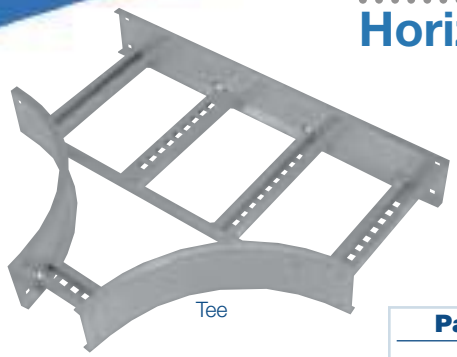
Horizontal CROSS

Nominal Radius R	Width	Cat. No.	Dimensions X	Y
12	6	Prefix(†)-06-(*)-HX12	15	30
	9	Prefix(†)-09-(*)-HX12	16-1/2	33
	12	Prefix(†)-12-(*)-HX12	18	36
	18	Prefix(†)-18-(*)-HX12	21	42
	24	Prefix(†)-24-(*)-HX12	24	48
	30	Prefix(†)-30-(*)-HX12	27	54
	36	Prefix(†)-36-(*)-HX12	30	60
24	6	Prefix(†)-06-(*)-HX24	27	54
	9	Prefix(†)-09-(*)-HX24	28-1/2	57
	12	Prefix(†)-12-(*)-HX24	30	60
	18	Prefix(†)-18-(*)-HX24	33	66
	24	Prefix(†)-24-(*)-HX24	36	72
	30	Prefix(†)-30-(*)-HX24	39	78
	36	Prefix(†)-36-(*)-HX24	42	84
36	6	Prefix(†)-06-(*)-HX36	39	78
	9	Prefix(†)-09-(*)-HX36	40-1/2	81
	12	Prefix(†)-12-(*)-HX36	42	84
	18	Prefix(†)-18-(*)-HX36	45	90
	24	Prefix(†)-24-(*)-HX36	48	96
	30	Prefix(†)-30-(*)-HX36	51	102
	36	Prefix(†)-36-(*)-HX36	54	108
48	6	Prefix(†)-06-(*)-HX48	51	102
	9	Prefix(†)-09-(*)-HX48	52-1/2	105
	12	Prefix(†)-12-(*)-HX48	54	108
	18	Prefix(†)-18-(*)-HX48	57	114
	24	Prefix(†)-24-(*)-HX48	60	120
	30	Prefix(†)-30-(*)-HX48	63	126
	36	Prefix(†)-36-(*)-HX48	66	132

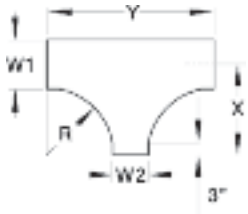
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Tees include 2 pairs / Crosses include 3 pairs of splice plates with hardware.

Fittings

Horizontal Reducing Tee



Tee



Part Numbering System

SHF 4 3024 L RT 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 3024 — Width 1 / Width 2
- L — Bottom Style
- RT — Fitting Type
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

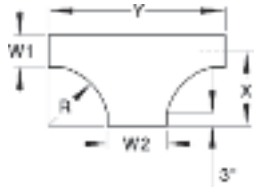
Horizontal REDUCING TEE										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
36	30	Prefix(†)-3630-(*)-RT(+)	30	54	42	78	54	102	66	126
	24	Prefix(†)-3624-(*)-RT(+)	30	48	42	72	54	96	66	120
	18	Prefix(†)-3618-(*)-RT(+)	30	42	42	66	54	90	66	114
	12	Prefix(†)-3612-(*)-RT(+)	30	36	42	60	54	84	66	108
	9	Prefix(†)-3609-(*)-RT(+)	30	33	42	57	54	81	66	105
	6	Prefix(†)-3606-(*)-RT(+)	30	30	42	54	54	78	66	102
30	24	Prefix(†)-3024-(*)-RT(+)	27	48	39	72	51	96	63	120
	18	Prefix(†)-3018-(*)-RT(+)	27	42	39	66	51	90	63	114
	12	Prefix(†)-3012-(*)-RT(+)	27	36	39	60	51	84	63	108
	9	Prefix(†)-3009-(*)-RT(+)	27	33	39	57	51	81	63	105
	6	Prefix(†)-3006-(*)-RT(+)	27	30	39	54	51	78	63	102
24	18	Prefix(†)-2418-(*)-RT(+)	24	42	36	66	48	90	60	114
	12	Prefix(†)-2412-(*)-RT(+)	24	36	36	60	48	84	60	108
	9	Prefix(†)-2409-(*)-RT(+)	24	33	36	57	48	81	60	105
	6	Prefix(†)-2406-(*)-RT(+)	24	30	36	54	48	78	60	102
18	12	Prefix(†)-1812-(*)-RT(+)	21	36	33	60	45	84	57	108
	9	Prefix(†)-1809-(*)-RT(+)	21	33	33	57	45	81	57	105
	6	Prefix(†)-1806-(*)-RT(+)	21	30	33	54	45	78	57	102
12	9	Prefix(†)-1209-(*)-RT(+)	18	33	30	57	42	81	54	105
	6	Prefix(†)-1206-(*)-RT(+)	18	30	30	54	42	78	54	102
9	6	Prefix(†)-0906-(*)-RT(+)	16-1/2	30	28-1/2	54	40-1/2	78	52-1/2	102

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 2 pairs of splice plates with hardware.

Fittings

Horizontal Expanding Tee

Tee



Dimension / Information

Part Numbering System

SHF 4 2430 L ET 12

- SHF: Prefix (SPF, SHF, SSF)
- 4: Siderail Depth
- 2430: Width 1, Width 2
- L: Bottom Style
- ET: Fitting Type
- 12: Nominal Radius

Selection Guide

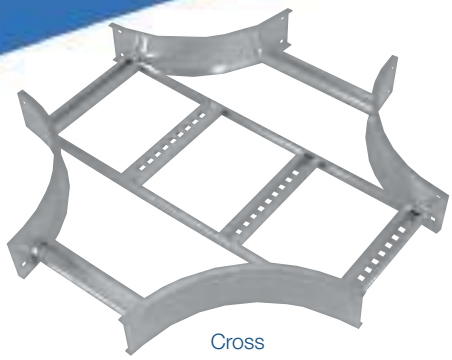
Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Horizontal EXPANDING TEE										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	Prefix(†)-3036-(*)-ET(+)	27	60	39	84	51	108	63	132
24	30	Prefix(†)-2430-(*)-ET(+)	24	54	36	78	48	102	60	126
	36	Prefix(†)-2436-(*)-ET(+)	24	60	36	84	48	108	60	132
18	24	Prefix(†)-1824-(*)-ET(+)	21	48	33	72	45	96	57	120
	30	Prefix(†)-1830-(*)-ET(+)	21	54	33	78	45	102	57	126
	36	Prefix(†)-1836-(*)-ET(+)	21	60	33	84	45	108	57	132
12	18	Prefix(†)-1218-(*)-ET(+)	18	42	30	66	42	90	54	114
	24	Prefix(†)-1224-(*)-ET(+)	18	48	30	72	42	96	54	120
	30	Prefix(†)-1230-(*)-ET(+)	18	54	30	78	42	102	54	126
	36	Prefix(†)-1236-(*)-ET(+)	18	60	30	84	42	108	54	132
9	12	Prefix(†)-0912-(*)-ET(+)	16-1/2	36	28-1/2	60	40-1/2	84	52-1/2	108
	18	Prefix(†)-0918-(*)-ET(+)	16-1/2	42	28-1/2	66	40-1/2	90	52-1/2	114
	24	Prefix(†)-0924-(*)-ET(+)	16-1/2	48	28-1/2	72	40-1/2	96	52-1/2	120
	30	Prefix(†)-0930-(*)-ET(+)	16-1/2	54	28-1/2	78	40-1/2	102	52-1/2	126
	36	Prefix(†)-0936-(*)-ET(+)	16-1/2	60	28-1/2	84	40-1/2	108	52-1/2	132
6	9	Prefix(†)-0609-(*)-ET(+)	15	33	27	57	39	81	51	105
	12	Prefix(†)-0612-(*)-ET(+)	15	36	27	60	39	84	51	108
	18	Prefix(†)-0618-(*)-ET(+)	15	42	27	66	39	90	51	114
	24	Prefix(†)-0624-(*)-ET(+)	15	48	27	72	39	96	51	120
	30	Prefix(†)-0630-(*)-ET(+)	15	54	27	78	39	102	51	126
	36	Prefix(†)-0636-(*)-ET(+)	15	60	27	84	39	108	51	132

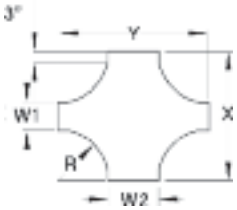
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 2 pairs of splice plates with hardware.

Fittings

Horizontal Expanding Cross



Cross



Part Numbering System

SHF 4 2430 V EX 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 2430 — Width 1 / Width 2
- V — Bottom Style
- EX — Fitting Type
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Tray Widths W1: **30, 24, 18, 12, 9, 6**
Tray Widths W2: **36, 30, 24, 18, 12, 9**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

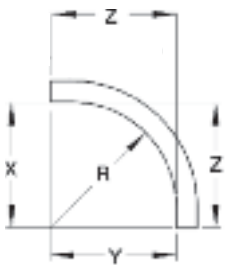
Horizontal EXPANDING CROSS										
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius		(+) 48 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y	X	Y
30	36	Prefix(†)-3036-(*)-EX(+)	54	60	78	84	102	108	126	132
24	30	Prefix(†)-2430-(*)-EX(+)	48	54	72	78	96	102	120	126
	36	Prefix(†)-2436-(*)-EX(+)	48	60	72	84	96	108	120	132
18	24	Prefix(†)-1824-(*)-EX(+)	42	48	66	72	90	96	114	120
	30	Prefix(†)-1830-(*)-EX(+)	42	54	66	78	90	102	114	126
	36	Prefix(†)-1836-(*)-EX(+)	42	60	66	84	90	108	114	132
12	18	Prefix(†)-1218-(*)-EX(+)	36	42	60	66	84	90	108	114
	24	Prefix(†)-1224-(*)-EX(+)	36	48	60	72	84	96	108	120
	30	Prefix(†)-1230-(*)-EX(+)	36	54	60	78	84	102	108	126
	36	Prefix(†)-1236-(*)-EX(+)	36	60	60	84	84	108	108	132
9	12	Prefix(†)-0912-(*)-EX(+)	33	36	57	60	81	84	105	108
	18	Prefix(†)-0918-(*)-EX(+)	33	42	57	66	81	90	105	114
	24	Prefix(†)-0924-(*)-EX(+)	33	48	57	72	81	96	105	120
	30	Prefix(†)-0930-(*)-EX(+)	33	54	57	78	81	102	105	126
	36	Prefix(†)-0936-(*)-EX(+)	33	60	57	84	81	108	105	132
6	9	Prefix(†)-0609-(*)-EX(+)	30	33	54	57	78	81	102	105
	12	Prefix(†)-0612-(*)-EX(+)	30	36	54	60	78	84	102	108
	18	Prefix(†)-0618-(*)-EX(+)	30	42	54	66	78	90	102	114
	24	Prefix(†)-0624-(*)-EX(+)	30	48	54	72	78	96	102	120
	30	Prefix(†)-0630-(*)-EX(+)	30	54	54	78	78	102	102	126
	36	Prefix(†)-0636-(*)-EX(+)	30	60	54	84	78	108	102	132

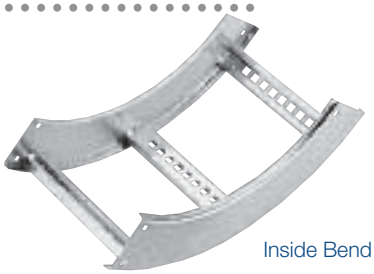
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 3 pairs of splice plates with hardware.

Fittings

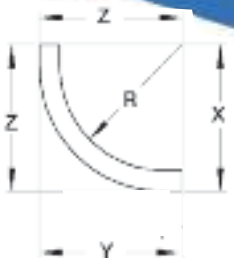
Vertical Bends 90°

Outside Bend





Inside Bend



Part Numbering System

SHF 4 24 L VI90 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 24 — Width
- L — Bottom Style
- VI90 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **90°**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

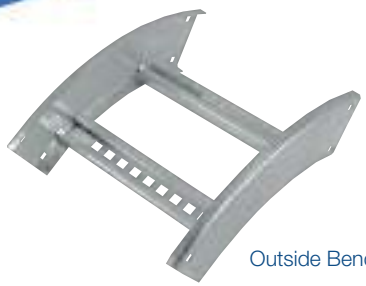
90° Vertical BEND

Nominal Radius			(+) VO Siderail Height 3-1/2 – 7 in.			(+) VI Siderail Height 3-1/2 in.			(+) VI Siderail Height 4 in.			(+) VI Siderail Height 5 in.			(+) VI Siderail Height 6 in.			(+) VI Siderail Height 7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)90-12	12	12	12	15-5/8	15-5/8	15-5/8	16-3/16	16-3/16	16-3/16	17-3/16	17-3/16	17-3/16	18-3/16	18-3/16	18-3/16	19-3/16	19-3/16	19-3/16
	9	Prefix(†)-09-(*)-(+)90-12																		
	12	Prefix(†)-12-(*)-(+)90-12																		
	18	Prefix(†)-18-(*)-(+)90-12																		
	24	Prefix(†)-24-(*)-(+)90-12																		
	30	Prefix(†)-30-(*)-(+)90-12																		
	36	Prefix(†)-36-(*)-(+)90-12																		
24	6	Prefix(†)-06-(*)-(+)90-24	24	24	24	27-5/8	27-5/8	27-5/8	28-3/16	28-3/16	28-3/16	29-3/16	29-3/16	29-3/16	30-3/16	30-3/16	30-3/16	31-3/16	31-3/16	31-3/16
	9	Prefix(†)-09-(*)-(+)90-24																		
	12	Prefix(†)-12-(*)-(+)90-24																		
	18	Prefix(†)-18-(*)-(+)90-24																		
	24	Prefix(†)-24-(*)-(+)90-24																		
	30	Prefix(†)-30-(*)-(+)90-24																		
	36	Prefix(†)-36-(*)-(+)90-24																		
36	6	Prefix(†)-06-(*)-(+)90-36	36	36	36	39-5/8	39-5/8	39-5/8	40-3/16	40-3/16	40-3/16	41-3/16	41-3/16	41-3/16	42-3/16	42-3/16	42-3/16	43-3/16	43-3/16	43-3/16
	9	Prefix(†)-09-(*)-(+)90-36																		
	12	Prefix(†)-12-(*)-(+)90-36																		
	18	Prefix(†)-18-(*)-(+)90-36																		
	24	Prefix(†)-24-(*)-(+)90-36																		
	30	Prefix(†)-30-(*)-(+)90-36																		
	36	Prefix(†)-36-(*)-(+)90-36																		
48	6	Prefix(†)-06-(*)-(+)90-48	48	48	48	51-5/8	51-5/8	51-5/8	52-3/16	52-3/16	52-3/16	53-3/16	53-3/16	53-3/16	54-3/16	54-3/16	54-3/16	55-3/16	55-3/16	55-3/16
	9	Prefix(†)-09-(*)-(+)90-48																		
	12	Prefix(†)-12-(*)-(+)90-48																		
	18	Prefix(†)-18-(*)-(+)90-48																		
	24	Prefix(†)-24-(*)-(+)90-48																		
	30	Prefix(†)-30-(*)-(+)90-48																		
	36	Prefix(†)-36-(*)-(+)90-48																		

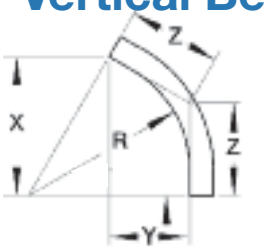
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

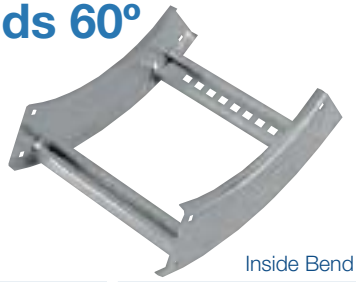
Fittings

Vertical Bends 60°

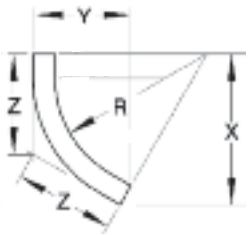


Outside Bend





Inside Bend



Part Numbering System

SHF 4 24 L VI60 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Width
- 24 — Siderail Depth
- L — Bottom Style
- VI — Fitting Type
- 60 — Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **60°**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

60° Vertical BEND

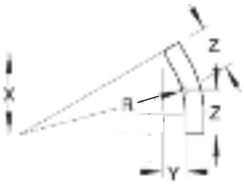
Nominal Radius			(+) VO Siderail Height 3-1/2 – 7 in.			(+) VI Siderail Height 3-1/2 in.			(+) VI Siderail Height 4 in.			(+) VI Siderail Height 5 in.			(+) VI Siderail Height 6 in.			(+) VI Siderail Height 7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)90-12	10-3/8	6	6-15/16	13-1/2	9-5/8	9	14	10-3/16	9-3/8	14-7/8	11-3/16	9-15/16	15-3/4	12-3/16	10-1/2	16-5/8	13-3/16	11-1/16
	9	Prefix(†)-09-(*)-(+)90-12																		
	12	Prefix(†)-12-(*)-(+)90-12																		
	18	Prefix(†)-18-(*)-(+)90-12																		
	24	Prefix(†)-24-(*)-(+)90-12																		
	30	Prefix(†)-30-(*)-(+)90-12																		
	36	Prefix(†)-36-(*)-(+)90-12																		
24	6	Prefix(†)-06-(*)-(+)90-24	20-13/16	12	13-7/8	23-15/16	15-5/8	15-15/16	24-7/16	16-3/16	16-1/4	25-1/4	17-3/16	16-7/8	26-1/8	18-3/16	17-7/16	27	19-3/16	18
	9	Prefix(†)-09-(*)-(+)90-24																		
	12	Prefix(†)-12-(*)-(+)90-24																		
	18	Prefix(†)-18-(*)-(+)90-24																		
	24	Prefix(†)-24-(*)-(+)90-24																		
	30	Prefix(†)-30-(*)-(+)90-24																		
	36	Prefix(†)-36-(*)-(+)90-24																		
36	6	Prefix(†)-06-(*)-(+)90-36	31-3/16	18	20-13/16	34-5/16	21-5/8	22-7/8	34-13/16	22-3/16	23-3/16	35-11/16	23-3/16	23-3/4	36-1/2	24-3/16	24-3/8	37-7/16	25-3/16	24-15/16
	9	Prefix(†)-09-(*)-(+)90-36																		
	12	Prefix(†)-12-(*)-(+)90-36																		
	18	Prefix(†)-18-(*)-(+)90-36																		
	24	Prefix(†)-24-(*)-(+)90-36																		
	30	Prefix(†)-30-(*)-(+)90-36																		
	36	Prefix(†)-36-(*)-(+)90-36																		
48	6	Prefix(†)-06-(*)-(+)90-48	41-9/16	24	27-11/16	44-11/16	27-5/8	29-13/16	45-3/16	28-3/16	30-1/8	46-1/16	29-3/16	30-11/16	46-15/16	30-3/16	31-1/8	47-13/16	31-3/16	31-7/8
	9	Prefix(†)-09-(*)-(+)90-48																		
	12	Prefix(†)-12-(*)-(+)90-48																		
	18	Prefix(†)-18-(*)-(+)90-48																		
	24	Prefix(†)-24-(*)-(+)90-48																		
	30	Prefix(†)-30-(*)-(+)90-48																		
	36	Prefix(†)-36-(*)-(+)90-48																		

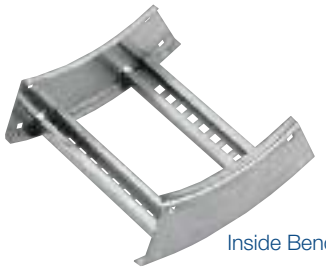
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

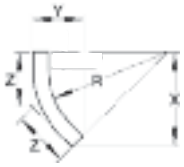
Vertical Bends 45º

Outside Bend





Inside Bend



Part Numbering System

SHF 4 24 L VI45 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 24 — Width
- L — Bottom Style
- VI45 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **45º**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

45º Vertical BEND

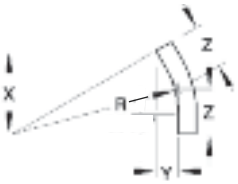
Nominal Radius			(+) VO Siderail Height 3-1/2 – 7 in.			(+) VI Siderail Height 3-1/2 in.			4 in.			5 in.			6 in.			7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)45-12	8-1/2	3-1/2	5	11-1/16	7-1/8	6-1/2	11-7/16	7-11/16	6-11/16	12-1/8	8-11/16	7-1/8	12-7/8	9-11/16	7-1/2	13-9/16	10-11/16	7-15/16
	9	Prefix(†)-09-(*)-(+)45-12																		
	12	Prefix(†)-12-(*)-(+)45-12																		
	18	Prefix(†)-18-(*)-(+)45-12																		
	24	Prefix(†)-24-(*)-(+)45-12																		
	30	Prefix(†)-30-(*)-(+)45-12																		
	36	Prefix(†)-36-(*)-(+)45-12																		
24	6	Prefix(†)-06-(*)-(+)45-24	17	7	9-15/16	19-1/2	10-5/8	11-7/16	19-15/16	11-3/16	11-11/16	20-5/8	12-3/16	12-1/16	21-3/8	13-3/16	12-1/2	22-1/16	14-3/16	12-15/16
	9	Prefix(†)-09-(*)-(+)45-24																		
	12	Prefix(†)-12-(*)-(+)45-24																		
	18	Prefix(†)-18-(*)-(+)45-24																		
	24	Prefix(†)-24-(*)-(+)45-24																		
	30	Prefix(†)-30-(*)-(+)45-24																		
	36	Prefix(†)-36-(*)-(+)45-24																		
36	6	Prefix(†)-06-(*)-(+)45-36	25-7/16	10-9/16	14-15/16	28	14-3/16	16-7/16	28-7/16	14-3/4	16-5/8	29-1/8	15-3/4	17-1/16	29-13/16	16-3/4	17-1/2	30-1/2	17-3/4	17-7/8
	9	Prefix(†)-09-(*)-(+)45-36																		
	12	Prefix(†)-12-(*)-(+)45-36																		
	18	Prefix(†)-18-(*)-(+)45-36																		
	24	Prefix(†)-24-(*)-(+)45-36																		
	30	Prefix(†)-30-(*)-(+)45-36																		
	36	Prefix(†)-36-(*)-(+)45-36																		
48	6	Prefix(†)-06-(*)-(+)45-48	33-15/16	14-1/16	19-7/8	36-1/2	17-11/16	21-3/8	36-7/8	18-1/4	21-5/8	37-5/8	19-1/4	22	39-5/16	20-1/4	22-7/16	39	21-1/4	22-7/8
	9	Prefix(†)-09-(*)-(+)45-48																		
	12	Prefix(†)-12-(*)-(+)45-48																		
	18	Prefix(†)-18-(*)-(+)45-48																		
	24	Prefix(†)-24-(*)-(+)45-48																		
	30	Prefix(†)-30-(*)-(+)45-48																		
	36	Prefix(†)-36-(*)-(+)45-48																		

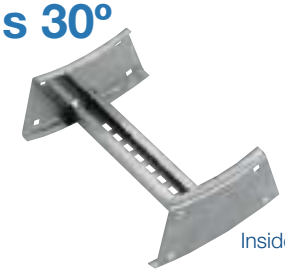
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

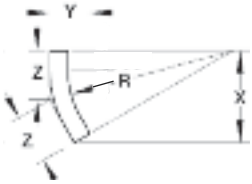
Vertical Bends 30°

Outside Bend





Inside Bend



Part Numbering System

SHF 4 24 L VI30 12

- SHF — Prefix: SPF, SHF, SSF
- 4 — Siderail Depth
- 24 — Width
- L — Bottom Style
- VI30 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Angle: **30°**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

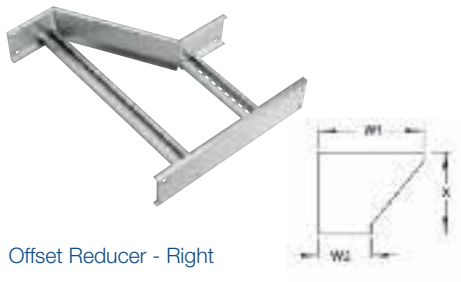
30° Vertical BEND

Nominal Radius			(+) VO Siderail Height 3-1/2 – 7 in.			(+) VI Siderail Height 3-1/2 in.			(+) VI Siderail Height 4 in.			(+) VI Siderail Height 5 in.			(+) VI Siderail Height 6 in.			(+) VI Siderail Height 7 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)30-12	6	1-5/8	3-3/16	7-13/16	5-1/4	4-3/16	8-1/16	15-13/16	4-5/16	8-9/16	6-13/16	4-5/8	9-1/16	7-13/16	4-7/8	9-9/16	8-13/16	5-1/8
	9	Prefix(†)-09-(*)-(+)30-12																		
	12	Prefix(†)-12-(*)-(+)30-12																		
	18	Prefix(†)-18-(*)-(+)30-12																		
	24	Prefix(†)-24-(*)-(+)30-12																		
	30	Prefix(†)-30-(*)-(+)30-12																		
	36	Prefix(†)-36-(*)-(+)30-12																		
24	6	Prefix(†)-06-(*)-(+)30-24	12	3-3/16	6-7/16	13-13/16	6-13/16	7-3/8	14-1/16	7-3/8	7-9/16	14-9/16	8-3/8	7-13/16	15-1/16	9-3/8	8-1/16	15-9/16	10-3/8	8-3/8
	9	Prefix(†)-09-(*)-(+)30-24																		
	12	Prefix(†)-12-(*)-(+)30-24																		
	18	Prefix(†)-18-(*)-(+)30-24																		
	24	Prefix(†)-24-(*)-(+)30-24																		
	30	Prefix(†)-30-(*)-(+)30-24																		
	36	Prefix(†)-36-(*)-(+)30-24																		
36	6	Prefix(†)-06-(*)-(+)30-36	18	4-13/16	9-5/8	19-13/16	8-7/16	10-5/8	20-1/16	9	10-3/4	20-1/16	10	11-1/16	21-1/16	11	11-5/16	21-9/16	12	11-9/16
	9	Prefix(†)-09-(*)-(+)30-36																		
	12	Prefix(†)-12-(*)-(+)30-36																		
	18	Prefix(†)-18-(*)-(+)30-36																		
	24	Prefix(†)-24-(*)-(+)30-36																		
	30	Prefix(†)-30-(*)-(+)30-36																		
	36	Prefix(†)-36-(*)-(+)30-36																		
48	6	Prefix(†)-06-(*)-(+)30-48	24	6-7/16	12-7/8	25-13/16	10-1/16	13-13/16	26-1/16	10-5/8	14	26-9/16	11-5/8	14-1/4	27-1/16	12-5/8	14-1/2	27-9/16	13-5/8	14-13/16
	9	Prefix(†)-09-(*)-(+)30-48																		
	12	Prefix(†)-12-(*)-(+)30-48																		
	18	Prefix(†)-18-(*)-(+)30-48																		
	24	Prefix(†)-24-(*)-(+)30-48																		
	30	Prefix(†)-30-(*)-(+)30-48																		
	36	Prefix(†)-36-(*)-(+)30-48																		

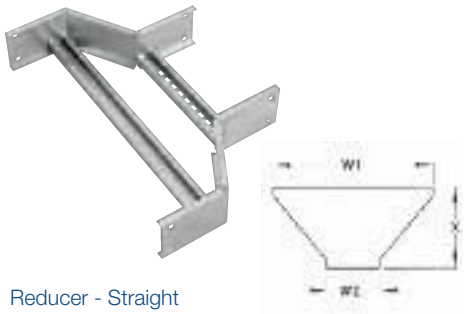
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

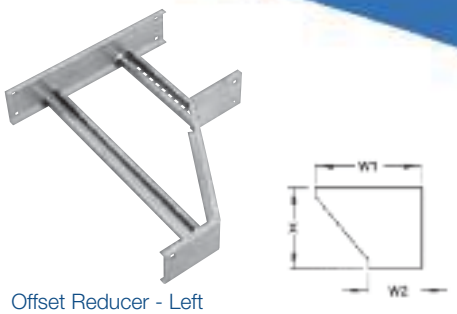
Reducers



Offset Reducer - Right



Reducer - Straight



Offset Reducer - Left

Dimension / Information

Part Numbering System

SHF-6-36-24-L-HLR

Prefix	Siderail Depth	Width 1	Width 2	Bottom Style	Fitting Type
SPF, SHF, SSF	6	36	24	L	HLR

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Tray Widths W1: **36, 30, 24, 18, 12, 9**
Tray Widths W2: **30, 24, 18, 12, 9, 6**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Horizontal REDUCERS

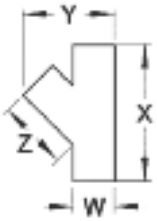
Widths		Left Reducer		Straight Reducer (Concentric)		Right Reducer	
W1	W2	Cat. No.	Dim. X	Cat. No.	Dim. X	Cat. No.	Dim. X
36	30	Prefix(†)-36-30-(*)-HLR	15-7/16	Prefix(†)-36-30-(*)-HSR	13-3/4	Prefix(†)-36-30-(*)-HRR	15-7/16
	24	Prefix(†)-36-24-(*)-HLR	18-15/16	Prefix(†)-36-24-(*)-HSR	15-7/16	Prefix(†)-36-24-(*)-HRR	18-15/16
	18	Prefix(†)-36-18-(*)-HLR	22-3/8	Prefix(†)-36-18-(*)-HSR	17-3/8	Prefix(†)-36-18-(*)-HRR	22-3/8
	12	Prefix(†)-36-12-(*)-HLR	25-7/8	Prefix(†)-36-12-(*)-HSR	18-5/16	Prefix(†)-36-12-(*)-HRR	25-7/8
	9	Prefix(†)-36-09-(*)-HLR	27-9/16	Prefix(†)-36-09-(*)-HSR	19-13/16	Prefix(†)-36-09-(*)-HRR	27-9/16
	6	Prefix(†)-36-06-(*)-HLR	29-5/16	Prefix(†)-36-06-(*)-HSR	20-11/16	Prefix(†)-36-06-(*)-HRR	29-5/16
30	24	Prefix(†)-30-24-(*)-HLR	15-7/16	Prefix(†)-30-24-(*)-HSR	13-3/4	Prefix(†)-30-24-(*)-HRR	15-7/16
	18	Prefix(†)-30-18-(*)-HLR	18-15/16	Prefix(†)-30-18-(*)-HSR	15-7/16	Prefix(†)-30-18-(*)-HRR	18-15/16
	12	Prefix(†)-30-12-(*)-HLR	22-3/8	Prefix(†)-30-12-(*)-HSR	17-3/16	Prefix(†)-30-12-(*)-HRR	22-3/8
	9	Prefix(†)-30-09-(*)-HLR	24-1/8	Prefix(†)-30-09-(*)-HSR	18-1/16	Prefix(†)-30-09-(*)-HRR	24-1/8
	6	Prefix(†)-30-06-(*)-HLR	25-7/8	Prefix(†)-30-06-(*)-HSR	18-15/16	Prefix(†)-30-06-(*)-HRR	25-7/8
24	18	Prefix(†)-24-18-(*)-HLR	15-7/16	Prefix(†)-24-18-(*)-HSR	13-3/4	Prefix(†)-24-18-(*)-HRR	15-7/16
	12	Prefix(†)-24-12-(*)-HLR	18-15/16	Prefix(†)-24-12-(*)-HSR	15-7/16	Prefix(†)-24-12-(*)-HRR	18-15/16
	9	Prefix(†)-24-09-(*)-HLR	20-11/16	Prefix(†)-24-09-(*)-HSR	16-5/16	Prefix(†)-24-09-(*)-HRR	20-11/16
	6	Prefix(†)-24-06-(*)-HLR	22-3/8	Prefix(†)-24-06-(*)-HSR	17-3/16	Prefix(†)-24-06-(*)-HRR	22-3/8
18	12	Prefix(†)-18-12-(*)-HLR	15-7/16	Prefix(†)-18-12-(*)-HSR	13-3/4	Prefix(†)-18-12-(*)-HRR	15-7/16
	9	Prefix(†)-18-09-(*)-HLR	17-3/16	Prefix(†)-18-09-(*)-HSR	14-5/8	Prefix(†)-18-09-(*)-HRR	17-3/16
	6	Prefix(†)-18-06-(*)-HLR	18-15/16	Prefix(†)-18-06-(*)-HSR	15-7/16	Prefix(†)-18-06-(*)-HRR	18-15/16
12	9	Prefix(†)-12-39-(*)-HLR	13-3/4	Prefix(†)-12-09-(*)-HSR	12-7/8	Prefix(†)-12-09-(*)-HRR	13-3/4
	6	Prefix(†)-12-06-(*)-HLR	15-7/16	Prefix(†)-12-06-(*)-HSR	13-3/4	Prefix(†)-12-06-(*)-HRR	15-7/16
9	6	Prefix(†)-09-06-(*)-HLR	13-3/4	Prefix(†)-09-06-(*)-HSR	12-7/8	Prefix(†)-09-06-(*)-HRR	13-3/4

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

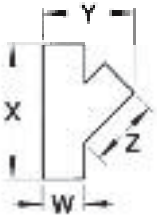
Fittings

Horizontal Wye 45º

Left Hand Wye



Right Hand Wye



Part Numbering System

SHF-6-36-L-HYL

- SHF – Prefix: SPF, SHF, SSF
- 6 – Width
- 36 – Siderail Depth
- L – Bottom Style
- HYL – Fitting Type

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in. , 4 in., 5 in., 6 in., 7 in.**

Dimension / Information

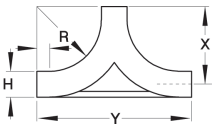
45º Horizontal WYE					
	Left Hand Wye	Right Hand Wye	Dimensions		
Width	Cat. No.	Cat. No.	X	Y	Z
6	Prefix(†)-06-(*)-HYL	Prefix(†)-06-(*)-HYR	18-5/16	14-13/16	12-7/16
9	Prefix(†)-09-(*)-HYL	Prefix(†)-09-(*)-HYR	22-1/2	19-15/16	15-7/16
12	Prefix(†)-12-(*)-HYL	Prefix(†)-12-(*)-HYR	26-3/4	25	18-7/16
18	Prefix(†)-18-(*)-HYL	Prefix(†)-18-(*)-HYR	35-1/4	35-1/4	24-7/16
24	Prefix(†)-24-(*)-HYL	Prefix(†)-24-(*)-HYR	43-1/2	45-1/2	30-7/16
30	Prefix(†)-30-(*)-HYL	Prefix(†)-30-(*)-HYR	52-1/4	55-3/4	36-7/16
36	Prefix(†)-36-(*)-HYL	Prefix(†)-36-(*)-HYR	60-11/16	66	42-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.

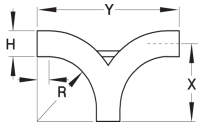
Fittings

Vertical Tee Up / Down

Up



Down



Dimension / Information

Part Numbering System

SHF 4 24 L VTD 12

SHF	4	24	L	VTD	12
Prefix SPF, SHF, SSF	Siderail Depth	Width	Bottom Style	Fitting Type	Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

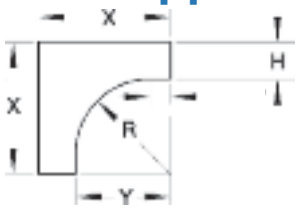
Vertical TEE Up / Down

Nominal Radius		Vertical Tee Up	Vertical Tee Down	Siderail Height "H"									
				3-1/2 in.		4 in.		5 in.		6 in.		7 in.	
R	Width	Cat. No.	Cat. No.	X	Y	X	Y	X	Y	X	Y	X	Y
12	6	Prefix(†)-06-(*)-VTU12	Prefix(†)-06-(*)-VTD12	13-13/16	27-5/8	14-1/8	28-3/16	14-5/8	29-3/16	15-1/8	30-3/16	15-5/8	31-3/16
	9	Prefix(†)-09-(*)-VTU12	Prefix(†)-09-(*)-VTD12										
	12	Prefix(†)-12-(*)-VTU12	Prefix(†)-12-(*)-VTD12										
	18	Prefix(†)-18-(*)-VTU12	Prefix(†)-18-(*)-VTD12										
	24	Prefix(†)-24-(*)-VTU12	Prefix(†)-24-(*)-VTD12										
	30	Prefix(†)-30-(*)-VTU12	Prefix(†)-30-(*)-VTD12										
	36	Prefix(†)-36-(*)-VTU12	Prefix(†)-36-(*)-VTD12										
24	6	Prefix(†)-06-(*)-VTU24	Prefix(†)-06-(*)-VTD24	25-13/16	51-5/8	26-1/8	52-3/16	26-5/8	53-3/16	27-1/8	54-3/16	27-5/8	55-3/16
	9	Prefix(†)-09-(*)-VTU24	Prefix(†)-09-(*)-VTD24										
	12	Prefix(†)-12-(*)-VTU24	Prefix(†)-12-(*)-VTD24										
	18	Prefix(†)-18-(*)-VTU24	Prefix(†)-18-(*)-VTD24										
	24	Prefix(†)-24-(*)-VTU24	Prefix(†)-24-(*)-VTD24										
	30	Prefix(†)-30-(*)-VTU24	Prefix(†)-30-(*)-VTD24										
	36	Prefix(†)-36-(*)-VTU24	Prefix(†)-36-(*)-VTD24										
36	6	Prefix(†)-06-(*)-VTU36	Prefix(†)-06-(*)-VTD36	37-13/16	75-5/8	38-1/8	76-3/16	38-5/8	77-3/16	39-1/8	78-3/16	39-5/8	79-3/16
	9	Prefix(†)-09-(*)-VTU36	Prefix(†)-09-(*)-VTD36										
	12	Prefix(†)-12-(*)-VTU36	Prefix(†)-12-(*)-VTD36										
	18	Prefix(†)-18-(*)-VTU36	Prefix(†)-18-(*)-VTD36										
	24	Prefix(†)-24-(*)-VTU36	Prefix(†)-24-(*)-VTD36										
	30	Prefix(†)-30-(*)-VTU36	Prefix(†)-30-(*)-VTD36										
	36	Prefix(†)-36-(*)-VTU36	Prefix(†)-36-(*)-VTD36										
48	6	Prefix(†)-06-(*)-VTU48	Prefix(†)-06-(*)-VTD48	49-13/16	99-5/8	50-1/8	100-3/16	50-5/8	101-3/16	51-1/8	102-3/16	51-5/8	103-3/16
	9	Prefix(†)-09-(*)-VTU48	Prefix(†)-09-(*)-VTD48										
	12	Prefix(†)-12-(*)-VTU48	Prefix(†)-12-(*)-VTD48										
	18	Prefix(†)-18-(*)-VTU48	Prefix(†)-18-(*)-VTD48										
	24	Prefix(†)-24-(*)-VTU48	Prefix(†)-24-(*)-VTD48										
	30	Prefix(†)-30-(*)-VTU48	Prefix(†)-30-(*)-VTD48										
	36	Prefix(†)-36-(*)-VTU48	Prefix(†)-36-(*)-VTD48										

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.

Fittings

Cable Support



Dimension / Information

Part Numbering System

SHF 4 24 L CS 12

- SHF: Prefix SPF, SHF, SSF
- 4: Siderail Depth
- 24: Width
- L: Bottom Style
- CS: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **SPF (Pre-Galv.), SHF (Hot Dip), SSF (Stainless Steel)**
Inside Tray Widths: **6, 9, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36, 48**
Bottom Styles: **L**– Ladder, **V**– Ventilated, **S**– Solid
Siderail Depth: **3 in., 4 in., 5 in., 6 in., 7 in.**

Cable Support Fittings

Nominal Radius			Siderail Height "H"				
			3-7/8 in.	4 in.	5 in.	6 in.	7 in.
R	Width	Cat. No.	X				
12	6	Prefix(†)-06-(*)-CS12	15-5/8	16-3/16	17-3/16	18-3/16	19-3/16
	9	Prefix(†)-09-(*)-CS12					
	12	Prefix(†)-12-(*)-CS12					
	18	Prefix(†)-18-(*)-CS12					
	24	Prefix(†)-24-(*)-CS12					
	30	Prefix(†)-30-(*)-CS12					
	36	Prefix(†)-36-(*)-CS12					
24	6	Prefix(†)-06-(*)-CS24	27-5/8	28-3/16	29-3/16	30-3/16	31-3/16
	9	Prefix(†)-09-(*)-CS24					
	12	Prefix(†)-12-(*)-CS24					
	18	Prefix(†)-18-(*)-CS24					
	24	Prefix(†)-24-(*)-CS24					
	30	Prefix(†)-30-(*)-CS24					
	36	Prefix(†)-36-(*)-CS24					
36	6	Prefix(†)-06-(*)-CS36	39-5/8	40-3/16	41-3/16	42-3/16	43-3/16
	9	Prefix(†)-09-(*)-CS36					
	12	Prefix(†)-12-(*)-CS36					
	18	Prefix(†)-18-(*)-CS36					
	24	Prefix(†)-24-(*)-CS36					
	30	Prefix(†)-30-(*)-CS36					
	36	Prefix(†)-36-(*)-CS36					
48	6	Prefix(†)-06-(*)-CS48	51-5/8	52-3/16	53-3/16	54-3/16	55-3/16
	9	Prefix(†)-09-(*)-CS48					
	12	Prefix(†)-12-(*)-CS48					
	18	Prefix(†)-18-(*)-CS48					
	24	Prefix(†)-24-(*)-CS48					
	30	Prefix(†)-30-(*)-CS48					
	36	Prefix(†)-36-(*)-CS48					

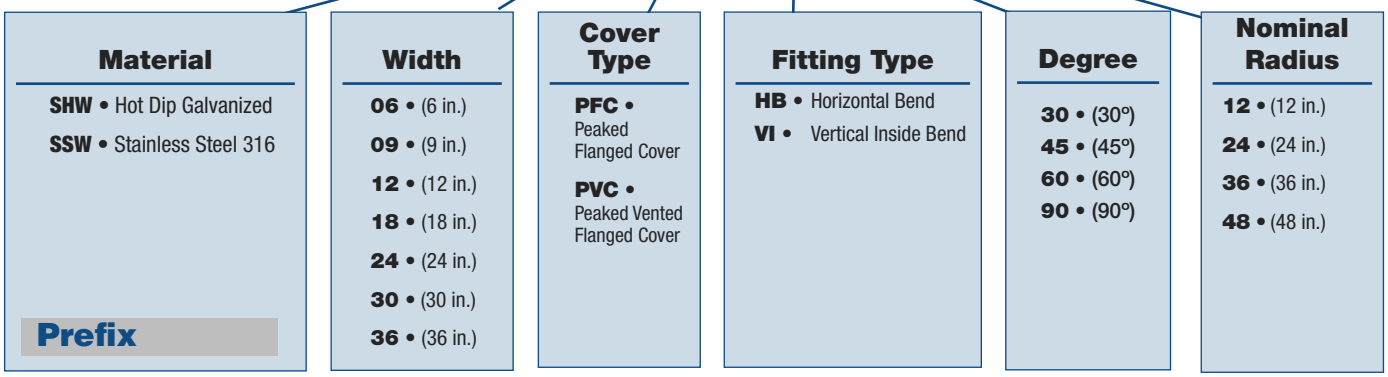
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

Covers

Peaked Covers

Steel Number Selection

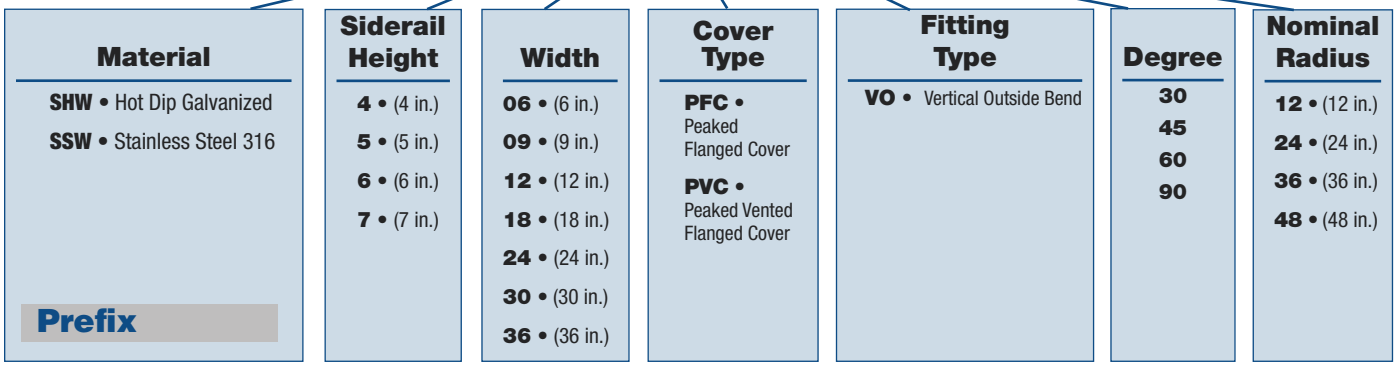
SHW-24-PFC-HB-90-24



Note: Pre-Galvanized not available.

Steel Number Selection

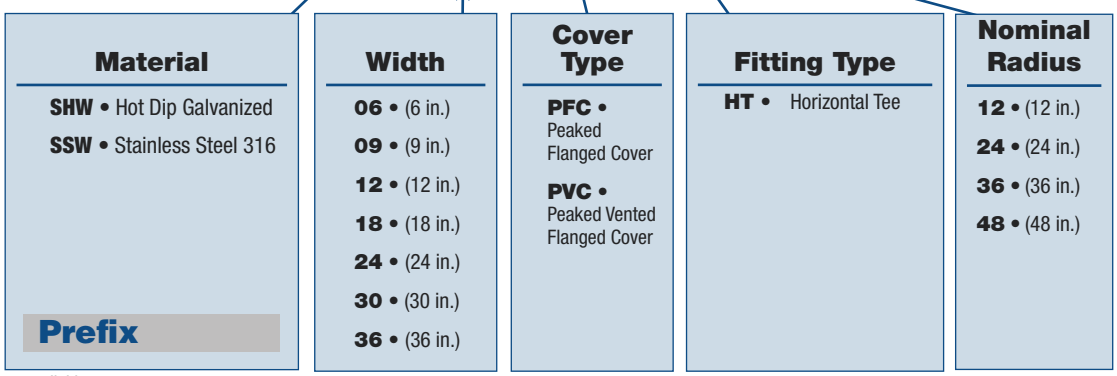
SSW-6-24-PFC-VO-90-24



Note: Pre-Galvanized not available.

Steel Number Selection

SHW-24-PFC-HT-24



Note: Pre-Galvanized not available.

Covers

Tray Covers

– Tray covers are available for all classes of tray. They should be installed where falling objects may damage cables or where a vertical tray run is accessible by pedestrian or vehicular traffic.

Outside cable tray runs should be covered with a peaked flanged cover to protect cable from the elements and excess build up of snow and ice.

Solid Covers

– These covers provide maximum mechanical protection for cables with limited heat build up. Solid covers are available with or without flange. Flanged covers have 1/2 in. flange.

Cover mounting hardware must be ordered separately.

Solid Flanged

Solid Non-Flanged

Ventilated Flanged Covers

– This design offers excellent mechanical protection while allowing heat produced by cables to dissipate.

Cover mounting hardware must be ordered separately.

Ventilated Flanged

Peaked Flanged Covers

– Peaked covers offer mechanical protection plus prevent accumulation of liquid on the cover. Peaked covers have 15° rise at the peak.

Cover mounting hardware must be ordered separately.

Peaked Flanged

Covers

Straight Covers

Straight Cover Number Selection

(SPW12)SNC-3

Material Prefix
- **SPW** • Pre-Galvanized
- **SHW**• Hot Dip Galvanized*
- **SSW** • Stainless Steel 316

Prefix

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Type
- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover
- ****PFC** • Peaked Flanged Cover

Length
- **72** • (72 in.)
- **3** • (3 m)

* Hot Dipped Covers only available in 72 in. and 1500 mm lengths.
** Peaked covers greater than 24 in. wide available in 72 in. and 3 m lengths only.

Fitting Covers

Fitting Cover Number Selection

(SPW12)SNCHB9024

Material Prefix
- **SPW** • Pre-Galvanized
- **SHW** • Hot Dip Galvanized
- **SSW** • Stainless Steel 316

Prefix

Width
- **06** • (6 in.)
- **09** • (9 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Cover Type
- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover

Fitting Type
- **HB** • Horizontal Bend
- **HT** • Horizontal Tee
- **HX** • Horizontal Cross
- **VI** • Vertical Inside Bend
- **VTU** • Vertical Tee Up
- **HYR** • Horizontal Wye Right
- **HYL** • Horizontal Wye Left

*** Degree**
- **30** • (30º)
- **45** • (45º)
- **60** • (60º)
- **90** • (90º)

Radius
- **12** • (12 in.)
- **24** • (24 in.)
- **36** • (36 in.)
- **48** • (48 in.)

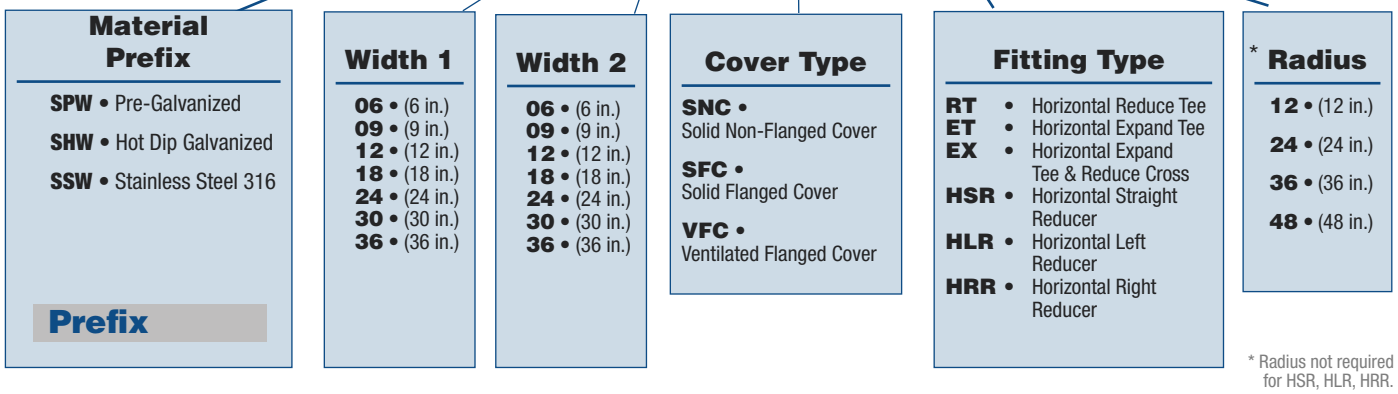
* Required for HB & VI only.

Covers

Fitting Covers (cont'd)

Fitting Cover Number Selection

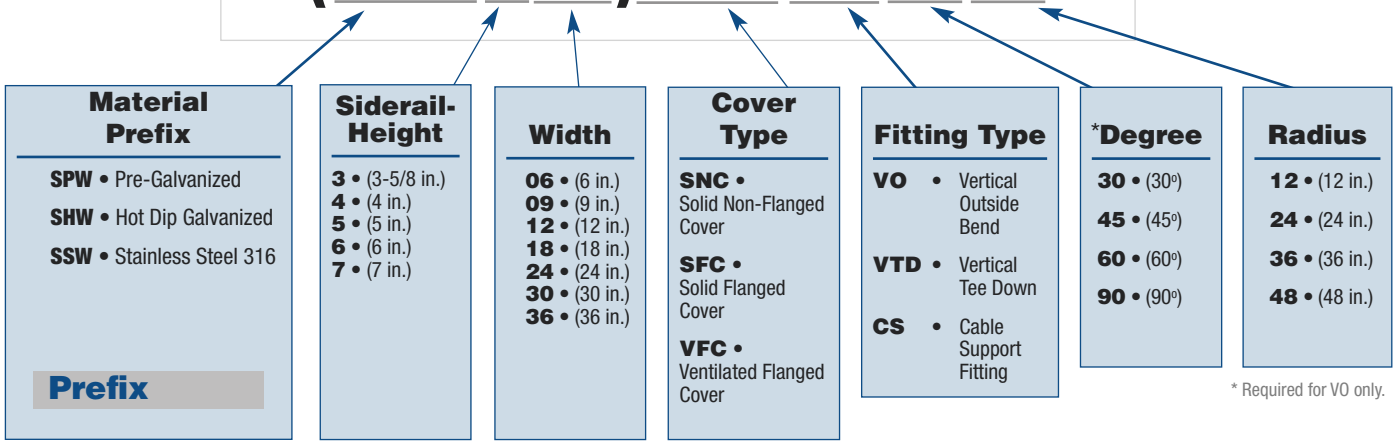
(SPW1812)SNCRT12



* Radius not required for HSR, HLR, HRR.

Fitting Cover Number Selection

(SPW412)SNCVO9024



* Required for VO only.

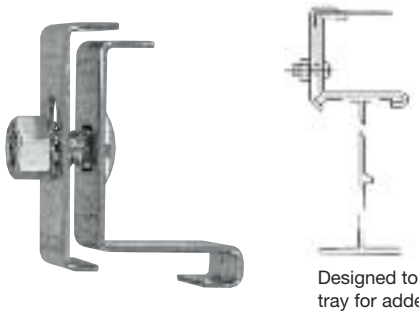
Covers

Accessories For Covers

Quantity of Standard Cover Clamps Required	
Straight section (6 ft.)	4 pcs.
Straight section (12 ft.)	6 pcs.
Horizontal and Vertical Bends	4 pcs.
Tees	6 pcs.
Crosses	8 pcs.

Note: When using the Heavy-Duty Cover Clamp, only half the quantity of pieces are required.

Raised Cover Clamp



Designed to raise cover above tray for added ventilation.

Material Prefix	Cover Offset (in.)	Cat. No.
SPW SSW	1	SPW(+)RCC
	2	
	3	

(*) Insert Cover Offset.

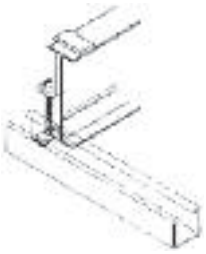
Peaked End Cap

Used for transition between peaked covers to straight covers.

Material Prefix	Width (in.)	Cat. No.
SPW SHW SSW	6	SPW(*)PEC
	9	SHW(*)PEC
	12	SSW(*)PEC
	18	
	24	
	30	
	36	

(*) Insert Width of Tray.

Combination Hold Down Cover Clamp



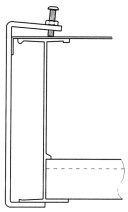
Designed to secure flat and flanged covers with hold down feature.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SSW	3	SPW-3-CCC
	4	SPW-4-CCC
	5	SPW-5-CCC
	6	SPW-6-CCC
	7	SPW-7-CCC

Covers

Accessories For Covers

Cover Clamp



Rigid indoor cover clamp for flat and flanged covers.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SSW	3	(Prefix)-3-SCC
	4	(Prefix)-4-SCC
	5	(Prefix)-5-SCC
	6	(Prefix)-6-SCC
	7	(Prefix)-7-SCC

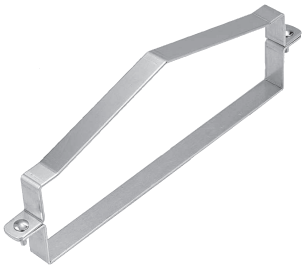
Heavy-Duty Cover Clamp

Wrap around design offers added protection for rugged applications and outdoor conditions.
Hardware included.

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
SPW SHW SSW	3	06	(Prefix)-3-(*)-HCC
	4	09	(Prefix)-4-(*)-HCC
	5	12	(Prefix)-5-(*)-HCC
	6	18	(Prefix)-6-(*)-HCC
	7	24	(Prefix)-7-(*)-HCC
		30	
		36	

(*) Insert Width of Tray.

Heavy-Duty Peaked Cover Clamp



Wrap around design formed to fit peaked cover for outdoor applications.
Hardware included.

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
SPW SHW SSW	3	06	(Prefix)-3-(*)-HPC
	4	09	(Prefix)-4-(*)-HPC
	5	12	(Prefix)-5-(*)-HPC
	6	18	(Prefix)-6-(*)-HPC
	7	24	(Prefix)-7-(*)-HPC
		30	
		36	

(*) Insert width of tray.

Cover Joint Strip

Strip used for joining covers end to end.

Material Prefix	Width of Tray (in.)	Cat. No.
SPW	6	SPW-(*)-SCS
	9	
	12	
	18	
	24	
	30	
	36	

(*) Insert width of tray.
Note: material is plastic.

Splice Plates

Splice Plate

Packaged in pairs with zinc plated hardware.
Provided as standard with each straight and/or fitting.

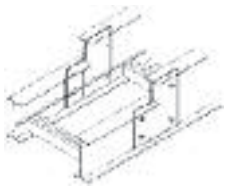
Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-SSP
	4	(Prefix)-4-SSP
	5	(Prefix)-5-SSP
	6	(Prefix)-6-SSP
	7	(Prefix)-7-SSP

Expansion Splice Plate

Allows for a 1 in. expansion or contraction of tray system.
Packaged in pairs with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-ESP
	4	(Prefix)-4-ESP
	5	(Prefix)-5-ESP
	6	(Prefix)-6-ESP
	7	(Prefix)-7-ESP

Step Down Splice Plate



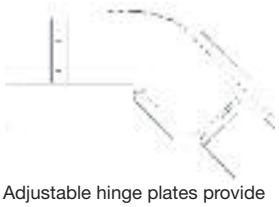
Connects siderails of different heights.
Hardware included.

Material Prefix	Cat. No.
SPW SHW SSW	(Prefix)-(*)-(**)-SDS

(*) Insert siderail height 1.
(**) Insert siderail height 2.

Note: Siderail height 1 is greater than siderail height 2.

Horizontal Adjustable Plate



Adjustable hinge plates provide maximum horizontal installation flexibility.
Furnished in pairs with hardware.

Material Prefix	For Tray Widths (in.)	Cat. No.
SPW SHW	6	(Prefix)-(*)06HAP
	9	(Prefix)-(*)09HAP
	12	(Prefix)-(*)12HAP
	18	(Prefix)-(*)18HAP
	24	(Prefix)-(*)24HAP
	30	(Prefix)-(*)30HAP
	36	(Prefix)-(*)36HAP

(*) Insert Siderail Height.

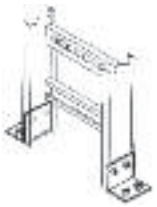
Splice Plates

Vertical Adjustable Plate

Hinged vertical plates provide maximum flexibility for changes in elevation.
Packaged in pairs with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-VSP
	4	(Prefix)-4-VSP
	5	(Prefix)-5-VSP
	6	(Prefix)-6-VSP
	7	(Prefix)-7-VSP

Box to Tray Plates



Designed to secure tray to electrical panels or boxes, walls or end supports.
Packaged in pairs with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-BSP
	4	(Prefix)-4-BSP
	5	(Prefix)-5-BSP
	6	(Prefix)-6-BSP
	7	(Prefix)-7-BSP

Splice Plates

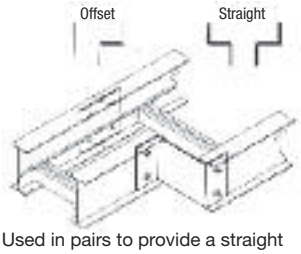
Closure End Plate

Provides closure for any tray end.
Hardware included.

Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-(*)-CEP
	4	(Prefix)-4-(*)-CEP
	5	(Prefix)-5-(*)-CEP
	6	(Prefix)-6-(*)-CEP
	7	(Prefix)-7-(*)-CEP

* Tray Width.

Reducing Splice Plate



Used in pairs to provide a straight reduction or used with a Standard Splice Plate for an offset reduction. One per package with hardware.

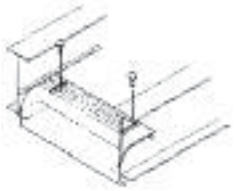
Material Prefix	Siderail Height (in.)	Cat. No.
SPW SHW SSW	3	(Prefix)-3-(*)-RSP
	4	(Prefix)-4-(*)-RSP
	5	(Prefix)-5-(*)-RSP
	6	(Prefix)-6-(*)-RSP
	7	(Prefix)-7-(*)-RSP

***Note:** For Offset Reduction: Insert width to be reduced.
For Straight Reduction: Insert 1/2 width to be reduced (2 required).

Example: SPW-503-RSP = 3 in. offset reducer.

Cable Protection

Drop-Out



Designed to provide a smooth radiused surface at any position on the tray or trough bottom. Drop-Outs are easily attached using hardware provided. Standard Radius = 4 in.

Material Prefix	Tray Width (in.)	Cat. No.
SPW	6	(Prefix)-(*)-DO
SHW	9	(Prefix)-(*)-DOS +
SSW	12	
	18	
	24	
	30	
	36	

(*) Insert Width of Tray.
+ DOS = is for solid Tray.

Wall Penetration Sleeve

Sold with cover

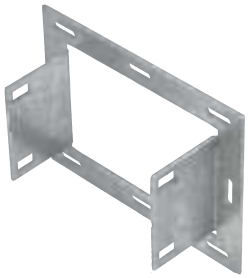
Designed to pass through walls and fire walls.
Hardware included.

Note: Not Fire Rated.
Fire Stop not included.

Material Prefix	Siderail Height (in.)	Tray Width (in.)	Cat. No.
SPW	3	06	
SHW	4	09	
SSW	5	12	
	6	18	(Prefix)-(*)-(**)-WPS
	7	24	
		30	
		36	

(*) Insert Siderail Height.
(**) Insert Width of Tray.

Frame Type Tray to Box Plate



Designed to secure tray to electrical enclosures and panels.

Hardware included.

Material Prefix	Siderail Height (in.)	Tray Width (in.)	Cat. No.
SPW	3	06	
SHW	4	09	
SSW	5	12	
	6	18	(Prefix)-(*)-(**)-FBP
	7	24	
		30	
		36	

(*) Insert Siderail Height.
(**) Insert Width of Tray.

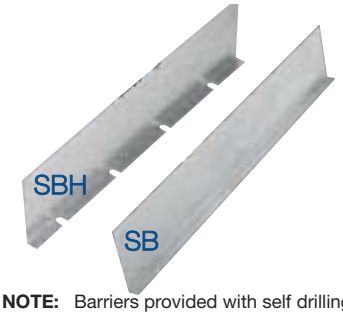
Nylon Expansion Pad

Allows for thermal expansion and contraction of cable trays over supports.

Material	Cat. No.
Natural Nylon	ABW-NSP

Barrier Strips

Barrier Strips



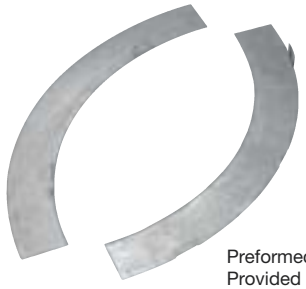
Barrier Strips provide a method of separating cables in tray and trough systems. Easily installed using supplied hardware or Barrier Strip Clamps (sold separately). 72 in. Barriers are flexible for use with horizontal fittings.

NOTE: Barriers provided with self drilling-tapping screw cat. no. SPW10SCR
72 in. length: 3 screw
3 m length: 5 screw
144 in. length: 6 screw

Material Prefix	Designed for Siderail Height (in.)	Length	Cat. No.
SPW	3	72 in.	(Prefix)-3-SBH-72
SHW	4		(Prefix)-4-SBH-72
SSW	5		(Prefix)-5-SBH-72
	6		(Prefix)-6-SBH-72
	7		(Prefix)-7-SBH-72
SPW	3	144 in.	(Prefix)-3-SB-(*)
SHW	4	3 m	(Prefix)-4-SB-(*)
SSW	5		(Prefix)-5-SB-(*)
	6		(Prefix)-6-SB-(*)
	7		(Prefix)-7-SB-(*)

Note: SHW barriers are only available in 72 in. or 1500 mm. (*) Insert Length.

Inside/Outside Vertical Bend Barriers



Preformed to fit all standard steel vertical bends. Provided with hardware.

Material Prefix	Inside Bend Catalogue Number	Outside Bend Catalogue Number	Designed for Siderail Height (in.)
SPW	(Prefix)-3-VIB-(*)-(+)	(Prefix)-3-VOB-(*)-(+)	3
SHW	(Prefix)-4-VIB-(*)-(+)	(Prefix)-4-VOB-(*)-(+)	4
SSW	(Prefix)-5-VIB-(*)-(+)	(Prefix)-5-VOB-(*)-(+)	5
	(Prefix)-6-VIB-(*)-(+)	(Prefix)-6-VOB-(*)-(+)	6
	(Prefix)-7-VIB-(*)-(+)	(Prefix)-7-VOB-(*)-(+)	7

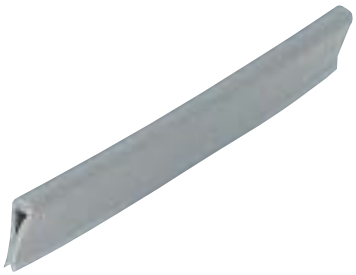
(*) Insert Bend Degree (+) Insert Bend Radius.

Barrier Strip Clamp

Barrier Strip Clamps mount Barrier Strips to Ladder rungs and Ventilated Trough bottoms. Complete mounting hardware supplied.

Material Prefix	Cat. No.
SPW	(Prefix)-BSC
SPW	

Barrier Strip Splice



Alignment splice for joining connecting Barrier Strips.

Material	Cat. No.
Plastic	ABW-BSS

Clamps and Hardware

Standard Hold Down Clamp

Easy to use and install.

Material Prefix	Cat. No.
SPW (Pre-Galvanized) SHW (Hot Dip Galvanized) SSW (Stainless Steel 316)	(Prefix)-SHC

Note: Order 3/8 in. hardware separately.

Material Prefix	Cat. No.
SPW SSW	(Prefix)-SHC-HDW

Note: HDW = Supplied complete with 3/8 in. hardware.

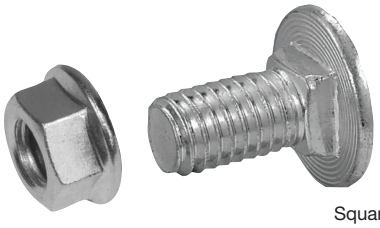
Combination Hold Down / Expansion Clamp

Material Prefix	Cat. No.
SPW SHW SSW	(Prefix)-HEC

Order 3/8 in. hardware separately.

Clamps and Hardware

Steel Tray Hardware



Square shoulder self-positioning carriage bolt.

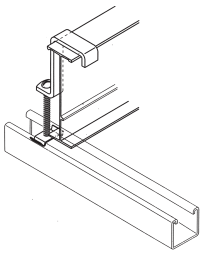
Description	Material	Cat. No.
1/4 in. Carriage Bolt	Zinc Plated Steel	SPW-1/4-CB
3/8 in. Carriage Bolt	Zinc Plated Steel	SPW-3/8-CB
1/4 in. Hex. Nut	Zinc Plated Steel	SPW-1/4-HN
3/8 in. Hex. Nut	Zinc Plated Steel	SPW-3/8-HN
Hardware Kit	Zinc Plated Steel	SPW-3/8-HWK*
3/8 in. Carriage Bolt	316 Stainless	SSW-3/8-CB
3/8 in. Hex. Nut	316 Stainless	SSW-3/8-HN
316 Stainless Steel	316 Stainless	SSW-3/8-HWK*
Hardware Kit		

* Contains 8 nuts and 8 bolts.

Self-Drilling – Tapping Screw

Material Prefix	Description	Cat. No.
Zinc Plated Steel	Self-Drilling – Tapping Screw	SPW-10-SCR
Stainless Steel	Self-Drilling – Tapping Screw	SSW-10-SCR

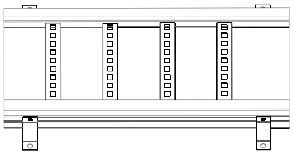
Hold Down Clamp



Material Prefix	Siderail Height (in.)	Cat. No.
SPW SSW	3	(Prefix)-3-HDC
	4	(Prefix)-4-HDC
	5	(Prefix)-5-HDC
	6	(Prefix)-6-HDC
	7	(Prefix)-7-HDC

Note: Hardware included.

Hold Down Clamp



For vertical applications

Cat. No.	Material
SPWHDCS	Pre-Galvanized
SHWHDCS	Hot Dip Galvanized
SSWHDCS	Stainless Steel 316
SPWHDCD	Pre-Galvanized
SHWHDCD	Hot Dip Galvanized
SSWHDCD	Stainless Steel 316

Clamps and Hardware

Cable Tray Guide

Expansion guide for single or double runs of cable tray.
No need to field drill channel or I-beam.

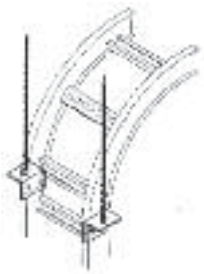
Material	Cat. No.
Zinc Plated Steel	SPW-CTG
Steel Hot Dip galvanized	SHW-CTG
Stainless Steel	SSW-CTG

Cable Tray Clamp

Clamps for single run of cable tray.
No need to field drill channel or I-beam.

Material	Cat. No.
Zinc Plated Steel	SPW-CTC
Steel Hot Dip galvanized	SHW-CTC
Stainless Steel	SSW-CTC

Vertical Tray Hanger



Material Prefix	Siderail Height (in.)	Cat. No.
SPW	3	(Prefix)-(*)-VTH
SHW	4	
SSW	5	
	6	
	7	

(*) Insert Siderail Height

Table of Contents

Selection Guide

Ventilated Trough

- Formed from a pre-punched sheet to produce a One-Piece Ventilated Trough.
- Available in Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized Steel and Stainless Steel 316.
- Fittings are also available to complete this cable tray system.

Solid Trough

- Fabricated from one sheet to form a continuous One-Piece tray design.
- Available in Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized Steel and Stainless Steel 316.
- Fittings are also available to complete this cable tray system.

Note: 1 pair of splice plates complete with hardware supplied with each straight length.

Selection Guide

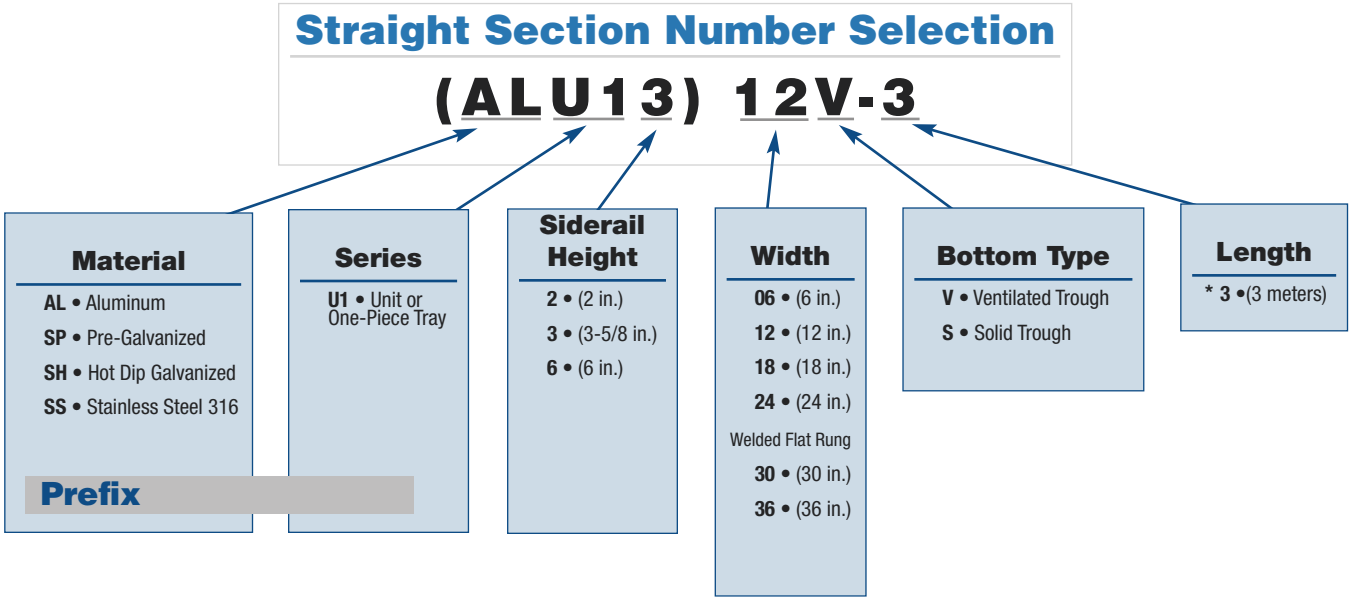
How to Create Part Numbers

Thomas & Betts has created a numbering system based on the order of selection criteria. For example the first selection issue is the environment which the cable tray will be subjected to. This selection will lead to the best material for your application. For complete details on cable tray selection process, see page A8.

Methods:

1. Select the material best suited to your environment. Refer to technical section page A8.
2. Determine the tray series using the NEMA Load/Span Designations page A16, and Sizing Cable Tray page A23.
3. Select nominal depth and width of tray based on Cable Loading. See Sizing Cable Tray page A23.
4. Select the bottom type based on cables and spacing requirements.
5. The last number is the length of the cable tray.

Example:



*3m = 9.842 ft.

Straight Lengths

2 in. Straight Sections / AL, SP, SH, SS

Solid and Vented

Straight Section Number Selection

(ALU12) 12V-3

Material Prefix
- **AL** • Aluminum
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized
- **SS** • Stainless Steel 316

Prefix

Series
- **U1** • Unit or One-Piece

Siderail Height
- **2** • (2 in.)

Width
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)

Welded Flat Ring
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **V** • Ventilated Trough
- **S** • Solid Trough

Length
- * **3** •(3 meters)

* Standard straight length is 10 feet nominal = actually 3 m.
1 m = 3.2808 ft. 3 m = 9.842 ft.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
ALU12	Load (lb./ft.)	69	39	25	–	–	–	–	–
	Deflection (in.)	0.382	0.730	1.000	–	–	–	–	–
	Deflection Factor	0.006	0.019	0.040	–	–	–	–	–
SPU12 SHU12	Load (lb./ft.)	69	39	25	–	–	–	–	–
	Deflection (in.)	0.382	0.730	1.000	–	–	–	–	–
	Deflection Factor	0.006	0.019	0.040	–	–	–	–	–
SSU12	Load (lb./ft.)	69	39	25	–	–	–	–	–
	Deflection (in.)	0.382	0.730	1.000	–	–	–	–	–
	Deflection Factor	0.006	0.019	0.040	–	–	–	–	–

Straight Lengths

2 in. Straight Sections / AL, SP, SH, SS

Solid and Vented

All U12 Series (Dimensions)	
W (in.)	**Wi (in.)**
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray above and beyond published load class.

		CLASSIFICATIONS	
Series	**Dimensions**	**NEMA**	**CSA**
ALU12	See Above	–	**A**
SPU12 **SHU12**	See Above	–	**A**
SSU12	See Above	–	**A**

Straight Lengths

3-5/8 in. Straight Sections / AL, SP, SH, SS

Solid and Vented

Straight Section Number Selection

(ALU13) 12V-3

Material Prefix
- **AL** • Aluminum
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized
- **SS** • Stainless Steel 316

Prefix

Series
- **U1** • Unit or One-Piece

Siderail Height
- **2** • (2 in.)

Width
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **V** • Ventilated Trough
- **S** • Solid Trough

Length
- * **3** •(3 meters)

* Standard straight length is 10 feet nominal = actually 3 m.
1 m = 3.2808 ft. 3 m = 9.842 ft.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
ALU13	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.382	0.430	0.540	–	–	–	–	–
	Deflection Factor	0.002	0.004	0.008	–	–	–	–	–
SPU13 SHU13	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.125	0.250	0.320	–	–	–	–	–
	Deflection Factor	0.001	0.002	0.005	–	–	–	–	–
SSU13	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.125	0.250	0.320	–	–	–	–	–
	Deflection Factor	0.001	0.002	0.005	–	–	–	–	–

Straight Lengths

3-5/8 in. Straight Sections / AL, SP, SH, SS

Solid and Vented

All U13 Series (Dimensions)	
W (in.)	**Wi (in.)**
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray above and beyond published load class.

		CLASSIFICATIONS	
Series	**Dimensions**	**NEMA**	**CSA**
ALU-13	See Above	**8C**	**C**
SPU13 **SHU13**	See Above	**8C**	**C**
SSU13	See Above	**8C**	**C**

Straight Lengths

6 in. Straight Sections / AL, SP, SH, SS

Solid and Vented

Straight Section Number Selection

(ALU16) 12V-3

Material
- **AL** • Aluminum
- **SP** • Pre-Galvanized
- **SH** • Hot Dip Galvanized
- **SS** • Stainless Steel 316

Prefix

Series
- **U1** • Unit or One-Piece

Siderail Height
- **6** • (6 in.)

Width
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Bottom Type
- **V** • Ventilated Trough
- **S** • Solid Trough

Length
- * **3** •(3 meters)

* Standard straight length is 10 feet nominal = actually 3 m.
1 m = 3.2808 ft. 3 m = 9.842 ft.

Technical Specifications

All calculations and data are based on 36 in. wide cable trays with tray supported as simple spans with deflection measured at the midpoint. Continuous spans may reduce deflection by as much as 50%.

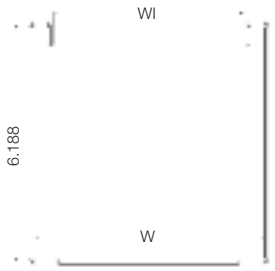
Deflection factor
For lighter loads, deflection at any length can be calculated by multiplying the load by the deflection factor.
For Fittings consult pages A50 to A87.

		Support Span (Feet)							
Series		6	8	10	12	14	16	18	20
ALU-16	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.082	0.128	0.160	–	–	–	–	–
	Deflection Factor	0.000	0.001	0.002	–	–	–	–	–
SPU16 SHU16	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.125	0.250	0.320	–	–	–	–	–
	Deflection Factor	0.001	0.002	0.005	–	–	–	–	–
SSU16	Load (lb./ft.)	180	101	65	–	–	–	–	–
	Deflection (in.)	0.125	0.250	0.320	–	–	–	–	–
	Deflection Factor	0.001	0.002	0.005	–	–	–	–	–

Straight Lengths

6 in. Straight Sections / AL, SP, SH, SS

Solid and Vented



All U16 Series (Dimensions)	
W (in.)	**Wi (in.)**
6	5.0
9	8.0
12	11.0
18	17.0
24	23.0
30	29.0
36	35.0

Technical Specifications

LOAD RATINGS
1.5 Safety factor. All tray sections will support an additional 200 lb. concentrated load on any portion of tray above and beyond published load class.

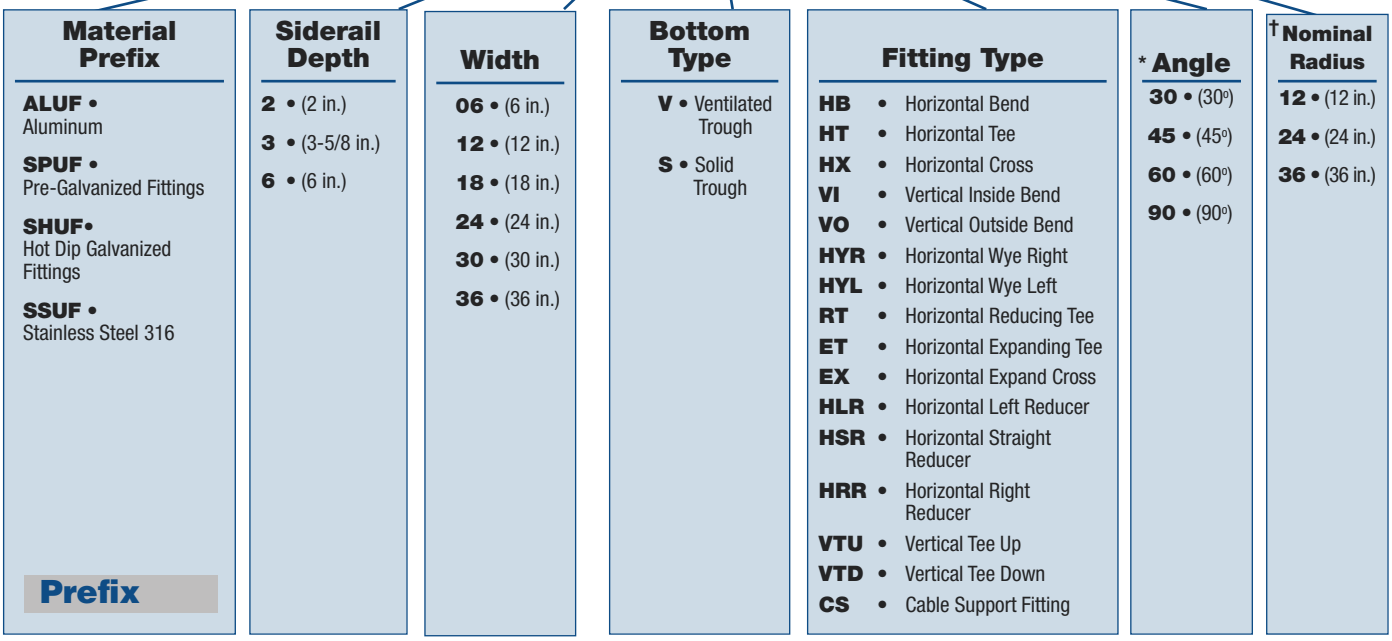
		CLASSIFICATIONS	
Series	**Dimensions**	**NEMA**	**CSA**
ALU-16	See Above	**8C**	**C**
SPU16 **SHU16**	See Above	**8C**	**C**
SSU16	See Above	**8C**	**C**

Fittings

Fittings Number Selection

Fitting Number Selection

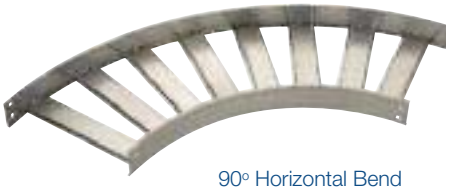
SHUF306VHB9012



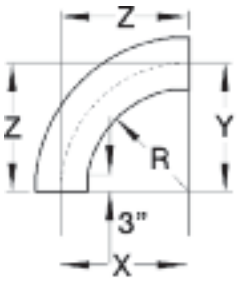
* Angle is required for HB, VI, VO only.
† Radius is not required for the following Fitting Types: **HYR, HYL, HLR, HRR, HSR**

Fittings

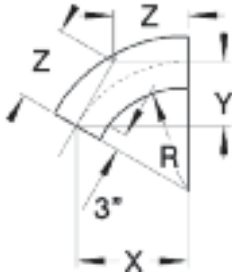
Horizontal Bends 90º / 60º



90º Horizontal Bend



90º Horizontal Bend



60º Horizontal Bend

Part Numbering System

ALUF 3 24 V HB90 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 3: Siderail Depth
- 24: Width
- V: Bottom Style
- HB90: Fitting Type
- 12: Angle
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **90º, 60º**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

90º Horizontal BEND

Nominal Radius		Cat. No.	Dimensions		
R	Width		X	Y	Z
12	6	Prefix(†)-06-(*)-HB90-12	15	15	15
	12	Prefix(†)-12-(*)-HB90-12	18	18	18
	18	Prefix(†)-18-(*)-HB90-12	21	21	21
	24	Prefix(†)-24-(*)-HB90-12	24	24	24
	30	Prefix(†)-30-(*)-HB90-12	27	27	27
	36	Prefix(†)-36-(*)-HB90-12	30	30	30
24	6	Prefix(†)-06-(*)-HB90-24	27	27	17
	12	Prefix(†)-12-(*)-HB90-24	30	30	30
	18	Prefix(†)-18-(*)-HB90-24	33	33	33
	24	Prefix(†)-24-(*)-HB90-24	36	36	36
	30	Prefix(†)-30-(*)-HB90-24	39	39	39
	36	Prefix(†)-36-(*)-HB90-24	42	42	42
36	6	Prefix(†)-06-(*)-HB90-36	39	39	39
	12	Prefix(†)-12-(*)-HB90-36	42	42	42
	18	Prefix(†)-18-(*)-HB90-36	45	45	45
	24	Prefix(†)-24-(*)-HB90-36	48	48	48
	30	Prefix(†)-30-(*)-HB90-36	51	51	51
	36	Prefix(†)-36-(*)-HB90-36	54	54	54

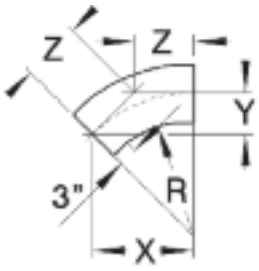
60º Horizontal BEND

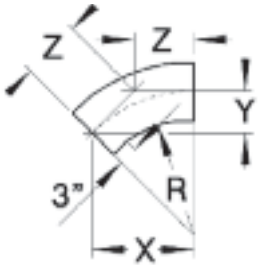
Nominal Radius		Cat. No.	Dimensions		
R	Width		X	Y	Z
12	6	Prefix(†)-06-(*)-HB60-12	14-7/8	8-5/8	9-15/16
	12	Prefix(†)-12-(*)-HB60-12	17-1/2	10-1/8	11-11/16
	18	Prefix(†)-18-(*)-HB60-12	20-1/16	11-5/8	13-3/8
	24	Prefix(†)-24-(*)-HB60-12	22-11/16	13-1/8	15-1/8
	30	Prefix(†)-30-(*)-HB60-12	25-5/16	14-5/8	16-7/8
	36	Prefix(†)-36-(*)-HB60-12	27-7/8	16-1/8	18-9/16
24	6	Prefix(†)-06-(*)-HB60-24	25-5/16	14-5/8	16-7/8
	12	Prefix(†)-12-(*)-HB60-24	27-7/8	16-1/8	18-9/16
	18	Prefix(†)-18-(*)-HB60-24	30-1/2	17-5/8	20-5/16
	24	Prefix(†)-24-(*)-HB60-24	33-1/16	19-1/8	22-1/16
	30	Prefix(†)-30-(*)-HB60-24	35-11/16	20-5/8	23-13/16
	36	Prefix(†)-36-(*)-HB60-24	38-1/4	22-1/8	25-1/2
36	6	Prefix(†)-06-(*)-HB60-36	35-11/16	20-5/8	23-13/16
	12	Prefix(†)-12-(*)-HB60-36	38-1/4	22-1/8	25-1/2
	18	Prefix(†)-18-(*)-HB60-36	40-7/8	23-5/8	27-2/8
	24	Prefix(†)-24-(*)-HB60-36	43-1/2	25-1/8	29
	30	Prefix(†)-30-(*)-HB60-36	46-1/16	26-5/8	30-11/16
	36	Prefix(†)-36-(*)-HB60-36	48-11/16	28-1/8	32-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

Fittings

Horizontal Bends 45º / 30º





Part Numbering System

ALUF 3 24 V HB45 12

- ALUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 24 — Width
- V — Bottom Style
- HB45 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **45º, 30º**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

45º Horizontal BEND

Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	Prefix(†)-06-(*)-(+)HB45-12	13-5/8	5-5/8	8
	12	Prefix(†)-12-(*)-(+)HB45-12	15-3/4	6-12	9-3/16
	18	Prefix(†)-18-(*)-(+)HB45-12	17-7/8	7-3/8	10-7/16
	24	Prefix(†)-24-(*)-(+)HB45-12	20	8-1/4	11-11/16
	30	Prefix(†)-30-(*)-(+)HB45-12	22-1/16	9-1/8	12-15/16
	36	Prefix(†)-36-(*)-(+)HB45-12	24-3/16	10	14-3/16
24	6	Prefix(†)-06-(*)-(+)HB45-24	22-1/16	9-1/8	12-15/16
	12	Prefix(†)-12-(*)-(+)HB45-24	24-3/16	10	14-3/16
	18	Prefix(†)-18-(*)-(+)HB45-24	26-5/16	10-15/16	15-7/16
	24	Prefix(†)-24-(*)-(+)HB45-24	28-7/16	11-13/16	16-11/16
	30	Prefix(†)-30-(*)-(+)HB45-24	30-9/16	12-11/16	17-15/16
	36	Prefix(†)-36-(*)-(+)HB45-24	32-11/16	13-9/16	19-1/8
36	6	Prefix(†)-06-(*)-(+)HB45-36	30-9/16	12-11/16	17-15/16
	12	Prefix(†)-12-(*)-(+)HB45-36	32-11/16	13-9/16	19-1/8
	18	Prefix(†)-18-(*)-(+)HB45-36	34-13/16	14-7/16	20-3/8
	24	Prefix(†)-24-(*)-(+)HB45-36	36-15/16	15-5/16	21-5/8
	30	Prefix(†)-30-(*)-(+)HB45-36	39-1/16	16-3/16	22-7/8
	36	Prefix(†)-36-(*)-(+)HB45-36	41-3/16	17-1/16	24-1/8

30º Horizontal BEND

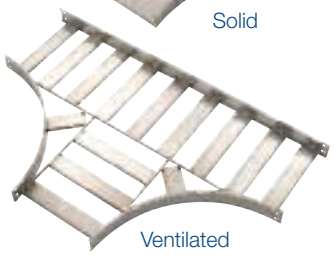
Nominal Radius R	Width	Cat. No.	Dimensions X	Y	Z
12	6	Prefix(†)-06-(*)-(+)HB30-12	11-5/8	3-1/8	6-3/16
	12	Prefix(†)-12-(*)-(+)HB30-12	13-1/2	3-1/2	7
	18	Prefix(†)-18-(*)-(+)HB30-12	14-5/8	3-15/16	7-13/16
	24	Prefix(†)-24-(*)-(+)HB30-12	16-1/8	4-5/16	8-5/8
	30	Prefix(†)-30-(*)-(+)HB30-12	17-5/8	4-11/16	9-7/16
	36	Prefix(†)-36-(*)-(+)HB30-12	19-1/8	5-1/8	10-1/4
24	6	Prefix(†)-06-(*)-(+)HB30-24	17-5/8	4-11/16	9-7/16
	12	Prefix(†)-12-(*)-(+)HB30-24	19-1/8	5-2/16	10-4/16
	18	Prefix(†)-18-(*)-(+)HB30-24	20-5/8	5-8/16	11-1/16
	24	Prefix(†)-24-(*)-(+)HB30-24	22-1/8	5-15/16	11-13/16
	30	Prefix(†)-30-(*)-(+)HB30-24	23-5/8	6-5/16	12-10/16
	36	Prefix(†)-36-(*)-(+)HB30-24	25-1/8	6-12/16	13-7/16
36	6	Prefix(†)-06-(*)-(+)HB30-36	23-5/8	6-5/16	12-5/8
	12	Prefix(†)-12-(*)-(+)HB30-36	25-1/8	6-3/4	13-7/16
	18	Prefix(†)-18-(*)-(+)HB30-36	26-5/8	7-1/4	14-1/4
	24	Prefix(†)-24-(*)-(+)HB30-36	28-1/8	7-1/2	15-1/16
	30	Prefix(†)-30-(*)-(+)HB30-36	29-5/8	7-15/16	15-7/8
	36	Prefix(†)-36-(*)-(+)HB30-36	31-1/8	8-5/16	16-11/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

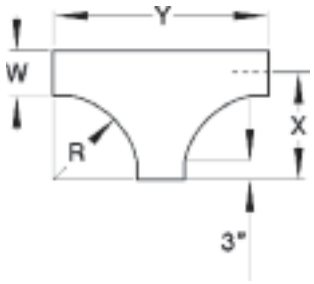
Fittings

Horizontal Tees

Solid



Ventilated



Part Numbering System

ALUF 3 24 V HT 12

- ALUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 24 — Width
- V — Bottom Style
- HT — Fitting Type
- 12 — Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

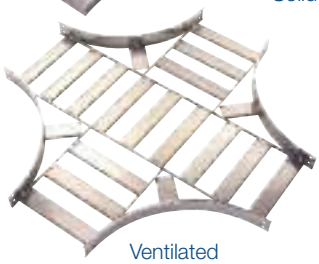
Horizontal TEE				
Nominal Radius		Cat. No.	Dimensions	
R	Width		X	Y
12	6	Prefix(†)-06-(*)-HT12	15	30
	12	Prefix(†)-12-(*)-HT12	18	36
	18	Prefix(†)-18-(*)-HT12	21	42
	24	Prefix(†)-24-(*)-HT12	24	48
	30	Prefix(†)-30-(*)-HT12	27	54
	36	Prefix(†)-36-(*)-HT12	30	60
24	6	Prefix(†)-06-(*)-HT24	27	54
	12	Prefix(†)-12-(*)-HT24	30	60
	18	Prefix(†)-18-(*)-HT24	33	66
	24	Prefix(†)-24-(*)-HT24	36	72
	30	Prefix(†)-30-(*)-HT24	39	78
	36	Prefix(†)-36-(*)-HT24	42	84
36	6	Prefix(†)-06-(*)-HT36	39	78
	12	Prefix(†)-12-(*)-HT36	42	84
	18	Prefix(†)-18-(*)-HT36	45	90
	24	Prefix(†)-24-(*)-HT36	48	96
	30	Prefix(†)-30-(*)-HT36	51	102
	36	Prefix(†)-36-(*)-HT36	54	108

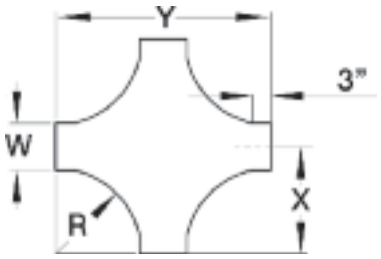
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Tees include 2 pairs / Crosses include 3 pairs of splice plates with hardware.

Fittings

Horizontal Crosses


Solid


Ventilated



Part Numbering System

ALUF 3 24 V HX 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 3: Siderail Depth
- 24: Width
- V: Bottom Style
- HX: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

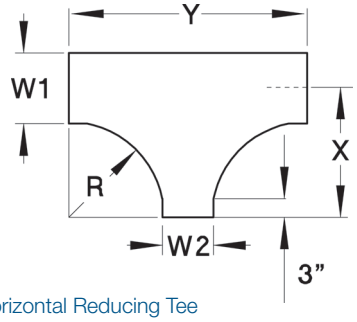
Dimension / Information

Horizontal CROSS				
Nominal Radius		Cat. No.	Dimensions	
R	Width		X	Y
12	6	Prefix(†)-06-(*)-HX12	15	30
	12	Prefix(†)-12-(*)-HX12	18	36
	18	Prefix(†)-18-(*)-HX12	21	42
	24	Prefix(†)-24-(*)-HX12	24	48
	30	Prefix(†)-30-(*)-HX12	27	54
	36	Prefix(†)-36-(*)-HX12	30	60
24	6	Prefix(†)-06-(*)-HX24	27	54
	12	Prefix(†)-12-(*)-HX24	30	60
	18	Prefix(†)-18-(*)-HX24	33	66
	24	Prefix(†)-24-(*)-HX24	36	72
	30	Prefix(†)-30-(*)-HX24	39	78
	36	Prefix(†)-36-(*)-HX24	42	84
36	6	Prefix(†)-06-(*)-HX36	39	78
	12	Prefix(†)-12-(*)-HX36	42	84
	18	Prefix(†)-18-(*)-HX36	45	90
	24	Prefix(†)-24-(*)-HX36	48	96
	30	Prefix(†)-30-(*)-HX36	51	102
	36	Prefix(†)-36-(*)-HX36	54	108

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Tees include 2 pairs / Crosses include 3 pairs of splice plates with hardware.

Fittings

Horizontal Reducing Tee



Horizontal Reducing Tee

Part Numbering System

ALUF 3 2412 V RT 12

- ALUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 2412 — Width 1 / Width 2
- V — Bottom Style
- RT — Fitting Type
- 12 — Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Widths 1: **36, 30, 24, 18, 12**
Widths 2: **30, 24, 18, 12, 6**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

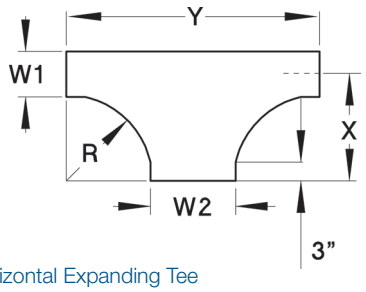
Dimension / Information

Horizontal Reducing TEE								
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y
36	30	Prefix(†)-3630-(*)-RT(+)	30	54	42	78	54	102
	24	Prefix(†)-3624-(*)-RT(+)	30	48	42	72	54	96
	18	Prefix(†)-3618-(*)-RT(+)	30	42	42	66	54	90
	12	Prefix(†)-3612-(*)-RT(+)	30	36	42	60	54	84
	6	Prefix(†)-3606-(*)-RT(+)	30	30	42	54	54	78
30	24	Prefix(†)-3024-(*)-RT(+)	27	48	39	72	51	96
	18	Prefix(†)-3018-(*)-RT(+)	27	42	39	66	51	90
	12	Prefix(†)-3012-(*)-RT(+)	27	36	39	60	51	84
	6	Prefix(†)-3006-(*)-RT(+)	27	30	39	54	51	78
24	18	Prefix(†)-2418-(*)-RT(+)	24	42	36	66	48	90
	12	Prefix(†)-2412-(*)-RT(+)	24	36	36	60	48	84
	6	Prefix(†)-2406-(*)-RT(+)	24	30	36	54	48	78
18	12	Prefix(†)-1812-(*)-RT(+)	21	36	33	60	45	84
	6	Prefix(†)-1806-(*)-RT(+)	21	30	33	54	45	78
12	6	Prefix(†)-1206-(*)-RT(+)	18	30	30	54	42	78

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 2 pairs of splice plates with hardware.

Fittings

Horizontal Expanding Tee



Horizontal Expanding Tee

Part Numbering System

ALUF 3 2430 V ET 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 3: Siderail Depth
- 24: Width 1
- 30: Width 2
- V: Bottom Style
- ET: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Tray Widths W1: **30, 24, 18, 12, 6**
Tray Widths W2: **36, 30, 24, 18, 12**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

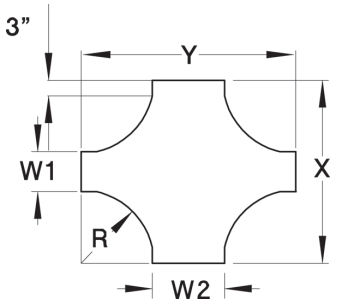
Horizontal Expanding TEE

Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y
30	36	Prefix(†)-3036-(*)-ET(+)	27	60	39	84	51	108
24	30	Prefix(†)-2430-(*)-ET(+)	24	54	36	78	48	102
	36	Prefix(†)-2436-(*)-ET(+)	24	60	36	84	48	108
18	24	Prefix(†)-1824-(*)-ET(+)	21	48	33	72	45	96
	30	Prefix(†)-1830-(*)-ET(+)	21	54	33	78	45	102
	36	Prefix(†)-1836-(*)-ET(+)	21	60	33	84	45	108
12	18	Prefix(†)-1218-(*)-ET(+)	18	42	30	66	42	90
	24	Prefix(†)-1224-(*)-ET(+)	18	48	30	72	42	96
	30	Prefix(†)-1230-(*)-ET(+)	18	54	30	78	42	102
	36	Prefix(†)-1236-(*)-ET(+)	18	60	30	84	42	108
06	12	Prefix(†)-0612-(*)-ET(+)	15	36	27	60	39	84
	18	Prefix(†)-0618-(*)-ET(+)	15	42	27	66	39	90
	24	Prefix(†)-0624-(*)-ET(+)	15	48	27	72	39	96
	30	Prefix(†)-0630-(*)-ET(+)	15	54	27	78	39	102
	36	Prefix(†)-0636-(*)-ET(+)	15	60	27	84	39	108

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 2 pairs of splice plates with hardware.

Fittings

Horizontal Expanding Cross



Horizontal Expanding Cross

Part Numbering System

ALUF 6 2430 V EX 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 6: Siderail Depth
- 24: Width 1
- 30: Width 2
- V: Bottom Style
- EX: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Tray Widths W1: **30, 24, 18, 12, 6**
Tray Widths W2: **36, 30, 24, 18, 12**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

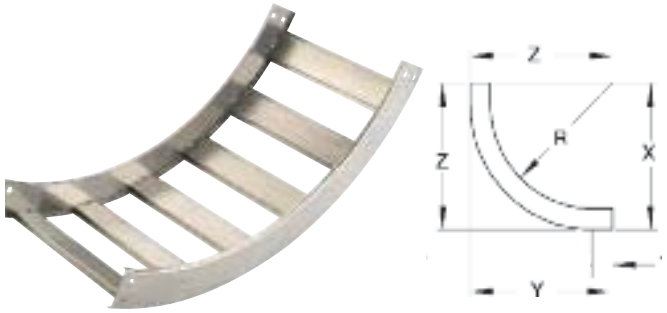
Horizontal Expanding CROSS								
Widths		Cat. No.	(+) 12 in. Nominal Radius		(+) 24 in. Nominal Radius		(+) 36 in. Nominal Radius	
W1	W2		X	Y	X	Y	X	Y
30	36	Prefix(†)-3036-(*)-EX(+)	54	60	78	84	102	108
24	30	Prefix(†)-2430-(*)-EX(+)	48	54	72	78	96	102
	36	Prefix(†)-2436-(*)-EX(+)	48	60	72	84	96	108
18	24	Prefix(†)-1824-(*)-EX(+)	42	48	66	72	90	96
	30	Prefix(†)-1830-(*)-EX(+)	42	54	66	78	90	102
	36	Prefix(†)-1836-(*)-EX(+)	42	60	66	84	90	108
12	18	Prefix(†)-1218-(*)-EX(+)	36	42	60	66	84	90
	24	Prefix(†)-1224-(*)-EX(+)	36	48	60	72	84	96
	30	Prefix(†)-1230-(*)-EX(+)	36	54	60	78	84	102
	36	Prefix(†)-1236-(*)-EX(+)	36	60	60	84	84	108
06	12	Prefix(†)-0612-(*)-EX(+)	30	36	54	60	78	84
	18	Prefix(†)-0618-(*)-EX(+)	30	42	54	66	78	90
	24	Prefix(†)-0624-(*)-EX(+)	30	48	54	72	78	96
	30	Prefix(†)-0630-(*)-EX(+)	30	54	54	78	78	102
	36	Prefix(†)-0636-(*)-EX(+)	30	60	54	84	78	108

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert radius (12 in. - 48 in.). Includes 3 pairs of splice plates with hardware.

Fittings

Vertical Bends 90º

90º Outside Bend
Ventilated



90º Inside Bend
Ventilated

Dimension / Information

Part Numbering System

ALUF 3 24 V VI90 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 3: Siderail Depth
- 24: Width
- V: Bottom Style
- VI90: Fitting Type (Angle)
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **90º**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

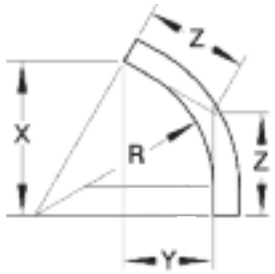
90º Vertical BEND

Nominal Radius			(+) VO Siderail Height 2 in., 3 in., 6 in.			(+) VI Siderail Height 2 in.			(+) VI Siderail Height 3 in.			(+) VI Siderail Height 6 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)90-12	12	12	12	13-7/8	13-7/8	13-7/8	15-5/8	15-5/8	15-5/8	18-3/16	18-3/16	18-3/16
	12	Prefix(†)-12-(*)-(+)90-12												
	18	Prefix(†)-18-(*)-(+)90-12												
	24	Prefix(†)-24-(*)-(+)90-12												
	36	Prefix(†)-36-(*)-(+)90-12												
24	6	Prefix(†)-06-(*)-(+)90-24	24	24	24	25-7/8	25-7/8	25-7/8	27-5/8	27-5/8	27-5/8	30-3/16	30-3/16	30-3/16
	12	Prefix(†)-12-(*)-(+)90-24												
	18	Prefix(†)-18-(*)-(+)90-24												
	24	Prefix(†)-24-(*)-(+)90-24												
	30	Prefix(†)-30-(*)-(+)90-24												
	36	Prefix(†)-36-(*)-(+)90-24												
36	6	Prefix(†)-06-(*)-(+)90-36	36	36	36	37-7/8	37-7/8	37-7/8	39-5/8	39-5/8	39-5/8	42-3/16	42-3/16	42-3/16
	12	Prefix(†)-12-(*)-(+)90-36												
	18	Prefix(†)-18-(*)-(+)90-36												
	24	Prefix(†)-24-(*)-(+)90-36												
	30	Prefix(†)-30-(*)-(+)90-36												
	36	Prefix(†)-36-(*)-(+)90-36												

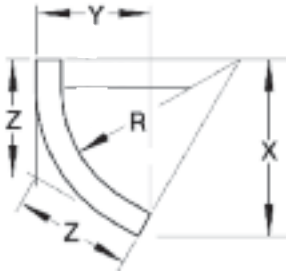
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

Vertical Bends 60°



60° Outside Bend



60° Inside Bend

Dimension / Information

Part Numbering System

ALUF 3 12 V VI60 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 3: Siderail Depth
- 12: Width
- V: Bottom Style
- VI60: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **60°**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

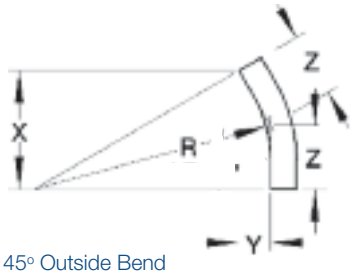
60° Vertical BEND

Nominal Radius			(+) VO Siderail Height 2 in., 3 in., 6 in.			(+) VI Siderail Height 2 in.			(+) VI Siderail Height 3 in.			(+) VI Siderail Height 6 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)60-12	10-3/8	6	6-15/16	12	7-7/8	8	13-1/2	9-5/8	9	15-3/4	12-3/16	10-1/2
	12	Prefix(†)-12-(*)-(+)60-12												
	18	Prefix(†)-18-(*)-(+)60-12												
	24	Prefix(†)-24-(*)-(+)60-12												
	30	Prefix(†)-30-(*)-(+)60-12												
	36	Prefix(†)-36-(*)-(+)60-12												
24	6	Prefix(†)-06-(*)-(+)60-24	20-13/16	12	13-7/8	22-7/16	13-7/8	14-15/16	23-15/16	15-5/8	15-15/16	26-1/8	18-3/16	17-7/16
	12	Prefix(†)-12-(*)-(+)60-24												
	18	Prefix(†)-18-(*)-(+)60-24												
	24	Prefix(†)-24-(*)-(+)60-24												
	30	Prefix(†)-30-(*)-(+)60-24												
	36	Prefix(†)-36-(*)-(+)60-24												
36	6	Prefix(†)-06-(*)-(+)60-36	31-3/16	18	20-13/16	32-13/16	19-7/8	21-7/8	34-5/16	21-5/8	22-7/8	36-1/2	24-3/16	24-3/8
	12	Prefix(†)-12-(*)-(+)60-36												
	18	Prefix(†)-18-(*)-(+)60-36												
	24	Prefix(†)-24-(*)-(+)60-36												
	30	Prefix(†)-30-(*)-(+)60-36												
	36	Prefix(†)-36-(*)-(+)60-36												

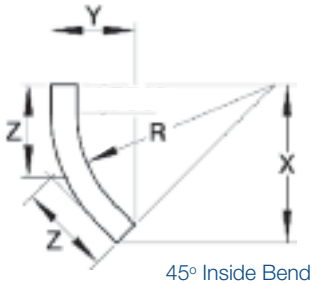
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

Vertical Bends 45º



45º Outside Bend



45º Inside Bend

Dimension / Information

Part Numbering System

ALUF 3 12 V VI45 12

ALUF	3	12	V	VI	45	12
Prefix ALUF, SPUF, SHUF, SSUF	Siderail Depth	Width	Bottom Style	Fitting Type	Angle	Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **45º**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

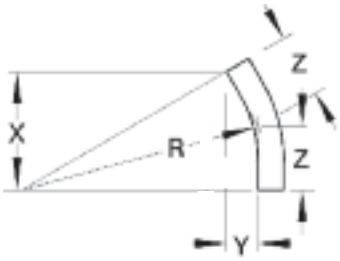
45º Vertical BEND

Nominal Radius			(+) VO Siderail Height 2 in., 3 in., 6 in.			(+) VI Siderail Height 2 in.			(+) VI Siderail Height 3 in.			(+) VI Siderail Height 6 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)45-12	8-1/2	3-1/2	5	9-13/16	5-3/8	5-3/4	11-1/16	7-1/8	6-11/16	12-7/8	9-11/16	7-9/16
	12	Prefix(†)-12-(*)-(+)45-12												
	18	Prefix(†)-18-(*)-(+)45-12												
	24	Prefix(†)-24-(*)-(+)45-12												
	30	Prefix(†)-30-(*)-(+)45-12												
	36	Prefix(†)-36-(*)-(+)45-12												
24	6	Prefix(†)-06-(*)-(+)45-24	17	7	9-15/16	18-5/16	8-7/8	10-11/16	19-1/2	10-5/8	11-7/16	21-3/8	13-3/16	12-1/2
	12	Prefix(†)-12-(*)-(+)45-24												
	18	Prefix(†)-18-(*)-(+)45-24												
	24	Prefix(†)-24-(*)-(+)45-24												
	30	Prefix(†)-30-(*)-(+)45-24												
	36	Prefix(†)-36-(*)-(+)45-24												
36	6	Prefix(†)-06-(*)-(+)45-36	25-7/16	10-9/16	14-15/16	26-13/16	12-7/16	15-11/16	28	14-3/16	16-7/16	29-13/16	16-3/4	17-1/2
	12	Prefix(†)-12-(*)-(+)45-36												
	18	Prefix(†)-18-(*)-(+)45-36												
	24	Prefix(†)-24-(*)-(+)45-36												
	30	Prefix(†)-30-(*)-(+)45-36												
	36	Prefix(†)-36-(*)-(+)45-36												

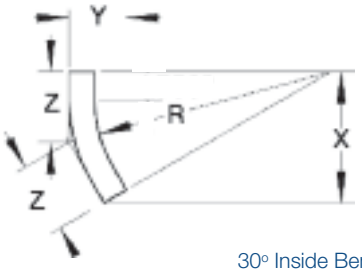
(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside.
Includes 1 pair of splice plates with hardware.

Fittings

Vertical Bends 30º



30º Outside Bend



30º Inside Bend

Dimension / Information

Part Numbering System

ALUF 3 06 V VI30 12

- ALUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 06 — Width
- V — Bottom Style
- VI30 — Fitting Type: Angle
- 12 — Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Angle: **30º**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

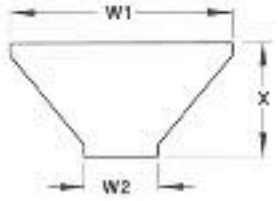
30º Vertical BEND														
Nominal Radius			(+) VO Siderail Height 2 in., 3 in., 6 in.			(+) VI Siderail Height 2 in.			(+) VI Siderail Height 3 in.			(+) VI Siderail Height 6 in.		
R	Width	Cat. No.	X	Y	Z	X	Y	Z	X	Y	Z	X	Y	Z
12	6	Prefix(†)-06-(*)-(+)30-12	6	1-5/8	3-3/16	6-15/16	3-1/2	3-11/16	7-13/16	5-1/4	4-3/16	9-1/8	7-13/16	4-7/8
	12	Prefix(†)-12-(*)-(+)30-12												
	18	Prefix(†)-18-(*)-(+)30-12												
	24	Prefix(†)-24-(*)-(+)30-12												
	30	Prefix(†)-30-(*)-(+)30-12												
	36	Prefix(†)-36-(*)-(+)30-12												
24	6	Prefix(†)-06-(*)-(+)30-24	12	3-3/16	6-7/16	12-15/16	5-1/16	6-15/16	13-13/16	6-13/16	7-3/8	15-1/8	9-3/8	8-1/16
	12	Prefix(†)-12-(*)-(+)30-24												
	18	Prefix(†)-18-(*)-(+)30-24												
	24	Prefix(†)-24-(*)-(+)30-24												
	30	Prefix(†)-30-(*)-(+)30-24												
	36	Prefix(†)-36-(*)-(+)30-24												
36	6	Prefix(†)-06-(*)-(+)30-36	18	4-13/16	9-5/8	18-15/16	6-11/16	10-1/8	19-13/16	8-7/16	10-5/8	21-1/8	11	11-5/16
	12	Prefix(†)-12-(*)-(+)30-36												
	18	Prefix(†)-18-(*)-(+)30-36												
	24	Prefix(†)-24-(*)-(+)30-36												
	30	Prefix(†)-30-(*)-(+)30-36												
	36	Prefix(†)-36-(*)-(+)30-36												

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. (+) Insert "VO" for vertical outside or "VI" for vertical inside. Includes 1 pair of splice plates with hardware.

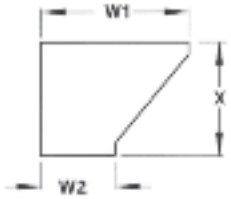
Fittings

Horizontal Reducers

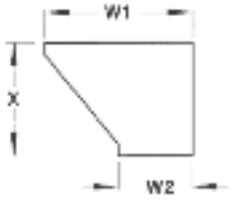
Straight Reducer



Straight Reducer



Offset Reducer - Right



Offset Reducer - Left

Dimension / Information

Part Numbering System

ALUF 3 3624 V HLR

- ALUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 3624 — Width 1 Width 2
- V — Bottom Style
- HLR — Fitting Type

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Tray Widths W1: **36, 30, 24, 18, 12**
Tray Widths W2: **30, 24, 18, 12, 6**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

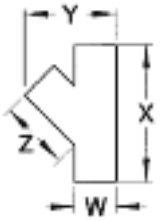
Horizontal REDUCERS							
Widths		LH Reducer		Straight Reducer (Concentric)		RH Reducer	
W1	W2	Cat. No.	Dim. X	Cat. No.	Dim. X	Cat. No.	Dim. X
36	30	Prefix(†)-36-30-(*)-HLR	15-7/16	Prefix(†)-36-30-(*)-HSR	13-3/4	Prefix(†)-36-30-(*)-HRR	15-7/16
	24	Prefix(†)-36-24-(*)-HLR	18-15/16	Prefix(†)-36-24-(*)-HSR	15-7/16	Prefix(†)-36-24-(*)-HRR	18-15/16
	18	Prefix(†)-36-18-(*)-HLR	22-3/8	Prefix(†)-36-18-(*)-HSR	17-3/8	Prefix(†)-36-18-(*)-HRR	22-3/8
	12	Prefix(†)-36-12-(*)-HLR	25-7/8	Prefix(†)-36-12-(*)-HSR	18-5/16	Prefix(†)-36-12-(*)-HRR	25-7/8
	06	Prefix(†)-36-06-(*)-HLR	29-5/16	Prefix(†)-36-06-(*)-HSR	20-11/16	Prefix(†)-36-06-(*)-HRR	29-5/16
30	24	Prefix(†)-30-24-(*)-HLR	15-7/16	Prefix(†)-30-24-(*)-HSR	13-3/4	Prefix(†)-30-24-(*)-HRR	15-7/16
	18	Prefix(†)-30-18-(*)-HLR	18-15/16	Prefix(†)-30-18-(*)-HSR	15-7/16	Prefix(†)-30-18-(*)-HRR	18-15/16
	12	Prefix(†)-30-12-(*)-HLR	22-3/8	Prefix(†)-30-12-(*)-HSR	17-3/16	Prefix(†)-30-12-(*)-HRR	22-3/8
	06	Prefix(†)-30-06-(*)-HLR	25-7/8	Prefix(†)-30-06-(*)-HSR	18-15/16	Prefix(†)-30-06-(*)-HRR	25-7/8
24	18	Prefix(†)-24-18-(*)-HLR	15-7/16	Prefix(†)-24-18-(*)-HSR	13-3/4	Prefix(†)-24-18-(*)-HRR	15-7/16
	12	Prefix(†)-24-12-(*)-HLR	18-15/16	Prefix(†)-24-12-(*)-HSR	15-7/16	(Prefix(†)-24-12-(*)-HRR	18-15/16
	06	Prefix(†)-24-06-(*)-HLR	22-3/8	Prefix(†)-24-06-(*)-HSR	17-3/16	Prefix(†)-24-06-(*)-HRR	22-3/8
18	12	Prefix(†)-18-12-(*)-HLR	15-7/16	Prefix(†)-18-12-(*)-HSR	13-3/4	Prefix(†)-18-12-(*)-HRR	15-7/16
	06	Prefix(†)-18-06-(*)-HLR	18-15/16	Prefix(†)-18-06-(*)-HSR	15-7/16	Prefix(†)-18-06-(*)-HRR	18-15/16
24	06	Prefix(†)-12-06-(*)-HLR	15-7/16	Prefix(†)-12-06-(*)-HSR	13-3/4	Prefix(†)-12-06-(*)-HRR	15-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

Fittings

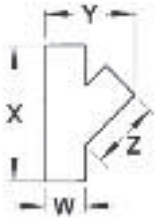
Horizontal Wye 45º

Solid - Left



Left Hand Wye

Ventilated - Left



Right Hand Wye

Dimension / Information

Part Numbering System

ALUF-6-24-V-HYL

- ALUF-: Prefix — ALUF, SPUF, SHUF, SSUF
- -6-: Siderail Depth
- -24-: Width
- -V-: Bottom Style
- -HYL: Fitting Type

Selection Guide

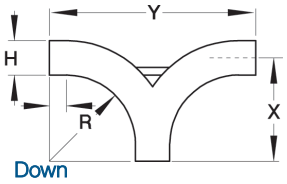
Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

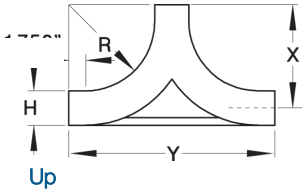
45º Horizontal WYE					
Width	Left Hand Wye Cat. No.	Right Hand Wye Cat. No.	Dimensions		
			X	Y	Z
06	Prefix(†)-06-(*)-HYL	Prefix(†)-06-(*)-HYR	18-5/16	14-13/16	12-7/16
12	Prefix(†)-12-(*)-HYL	Prefix(†)-12-(*)-HYR	26-3/4	25	18-7/16
18	Prefix(†)-18-(*)-HYL	Prefix(†)-18-(*)-HYR	35-1/4	35-1/4	24-7/16
24	Prefix(†)-24-(*)-HYL	Prefix(†)-24-(*)-HYR	43-1/2	45-1/2	30-7/16
30	Prefix(†)-30-(*)-HYL	Prefix(†)-30-(*)-HYR	52-1/4	55-3/4	36-7/16
36	Prefix(†)-36-(*)-HYL	Prefix(†)-36-(*)-HYR	60-11/16	66	42-7/16

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.

Fittings

Vertical Tee Up / Down





Dimension / Information

Part Numbering System

ALUF 6 24 V VTD 12

- ALUF: Prefix (ALUF, SPUF, SHUF, SSUF)
- 6: Siderail Depth
- 24: Width
- V: Bottom Style
- VTD: Fitting Type
- 12: Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

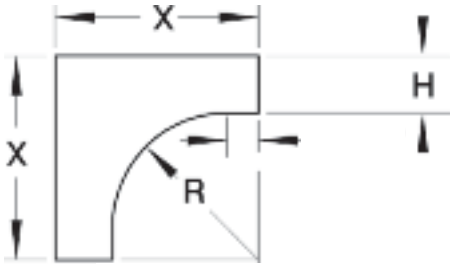
Vertical TEE Up / Down

Nominal Radius		Vertical Tee Up	Vertical Tee Down	Siderail Height "H"					
				2 in.		3 in.		6 in.	
R	Width	Cat. No.	Cat. No.	X	Y	X	Y	X	Y
12	6	Prefix(†)-06-(*)-VTU12	Prefix-06-(*)-VTD12	12-15/16	25-7/8	13-13/16	27-5/8	15-1/8	30-3/16
	12	Prefix(†)-12-(*)-VTU12	Prefix-12-(*)-VTD12						
	18	Prefix(†)-18-(*)-VTU12	Prefix-18-(*)-VTD12						
	24	Prefix(†)-24-(*)-VTU12	Prefix-24-(*)-VTD12						
	30	Prefix(†)-30-(*)-VTU12	Prefix-30-(*)-VTD12						
	36	Prefix(†)-36-(*)-VTU12	Prefix-36-(*)-VTD12						
24	6	Prefix(†)-06-(*)-VTU24	Prefix-06-(*)-VTD24	24-15/16	49-7/8	25-13/16	51-5/8	27-1/8	54-3/16
	12	Prefix(†)-12-(*)-VTU24	Prefix-12-(*)-VTD24						
	18	Prefix(†)-18-(*)-VTU24	Prefix-18-(*)-VTD24						
	24	Prefix(†)-24-(*)-VTU24	Prefix-24-(*)-VTD24						
	30	Prefix(†)-30-(*)-VTU24	Prefix-30-(*)-VTD24						
	36	Prefix(†)-36-(*)-VTU24	Prefix-36-(*)-VTD24						
36	6	Prefix(†)-06-(*)-VTU36	Prefix-06-(*)-VTD36	36-15/16	73-7/8	37-13/16	75-5/8	39-1/8	78-3/16
	12	Prefix(†)-12-(*)-VTU36	Prefix-12-(*)-VTD36						
	18	Prefix(†)-18-(*)-VTU36	Prefix-18-(*)-VTD36						
	24	Prefix(†)-24-(*)-VTU36	Prefix-24-(*)-VTD36						
	30	Prefix(†)-30-(*)-VTU36	Prefix-30-(*)-VTD36						
	36	Prefix(†)-36-(*)-VTU36	Prefix-36-(*)-VTD36						

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 2 pairs of splice plates with hardware.

Fittings

Cable Support Fittings



Part Numbering System

SPUF 3 24 V CS 12

- SPUF — Prefix: ALUF, SPUF, SHUF, SSUF
- 3 — Siderail Depth
- 24 — Width
- V — Bottom Style
- CS — Fitting Type
- 12 — Nominal Radius

Selection Guide

Prefix: **ALUF (Aluminum), SPUF (Pre-Galv.), SHUF (Hot Dip Galv.), SSUF (Stainless Steel)**
Inside Tray Widths: **6, 12, 18, 24, 30, 36**
Nominal Radius: **12, 24, 36**
Bottom Styles: **V**– Ventilated, **S**– Solid
Siderail Depth: **2 in., 3 in., 6 in.**

Dimension / Information

Cable Support Fittings

Nominal Radius			Siderail Height "H"		
			2 in.	3 in.	6 in.
R	Width	Cat. No.	X		
12	6	Prefix(†)-06-(*)-CS12	13-7/8	15-5/8	18-3/16
	12	Prefix(†)-12-(*)-CS12			
	18	Prefix(†)-18-(*)-CS12			
	24	Prefix(†)-24-(*)-CS12			
	30	Prefix(†)-30-(*)-CS12			
	36	Prefix(†)-36-(*)-CS12			
24	6	Prefix(†)-06-(*)-CS24	25-7/8	27-5/8	30-3/16
	12	Prefix(†)-12-(*)-CS24			
	18	Prefix(†)-18-(*)-CS24			
	24	Prefix(†)-24-(*)-CS24			
	30	Prefix(†)-30-(*)-CS24			
	36	Prefix(†)-36-(*)-CS24			
36	6	Prefix(†)-06-(*)-CS36	37-7/8	39-5/8	42-3/16
	12	Prefix(†)-12-(*)-CS36			
	18	Prefix(†)-18-(*)-CS36			
	24	Prefix(†)-24-(*)-CS36			
	30	Prefix(†)-30-(*)-CS36			
	36	Prefix(†)-36-(*)-CS36			

(†) Insert siderail depth. (*) Insert bottom style to complete Cat. No. Includes 1 pair of splice plates with hardware.

Covers

Straight Covers

Straight Cover Number Selection

(ALUW12)SNC-3

Material Prefix

- **ALUW** • Aluminum
- **SPW** • Pre-Galvanized
- **SHW** • Hot Dip Galvanized after fabrication
- **SSW** • Stainless Steel 316

Prefix

Width

- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Type

- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover
- **PFC** • Peaked Flanged Cover
- **PVC** • Peaked Ventilated Cover

***Length**

- **3** • (3 m)

*** For SHW covers, maximum lengths are 72 in. and 1500 mm.**

Fitting Covers

Fitting Cover Number Selection

(ALUW12)SNCHB9024

Material Prefix

- **ALUW** • Aluminum
- **SPW** • Pre-Galvanized
- **SHW** • Hot Dip Galvanized after fabrication
- **SSW** • Stainless Steel 316

Prefix

Width

- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Cover Type

- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover

Fitting Type

- **HB** • Horizontal Bend
- **HT** • Horizontal Tee
- **HX** • Horizontal Cross
- **VI** • Vertical Inside Bend
- **VTU** • Vertical Tee Down
- **HYR** • Horizontal Wye Right
- **HYL** • Horizontal Wye Left

***Degree**

- **30** • (30°)
- **45** • (45°)
- **60** • (60°)
- **90** • (90°)

Radius

- **12** • (12 in.)
- **24** • (24 in.)
- **36** • (36 in.)

*** Required for HB & VI only**

Note: Cover mounting hardware sold separately.

Covers

Fitting Covers (cont'd)

Fitting Cover Number Selection

(ALUW1812)SNCRT12

Material Prefix
- **ALUW** • Aluminum
- **SPW** • Pre-Galvanized
- **SHW** • Hot Dip Galvanized after fabrication
- **SSW** • Stainless Steel 316

Prefix

Width 1
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Width 2
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Cover Type
- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover

Fitting Type
- **RT** • Horizontal Reduce Tee
- **ET** • Horizontal Expand Tee
- **EX** • Horizontal Expand Tee & Reduce Cross
- **HSR** • Horizontal Straight Reducer
- **HLR** • Horizontal Left Reducer
- **HRR** • Horizontal Right Reducer

*** Radius**
- **12** • (12 in.)
- **24** • (24 in.)
- **36** • (36 in.)

*** Radius not required for HSR, HLR, HRR**

Fitting Cover Number Selection

(ALUW312)SNCVO9024

Material Prefix
- **ALUW** • Aluminum
- **SPW** • Pre-Galvanized
- **SHW** • Hot Dip Galvanized after fabrication
- **SSW** • Stainless Steel 316

Prefix

Siderail-Height
- **2** • (2 in.)
- **3** • (3-5/8 in.)
- **6** • (6 in.)

Width
- **06** • (6 in.)
- **12** • (12 in.)
- **18** • (18 in.)
- **24** • (24 in.)
- **30** • (30 in.)
- **36** • (36 in.)

Cover Type
- **SNC** • Solid Non-Flanged Cover
- **SFC** • Solid Flanged Cover
- **VFC** • Ventilated Flanged Cover

Fitting Type
- **VO** • Vertical Outside Bend
- **VTD** • Vertical Tee Down
- **CS** • Cable Support

***Degree**
- **30** • (30°)
- **45** • (45°)
- **60** • (60°)
- **90** • (90°)

Radius
- **12** • (12 in.)
- **24** • (24 in.)
- **36** • (36 in.)

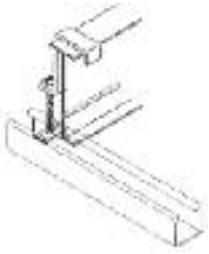
*** Required for VO only**

Note: Cover mounting hardware sold separately.

Covers

Accessories For Covers

Combination Hold Down / Cover Clamp



Material Prefix	Siderail Height (in.)	Cat. No.
SPUW	2	(Prefix)-2-HDC
SSUW	3	(Prefix)-3-HDC
SHUW	6	(Prefix)-6-HDC

Combination Hold Down Cover Clamp

Designed to secure flat and flanged covers with hold down feature.

Material Prefix	Siderail Height (in.)	Cat. No.
SPUW	2	(Prefix)-2-CCC
SSUW		
SHUW		
SPUW		
SHUW	3	(Prefix)-3-CCC
SSUW	6	(Prefix)-6-CCC

Covers

Accessories For Covers

Cover Clamp

Rigid indoor cover clamp for flat and flanged covers.

Material Prefix	Siderail Height (in.)	Cat. No.
SPUW	2	(Prefix)-2-SCC
SSUW		
SPW	3	(Prefix)-3-SCC
SSW	6	(Prefix)-6-SCC

Heavy-Duty Cover Clamp

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
ALUW	2	6	(Prefix)-2-**-HCC
SHUW		12	
SPUW		18	
SSUW		24	
		30	
		36	

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
ALUW	3	6	(Prefix)-3-**-HCC
SHW	6	12	(Prefix)-6-**-HCC
SPW		18	
SSW		24	
		30	
		36	

** Insert Width of Tray

Splice Plates

Standard Splice Plate

Packaged in pairs with zinc plated hardware.
Provided as standard with each straight and/or fitting.

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW SHUW SPUW SSUW	2	(Prefix)-2-SSP

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW	3	(Prefix)-3-SSP
SHW	6	(Prefix)-6-SSP
SPW SSW		

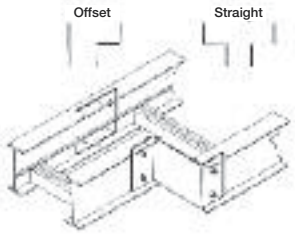
Expansion Splice Plate

Allows for a 1 in. expansion or contraction of tray system.
Packaged in pairs with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW SHUW SPUW SSUW	2	(Prefix)-2-ESP

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW	3	(Prefix)-3-ESP
SHW	6	(Prefix)-6-ESP
SPW SSW		

Reducing Splice Plate



Used in pairs to provide a straight reduction or used with a Standard Splice Plate for an offset reduction. One per package with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW SHUW SPUW SSUW	2	(Prefix)-2-RSP

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW	3	(Prefix)-3-RSP
SHW	6	(Prefix)-6-RSP
SPW SSW		

Note: For Offset Reduction: Insert width to be reduced.
For Straight Reduction: Insert 1/2 width to be reduced (2 required)

Example: ALUW-603-RSP = 3 in. offset reducer

Barrier Strips

Horizontal Barrier Strips

Barrier Strips provide a method of separating cables in tray and trough systems. Easily installed using supplied hardware or Barrier Strip Clamps (sold separately).

72 in. barriers are flexible for use with horizontal fittings.

Material Prefix	Height (in.)	Length (in.)	Cat. No.
ALUW	2	3 m	(Prefix)-2-SB-3
SPUW	3		(Prefix)-3-SB-3
SHUW*			
SSUW	6		(Prefix)-6-SB-3
ALUW	2	72 in.	(Prefix)-2-SBH-72
SPUW	3		(Prefix)-3-SBH-72
SHUW*			
SSUW	6		(Prefix)-6-SBH-72

NOTE: 72 in. barriers provided with 3 SPW10SCR
3 m barriers provided with 6 SPW10SCR
*Available in 1500 mm only.

Vertical Barrier Strips

Material Prefix	Height (in.)	Inside Bend Cat. No.	Outside Bend Cat. No.	Angle	Radius
ALUW	2	(Prefix)-2-VIB-(*)-(**)	Prefix-2-VOB-(*)-(**)	90	12
SPUW	3	(Prefix)-3-VIB-(*)-(**)	Prefix-3-VOB-(*)-(**)	60	24
SHUW*				30	
SSUW	6	(Prefix)-6-VIB-(*)-(**)	Prefix-6-VOB-(*)-(**)	45	36

(*) Insert Angle (**) Insert Radius
*Available in 1500 mm only.

Preformed to fit all standard steel vertical bends.
Provided with hardware

Barrier Strip Clamp

Barrier strip clamps mount barrier strips to ladder rungs and ventilated bottoms.

Complete mounting hardware supplied.

Cat. No.	Material
SPW-BSC	Zinc Plated Steel
SSW-BSC	Stainless Steel 316

T&B aluminum cable tray is composed of two distinct systems H-Style and U-Style. These systems are interchangeable.

Accessories

Closure End Plate

Provides closure for any tray end. Hardware included.

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
ALUW	2	6	(Prefix)-2-**-CEP
SPUW		12	
SHUW		18	
SSUW		24	
		30	
		36	

Material Prefix	Siderail Height (in.)	Width of Tray (in.)	Cat. No.
ALUW	3	6	(Prefix)-3-**-CEP
SPW	6	12	(Prefix)-6-**-CEP
SHW		18	
SSW		24	
		30	
		36	

** Insert Width of Tray

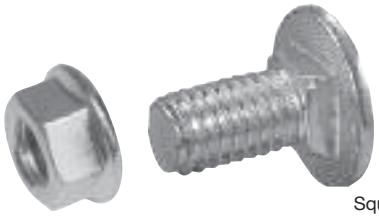
Drop-Out

Designed to provide a smooth radiused surface at any position on the tray or trough bottom. Drop-Outs are easily attached using hardware provided. Standard Radius = 4 in.

Material Prefix	Width (in.)	Cat. No.
ALUW	6	(Prefix)-**-DOS
SPW	12	
SSW	18	
SHW	24	
	30	
	36	

** Insert Width of Tray

Steel Tray Hardware



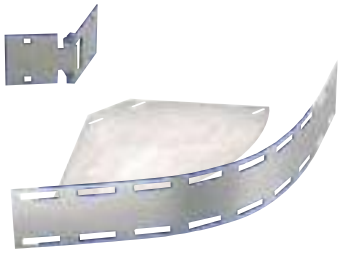
Square shoulder self-positioning carriage bolt.

Description	Material	Cat. No.
1/4 in. Carriage Bolt	Zinc Plated Steel	SPW-1/4-CB
SPW3/8 in. Carriage Bolt	Zinc Plated Steel	SPW-3/8-CB
SSW1/4 in. Hex. Nut	Zinc Plated Steel	SPW-1/4-HN
3/8 in. Hex. Nut	Zinc Plated Steel	SPW-3/8-HN
3/8 in. Carriage Bolt	316 Stainless	SSW-3/8-CB
3/8 in. Hex. Nut	316 Stainless	SSW-3/8-HN
316 Stainless Steel	316 Stainless	SSW-3/8-HWK*
Hardware Kit		

* Contains 8 nuts, 8 bolts, 8 lock washers

Accessories

Horizontal Adjustable Plate

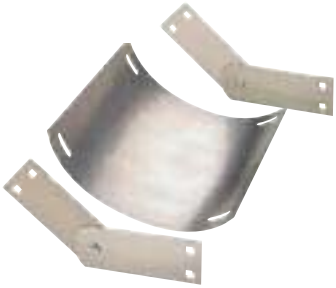


Adjustable hinge plates provide maximum horizontal installation flexibility. Furnished as a kit with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW SPUW SSUW SHUW	6	(Prefix)-(*)06-HAP
	9	(Prefix)-(*)09-HAP
	12	(Prefix)-(*)12-HAP
	18	(Prefix)-(*)18-HAP
	24	(Prefix)-(*)24-HAP
	30	(Prefix)-(*)30-HAP
	36	(Prefix)-(*)36-HAP

* Insert siderail height

Vertical Adjustable Plate



Hinged vertical plates provide maximum flexibility for changes in elevation. Furnished as a kit with hardware.

Material Prefix	Height (in.)	Width (in.)	Cat. No.
ALUW	2	6	(Prefix)-2-**-VSP
SPUW	3	12	(Prefix)-3-**-VSP
SHUW	6	18	(Prefix)-6-**-VSP
SSUW		24	
		30	
		36	

** Insert width

Horizontal Tee Branch

Material Prefix	Height (in.)	Length (in.)	Cat. No.
ALUW	2	6	(Prefix)-2-(**)-HTB
SPUW	3	12	(Prefix)-3-(**)-HTB
SHUW		24	
SSUW	6	18	(Prefix)-6-(**)-HTB
		30	
		36	

(**) Insert width

Box to Tray Plates

Designed to secure tray to electrical panels or boxes, walls or end supports. Packaged in pairs with hardware.

Material Prefix	Siderail Height (in.)	Cat. No.
ALUW SHUW SPUW SSUW	2	(Prefix)-2-BSP
ALUW SPW SHW SSW	3	(Prefix)-3-BSP
	6	(Prefix)-6-BSP

Table of Contents

Selection Guide

In order to ensure that your Channel Tray installation will meet your present and future needs, a sequence of decisions must be made. These decisions are relatively simple and can be condensed down to 4 steps.

1. Material Choice

- Aluminum
- Pre-Galvanized
- Hot Dipped
- Stainless Steel
- Coatings
- Other

2. Type of Tray Bottom

- Ventilated
- Solid

3. T&B Channel Tray Width

- 1.5 in.
- 3 in.
- 4 in.
- 6 in.

4. Fittings Selection

- Horizontal bends (90°, 60°, 45° and 30°)
- Horizontal Tees and Crosses
- Vertical bends (90°, 60°, 45° and 30°)

Each step is explained in detail on the following pages.

Selection Guide

1. Material Choice

T&B Channel Tray systems are fabricated from a corrosion-resistant metal (low-carbon steel, stainless steel or an aluminum alloy) or from a metal with a corrosion-resistant finish (zinc or epoxy). The choice of material for any particular installation depends on the installation environment (corrosion and electrical considerations) and cost. Please refer to the technical section (pages A5 to A32) for further explanation.

2. Type of Channel Tray Bottom

Cable Channel

Thomas & Betts offers cable channel in solid or ventilated straight sections.

Ventilated channel has burr free oblong punched holes for easy access.

Ty-Rap® slots are provided between each opening for securing of cable.

Thomas & Betts channel tray meets NEMA VE-1 / CSA C22.22.

Solid Channel

Ventilated Channel

3. Select Channel Tray Width

The width of a channel tray is a function of the number, size, spacing and weight of the cables in the tray. Available nominal widths are 1.5, 3, 4 and 6 inches.

When specifying width, cable ties or other spacing devices may be used to maintain the required air space between cables.

4. Select the Fittings

Fittings are used to change the size or direction of the channel tray. The most important decision to be made in fitting design concerns radius. The radius of the bend, whether horizontal or vertical, can be zero (non-radius), 12 in., 24 in. or greater on a custom basis. The selection requires a compromise with the considerations being available space, minimum bending radius of cables, ease of cable pulling, and cost. The typical radius is 24 inches.

Fittings are also available for 30°, 45°, 60° and 90° angles. When a standard angle will not work, field fittings or adjustable elbows can be used. It may be necessary to add supports to the tray at these points.

Refer to CSA/NEMA VE2 Installation Guidelines for suggested support locations.

Straight Lengths

How to create Straight Section part numbers

1. Select the material
2. Select nominal width of tray
3. Select the bottom type
4. The last number is the length of the channel tray

Example: ALTC04V-3
- Aluminum
- 4 in. wide
- Ventilated bottom
- 10 ft. length

Ventilated Channel

Solid Channel

Straight Section Number Selection

(ALT) C 04 V-3

Prefix	Material	Series	Type	Width	Bottom Style	Length
	AL • Aluminum **SP** • Pre-galvanized **SH** • Hot Dip Galvanized **SS** • 316 Stainless Steel	**T** • Cable Channel	**C** • Straight Section	**01** • (1.5 in.) **03** • (3 in.) **04** • (4 in.) **06** • (6 in.)	**S** • Solid Trough **V** • Ventilated Trough	**3** • (10 ft.)

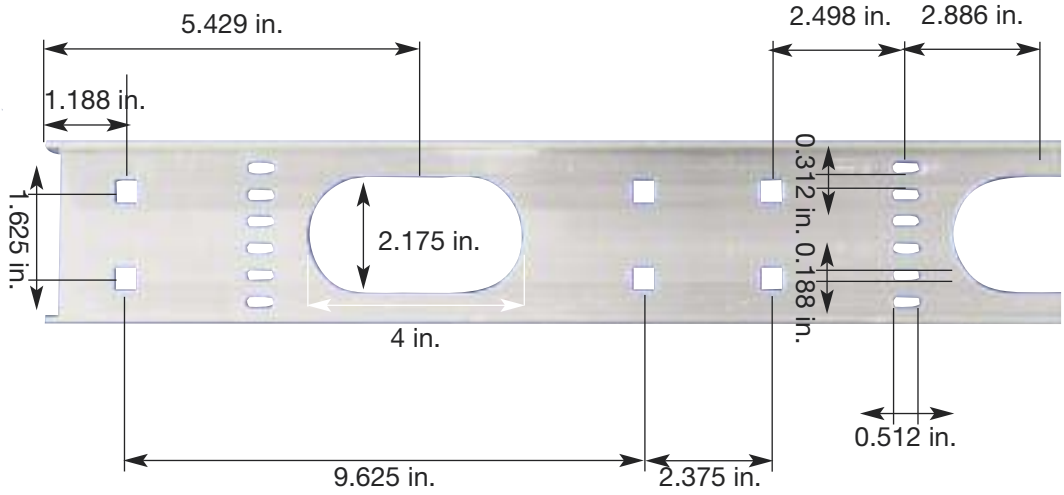
Straight Lengths

Solid and Ventilated

Vented style offered in 1.5 in. wide only

Vented style offered in 3 in., 4 in., 6 in. wide only

Solid offered in all widths



Bottom view of ventilated Channel Tray larger then 1.5 in. wide

Dimension / Information

Part Numbering System

ALT C 04 V-3

ALT	C	04	V-3
Material	Type	Width	Bottom
Series			Length Style

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST(Stainless Steel)**
Inside Channel Widths: **01=1.5 in. , 03=3 in. , 04=4 in., 06=6 in.**
Bottom Styles: **V**– Ventilated, **S**– Solid

Straight Lengths

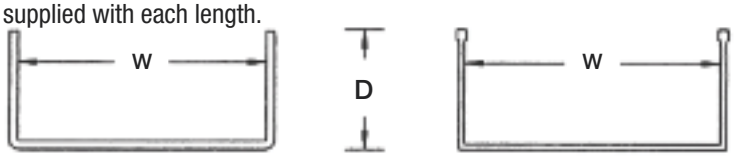
Solid and Ventilated Bottom

Solid: Steel - Roll Formed Steel. Aluminum - Extruded material.

Ventilated: Pre-punched burr free oblong holes with Ty-Rap® slots between each opening.

Accessories: One connector complete with hardware supplied with each length.

Material: Aluminum-6063-T6
Pre-galvanized
Hot Dip Galvanized
316 Stainless Steel



STEEL ALUMINUM

Aluminum Solid	Channel Width (W)	Depth (D)		Support Span (Feet)				
				2	4	6	8	10
ALTC	1.5 in.	3/4 in.	Load (lb./ft.) Deflection (in.)	47.5 0.170	11.9 0.680	5.4 0.745	3.0 1.325	1.9 2.070
	3 in.	1-3/8 in.	Load (lb./ft.) Deflection (in.)	362.5 0.083	90.6 0.330	40.3 0.743	22.7 1.322	17.0 2.065
	4 in.	1-5/8 in.	Load (lb./ft.) Deflection (in.)	580.0 0.065	145.0 0.260	64.4 0.585	36.3 1.041	24.0 1.626
	6 in.	1-3/4 in.	Load (lb./ft.) Deflection (in.)	607.5 0.061	151.9 0.244	67.5 0.550	38.0 0.977	25.0 1.527

Aluminum Ventilated	Channel Width (W)	Depth (D)		Support Span (Feet)				
				2	4	6	8	10
ALTC	1.5 in.	3/4 in.	Load (lb./ft.) Deflection (in.)	47.5 0.170	11.9 0.680	5.4 0.745	3.0 1.325	1.9 2.070
	3 in.	1-3/8 in.	Load (lb./ft.) Deflection (in.)	300.0 0.100	75.0 0.400	33.3 0.900	18.8 1.600	14.0 2.500
	4 in.	1-5/8 in.	Load (lb./ft.) Deflection (in.)	525.0 0.074	131.3 0.295	58.3 0.664	32.8 1.181	19.0 1.846
	6 in.	1-3/4 in.	Load (lb./ft.) Deflection (in.)	580.0 0.065	145.0 0.261	64.4 0.587	36.3 1.044	21.0 1.631

Steel Solid	Channel Width (W)	Depth (D)		Support Span (Feet)				
				2	4	6	8	10
SPTC SHTC SSTC	1.5 in.	3/4 in.	Load (lb./ft.) Deflection (in.)	97.5 0.045	24.4 0.181	10.8 0.408	6.1 0.725	3.9 1.133
	3 in.	1-3/8 in.	Load (lb./ft.) Deflection (in.)	252.0 0.034	63.0 0.134	28.0 0.302	15.8 0.538	17.0 0.840
	4 in.	1-5/8 in.	Load (lb./ft.) Deflection (in.)	408.0 0.026	102.0 0.105	45.3 0.237	25.5 0.421	24.0 0.658
	6 in.	1-3/4 in.	Load (lb./ft.) Deflection (in.)	432.0 0.024	108.0 0.096	48.0 0.217	27.0 0.386	25.0 0.603

Steel Ventilated	Channel Width (W)	Depth (D)		Support Span (Feet)				
				2	4	6	8	10
SPTC SHTC SSTC	1.5 in.	3/4 in.	Load (lb./ft.) Deflection (in.)	97.5 0.045	24.4 0.181	10.8 0.408	6.1 0.725	3.9 1.133
	3 in.	1-3/8 in.	Load (lb./ft.) Deflection (in.)	207.0 0.041	51.8 0.163	23.0 0.366	12.9 0.652	14.0 1.018
	4 in.	1-5/8 in.	Load (lb./ft.) Deflection (in.)	363.0 0.030	90.8 0.119	40.3 0.269	22.7 0.477	19.0 0.746
	6 in.	1-3/4 in.	Load (lb./ft.) Deflection (in.)	405.0 0.027	101.3 0.106	45.0 0.239	25.3 0.425	21.0 0.664

Fittings

How to create Fitting part numbers

1. Select fitting material
2. Select nominal width of fitting
3. Select type of fitting
4. Select degree of angle if required
5. Select radius

Example: ALTF04SHB4512
- Aluminum
- 4 in. wide
- Horizontal bend
- 45° degree
- 12 in. radius


Horizontal Cross


90° Horizontal Bend

Fittings Number Selection

(ALT) F 04 S HB 45 12

Prefix

Fitting Material	Series	Type	Width	Bottom Style	Fitting Type	Degree*	Radius
AL • Aluminum	**T** • Cable Channel	**F** • Fitting	01 • (1.5 in.)	**S** • Solid Trough	**HB** • Horizontal Bend	**30** • 30°	**12** • 12 in.
SP • Pre-galvanized			03 • (3 in.)		**HT** • Horizontal Tee	**45** • 45°	**24** • 24 in.
SH • Hot Dip Galvanized			04 • (4 in.)		**HX** • Horizontal Cross	**60** • 60°	**0** • Zero† radius
SS • 316 Stainless Steel			06 • (6 in.)		**VO** • Vertical Outside Bend	**90** • 90°	
					VI • Vertical Inside Bend		

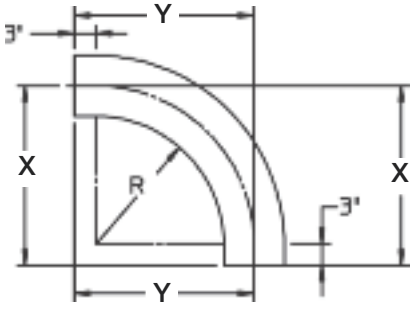
†Contact your Regional Sales Office for availability

*Required for HB, VI & VO only.

Fittings

Horizontal Bends – 90º

90° Horizontal Bend



Dimension / Information

Part Numbering System

ALT F 06 S HB 90 24

- ALT — Material
- F — Fitting
- 06 — Width
- S — Bottom Style
- HB — Fitting Type
- 90 — Angle
- 24 — Radius

Selection Guide

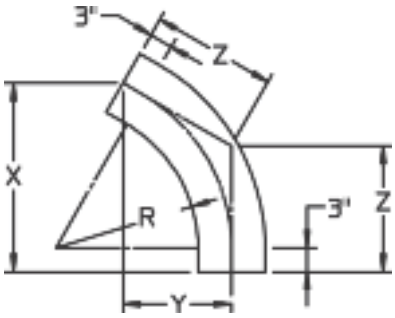
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

90º Horizontal BEND				
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)	
R	W		X	Y
12	1.5	(Prefix)-F 01-S-HB90-12	15-3/4	15-3/4
	3	(Prefix)-F 03-S-HB90-12	16-1/2	16-1/2
	4	(Prefix)-F 04-S-HB90-12	17	17
	6	(Prefix)-F 06-S-HB90-12	18	18
24	1.5	(Prefix)-F 01-S-HB90-24	27-3/4	27-3/4
	3	(Prefix)-F 03-S-HB90-24	28-1/2	28-1/2
	4	(Prefix)-F 04-S-HB90-24	29	29
	6	(Prefix)-F 06-S-HB90-24	30	30

Fittings

Horizontal Bends – 60º

60° Horizontal Bend



Dimension / Information

Part Numbering System

SPT F 03 S HB 60 24

- SPT — Material
- F — Fitting
- 03 — Width
- S — Bottom Style
- HB — Fitting Type
- 60 — Angle
- 24 — Radius

Selection Guide

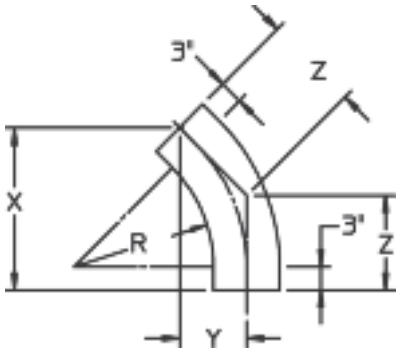
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

60º Horizontal BEND					
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)		
R	W		X	Y	Z
12	1.5	(Prefix)-F 01-S-HB60-12	15-1/2	9	10-1/4
	3	(Prefix)-F 03-S-HB60-12	16-3/16	9-3/8	10-13/16
	4	(Prefix)-F 04-S-HB60-12	16-5/8	9-5/8	11-1/16
	6	(Prefix)-F 06-S-HB60-12	17-1/2	10-1/8	11-11/16
24	1.5	(Prefix)-F 01-S-HB60-24	26	15	17-1/4
	3	(Prefix)-F 03-S-HB60-24	26-9/16	15-3/8	17-3/4
	4	(Prefix)-F 04-S-HB60-24	27	15-5/8	18
	6	(Prefix)-F 06-S-HB60-24	27-7/8	16-1/8	18-9/16

Fittings

Horizontal Bends – 45º

45° Horizontal Bend



Dimension / Information

Part Numbering System

SPT F 03 S HB 45 24

- SPT — Material
- F — Fitting
- 03 — Width
- S — Bottom Style
- HB — Fitting Type
- 45 — Angle
- 24 — Radius

Selection Guide

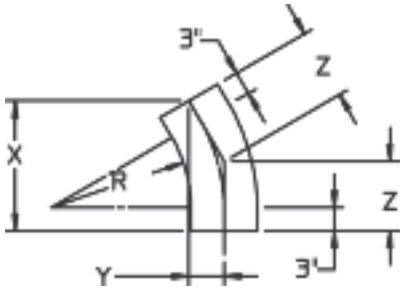
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

45º Horizontal BEND					
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)		
R	W		X	Y	Z
12	1.5	(Prefix)-F 01-S-HB45-12	14-1/8	5-7/8	8-1/4
	3	(Prefix)-F 03-S-HB45-12	14-11/16	6-1/16	8-9/16
	4	(Prefix)-F 04-S-HB45-12	15	6-1/4	8-13/16
	6	(Prefix)-F 06-S-HB45-12	15-3/4	6-1/2	9-3/16
24	1.5	(Prefix)-F 01-S-HB45-24	22-5/8	9-3/8	13-1/4
	3	(Prefix)-F 03-S-HB45-24	23-1/8	9-9/16	13-9/16
	4	(Prefix)-F 04-S-HB45-24	23-1/2	9-3/4	13-3/4
	6	(Prefix)-F 06-S-HB45-24	24-3/16	10	14-3/16

Fittings

Horizontal Bends – 30º

30° Horizontal Bend



Dimension / Information

Part Numbering System

ALT F 06 S HB 30 24

- ALT — Material
- F — Fitting
- 06 — Width
- S — Bottom Style
- HB — Fitting Type
- 30 — Angle
- 24 — Radius

Selection Guide

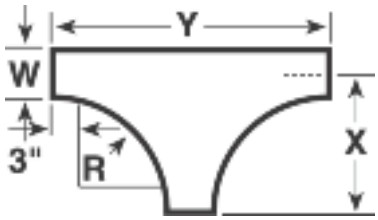
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

30° Horizontal BEND					
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)		
R	W		X	Y	Z
12	1.5	(Prefix)-F 01-S-HB30-12	12	3-1/4	6-1/2
	3	(Prefix)-F 03-S-HB30-12	12-3/8	3-5/16	6-5/8
	4	(Prefix)-F 04-S-HB30-12	12-5/8	3-3/8	6-3/4
	6	(Prefix)-F 06-S-HB30-12	13-1/8	3-1/2	7
24	1.5	(Prefix)-F 01-S-HB30-24	18	4-3/4	9-5/8
	3	(Prefix)-F 03-S-HB30-24	18-3/8	4-15/16	9-13/16
	4	(Prefix)-F 04-S-HB30-24	18-5/8	5	9-15/16
	6	(Prefix)-F 06-S-HB30-24	19-1/8	5-1/8	10-1/4

Fittings

Horizontal Tee

Horizontal Tee



Dimension / Information

Part Numbering System

SST F 04 S HT 24

- SST — Material
- F — Fitting
- 04 — Width
- S — Bottom Style
- HT — Fitting Type
- 24 — Radius

Selection Guide

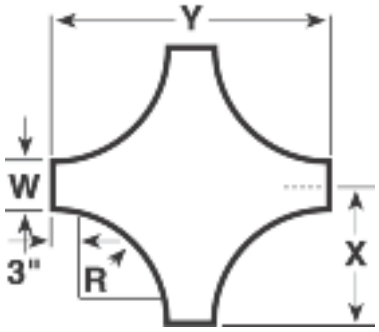
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

Horizontal TEE				
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)	
R	W		X	Y
12	1.5	(Prefix)-F 01-S-HT-12	15-3/4	31-1/2
	3	(Prefix)-F 03-S-HT-12	16-1/2	33
	4	(Prefix)-F 04-S-HT-12	17	34
	6	(Prefix)-F 06-S-HT-12	18	36
24	1.5	(Prefix)-F 01-S-HT-24	27-3/4	55-1/2
	3	(Prefix)-F 03-S-HT-24	28-1/2	57
	4	(Prefix)-F 04-S-HT-24	29	58
	6	(Prefix)-F 06-S-HT-24	30	60

Fittings

Horizontal Cross

Horizontal Cross



Dimension / Information

Part Numbering System

ALT F 04 S HX 24

- ALT — Material
- F — Fitting
- 04 — Width
- S — Bottom Style
- HX — Fitting Type
- 24 — Radius

Selection Guide

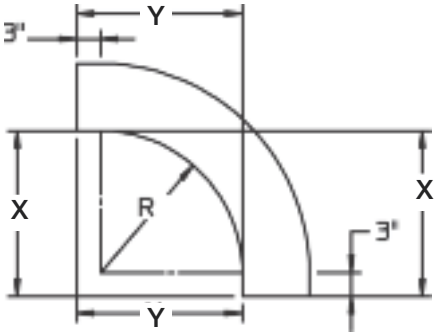
Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

Horizontal CROSS				
Radius (in.)	Width (in.)	Cat. No.	Dimensions (in.)	
R	W		X	Y
12	1.5	(Prefix)-F 01-S-HX-12	15-3/4	31-1/2
	3	(Prefix)-F 03-S-HX-12	16-1/2	33
	4	(Prefix)-F 04-S-HX-12	17	34
	6	(Prefix)-F 06-S-HX-12	18	36
24	1.5	(Prefix)-F 01-S-HX-24	27-3/4	55-1/2
	3	(Prefix)-F 03-S-HX-24	28-1/2	57
	4	(Prefix)-F 04-S-HX-24	29	58
	6	(Prefix)-F 06-S-HX-24	30	60

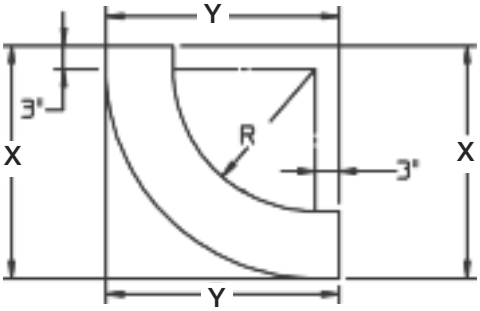
Fittings

Vertical Bends
90° Outside and Inside

Vertical Outside



Vertical Inside



Dimension / Information

Part Numbering System

SPT F 06 S VO 90 24

- SPT — Material
- F — Fitting
- 06 — Width
- S — Bottom Style
- VO — Fitting Type
- 90 — Angle
- 24 — Radius

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

90° Vertical Outside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y
12	1.5	(Prefix)-F 01-S-V090-12	15	15
	3	(Prefix)-F 03-S-V090-12	15	15
	4	(Prefix)-F 04-S-V090-12	15	15
	6	(Prefix)-F 06-S-V090-12	15	15
24	1.5	(Prefix)-F 01-S-V090-24	15	15
	3	(Prefix)-F 03-S-V090-24	27	27
	4	(Prefix)-F 04-S-V090-24	27	27
	6	(Prefix)-F 06-S-V090-24	27	27

90° Vertical Inside BEND

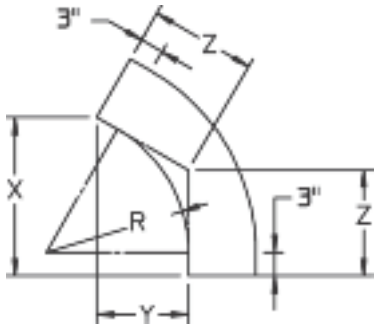
Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y
12	1.5	(Prefix)-F 01-S-VI90-12	15-3/4	15-3/4
	3	(Prefix)-F 03-S-VI90-12	16-1/2	16-1/2
	4	(Prefix)-F 04-S-VI90-12	16-7/8	16-7/8
	6	(Prefix)-F 06-S-VI90-12	16-7/8	16-7/8
24	1.5	(Prefix)-F 01-S-VI90-24	27-3/4	27-3/4
	3	(Prefix)-F 03-S-VI90-24	28-1/2	28-1/2
	4	(Prefix)-F 04-S-VI90-24	28-7/8	28-7/8
	6	(Prefix)-F 06-S-VI90-24	28-7/8	28-7/8

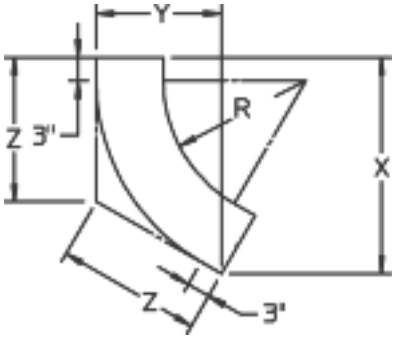
Fittings

Vertical Bends
60° Outside and Inside

Vertical Outside

Vertical Inside





Dimension / Information

Part Numbering System

SST F 04 S VI 60 24

SST	F	04	S	VI	60	24
Material	Fitting	Width	Bottom Style	Fitting Type	Angle	Radius

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

60° Vertical Outside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-V060-12	14-7/8	8-5/8	9-7/8
	3	(Prefix)-F 03-S-V060-12	14-7/8	8-5/8	9-7/8
	4	(Prefix)-F 04-S-V060-12	14-7/8	8-5/8	9-7/8
	6	(Prefix)-F 06-S-V060-12	14-7/8	8-5/8	9-7/8
24	1.5	(Prefix)-F 01-S-V060-24	25-1/4	14-5/8	16-7/8
	3	(Prefix)-F 03-S-V060-24	25-1/4	14-5/8	16-7/8
	4	(Prefix)-F 04-S-V060-24	25-1/4	14-5/8	16-7/8
	6	(Prefix)-F 06-S-V060-24	25-1/4	14-5/8	16-7/8

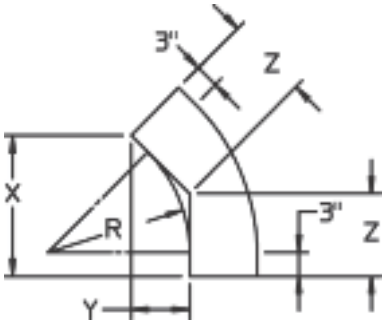
60° Vertical Inside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-VI60-12	15-1/2	9	10-1/4
	3	(Prefix)-F 03-S-VI60-12	16-1/8	9-1/4	10-3/4
	4	(Prefix)-F 04-S-VI60-12	16-1/4	9-3/8	10-7/8
	6	(Prefix)-F 06-S-VI60-12	16-3/8	9-1/2	11
24	1.5	(Prefix)-F 01-S-VI60-24	26	15	17-1/4
	3	(Prefix)-F 03-S-VI60-24	26-1/2	15-1/4	17-5/8
	4	(Prefix)-F 04-S-VI60-24	26-3/4	15-3/8	17-3/4
	6	(Prefix)-F 06-S-VI60-24	26-3/4	15-1/2	17-7/8

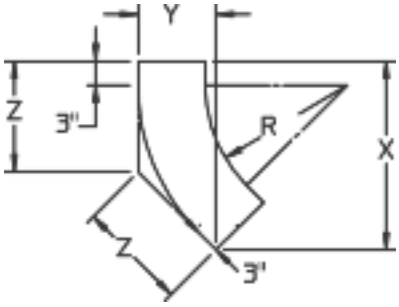
Fittings

Vertical Bends
45° Outside and Inside

Vertical Outside



Vertical Inside



Dimension / Information

Part Numbering System

SST F 04 S VI 45 24

- SST — Material
- F — Fitting
- 04 — Width
- S — Bottom Style
- VI — Fitting Type
- 45 — Angle
- 24 — Radius

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

45° Vertical Outside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-V045-12	13-5/8	5-5/8	8
	3	(Prefix)-F 03-S-V045-12	13-5/8	5-5/8	8
	4	(Prefix)-F 04-S-V045-12	13-5/8	5-5/8	8
	6	(Prefix)-F 06-S-V045-12	13-5/8	5-5/8	8
24	1.5	(Prefix)-F 01-S-V045-24	22-1/8	9-1/8	12-7/8
	3	(Prefix)-F 03-S-V045-24	22-1/8	9-1/8	13
	4	(Prefix)-F 04-S-V045-24	11	11	13
	6	(Prefix)-F 06-S-V045-24	11	11	13

45° Vertical Inside BEND

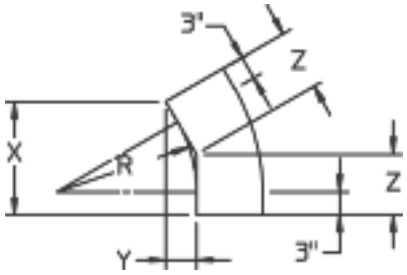
Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-VI45-12	14-1/8	5-1/8	9
	3	(Prefix)-F 03-S-VI45-12	14-5/8	6	8-1/2
	4	(Prefix)-F 04-S-VI45-12	14-3/4	7-1/8	8-5/8
	6	(Prefix)-F 06-S-VI45-12	14-7/8	11	8-3/4
24	1.5	(Prefix)-F 01-S-VI45-24	22-5/8	8-5/8	13-1/2
	3	(Prefix)-F 03-S-VI45-24	23	9-1/2	13-1/2
	4	(Prefix)-F 04-S-VI45-24	23-1/4	9-5/8	13-5/8
	6	(Prefix)-F 06-S-VI45-24	23-3/8	9-5/8	13-5/8

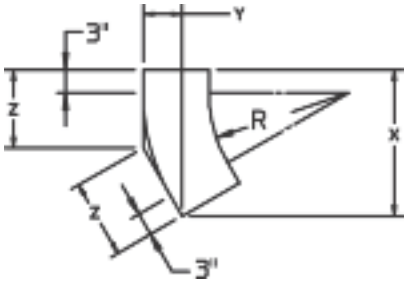
Fittings

Vertical Bends
30º Outside and Inside

Vertical Outside

Vertical Inside





Dimension / Information

Part Numbering System

SPT F 06 S VO 30 24

- SPT — Material
- F — Fitting
- 06 — Width
- S — Bottom Style
- VO — Fitting Type
- 30 — Angle
- 24 — Radius

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**
Bottom Styles: **S**– Solid

30º Vertical Outside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-V030-12	10-1/8	1-7/8	5-1/4
	3	(Prefix)-F 03-S-V030-12	11-5/8	3-1/8	6-1/8
	4	(Prefix)-F 04-S-V030-12	11-5/8	3-1/8	6-1/8
	6	(Prefix)-F 06-S-V030-12	11-5/8	3-1/8	6-1/8
24	1.5	(Prefix)-F 01-S-V030-24	17-5/8	4-3/4	9-1/2
	3	(Prefix)-F 03-S-V030-24	17-5/8	4-3/4	9-1/4
	4	(Prefix)-F 04-S-V030-24	17-5/8	4-3/4	9-1/4
	6	(Prefix)-F 06-S-V030-24	17-5/8	4-3/4	9-1/4

30º Vertical Inside BEND

Radius R (in.)	Width W (in.)	Cat. No.	Dimensions (in.) X	Y	Z
12	1.5	(Prefix)-F 01-S-VI30-12	10-3/8	1-7/8	5-3/8
	3	(Prefix)-F 03-S-VI30-12	12-1/4	3-1/2	6-3/8
	4	(Prefix)-F 04-S-VI30-12	12-3/8	3-3/8	5-5/8
	6	(Prefix)-F 06-S-VI30-12	12-1/2	3-3/8	5-5/8
24	1.5	(Prefix)-F 01-S-VI30-24	18	4-3/4	9-5/8
	3	(Prefix)-F 03-S-VI30-24	18-1/4	4-7/8	9-3/4
	4	(Prefix)-F 04-S-VI30-24	18-3/8	4-7/8	9-7/8
	6	(Prefix)-F 06-S-VI30-24	18-1/2	5	9-7/8

Covers

Cover Selection Guide

Tray Covers

Tray covers are available for all widths of tray. They should be installed where falling objects may damage cables or where vertical tray run is accessible by pedestrian or vehicular traffic.

Straight Covers

These covers provide maximum mechanical protection for cables with limited heat build up.
Flanged covers have 1/2 in. flange.

Note: Cover mounting hardware must be ordered separately.

Straight Section Number Selection

(ALT) F 03 SFC 3

Material	Series	Type	Width	Bottom Style	Length
AL • Aluminum **SP** • Pre-galvanized **SH** • Hot Dip Galvanized* **SS** • 316 Stainless Steel **Prefix**	**T** • Cable Channel	**Accessory** i.e.: Straight cover	**01** • (1.5 in.) **03** • (3 in.) **04** • (4 in.) **06** • (6 in.)	**SFC** • Solid Flanged Covers	**3** • (10 ft.)

*Hot Dip Galvanized Covers only available in 1500 mm lengths.

Quantity of Standard Cover Clamps Required	
Straight section (10 ft.) **Note:** When using the Heavy-Duty Cover Clamps, only half the quantity of pieces are required.	6 pcs.

Covers

Tray Covers

Tray covers are available for all widths of tray. They should be installed where falling objects may damage cables or where vertical tray run is accessible by pedestrian or vehicular traffic.

Fitting Covers

Fitting covers are available to complete your cable channel layout.
All fitting covers are flanged.

Note: Cover mounting hardware must be ordered separately.

Fittings Number Selection

(ALT) F 06 HBC 45 12

Material (Prefix)
- **AL** • Aluminum
- **SP** • Pre-galvanized
- **SH** • Hot Dip Galvanized
- **SS** • 316 Stainless Steel

Series
- **T** • Cable Channel

Type
- **F** • Fitting Cover

Width
- **01** • (1.5 in.)
- **03** • (3 in.)
- **04** • (4 in.)
- **06** • (6 in.)

Fitting Type Cover
- **HBC** • Horizontal Bend
- **HTC** • Horizontal Tee
- **HXC** • Horizontal Cross
- **VOC** • Vertical Outside Bend
- **VIC** • Vertical Inside Bend

Degree*
- **30** • 30°
- **45** • 45°
- **60** • 60°
- **90** • 90°

Radius
- **12** • 12 in.
- **24** • 24 in.
- **0** • Zero† radius

†Contact your Regional Sales Office for availability

*Required for HB, VI & VO only.

Quantity of Standard Cover Clamps Required	
Horizontal and Vertical Bends	4 pcs.
Tees	6 pcs.
Crosses	8 pcs.
Note: When using the Heavy-Duty Cover Clamps, only half the quantity of pieces are required.	

Accessories

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**

Standard 1.5 in. Splice Plate

Cat. No	Width (in.)
(Prefix)-W-01-CCS	1.5

Supplied standard with each length.

Standard Splice Plate

Cat. No	Width (in.)
(Prefix)-W-03-CCS	3
(Prefix)-W-04-CCS	4
(Prefix)-W-06-CCS	6

Supplied standard with each length.

Expansion Splice Plate

Cat. No	Width (in.)
(Prefix)-W-03-ESP	3
(Prefix)-W-04-ESP	4
(Prefix)-W-06-ESP	6

Supplied standard with each length.

Wrap Around Splice Plate

Cat. No	Width (in.)
(Prefix)-W-01-ACS	1.5
(Prefix)-W-03-ACS	3
(Prefix)-W-04-ACS	4
(Prefix)-W-06-ACS	6

Accessories

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**

Adjustable Horizontal Splice Plate

Cat. No	Width (in.)
(Prefix)-W-01-CHA	1.5
(Prefix)-W-03-CHA	3
(Prefix)-W-04-CHA	4
(Prefix)-W-06-CHA	6

Standard Vertical Adjustable Splice Plate

Cat. No.	Width (in.)
(Prefix)-W-01-CCV	1.5
(Prefix)-W-03-CCV	3
(Prefix)-W-04-CCV	4
(Prefix)-W-06-CCV	6

Wrap Around Vertical Adjustable Splice Plate

Cat. No.	Width (in.)
(Prefix)-W-01-WAV	1.5
(Prefix)-W-03-WAV	3
(Prefix)-W-04-WAV	4
(Prefix)-W-06-WAV	6

Standard Hold Down Clamp

Cat. No.	Width (in.)
(Prefix)-W-01-SHC	1.5
(Prefix)-W-03-SHC	3
(Prefix)-W-04-SHC	4
(Prefix)-W-06-SHC	6

Accessories

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**

Channel Expansion Guide Clamp

Cat. No.	Width (in.)
(Prefix)-W-01-CEG	1.5
(Prefix)-W-03-CEG	3
(Prefix)-W-04-CEG	4
(Prefix)-W-06-CEG	6

Combination Hold Down / Cover Clamp

Cat. No.	Width (in.)
(Prefix)-W-01-CCC	1.5
(Prefix)-W-03-CCC	3
(Prefix)-W-04-CCC	4
(Prefix)-W-06-CCC	6

Heavy-Duty Cover Clamp

Cat. No.	Width (in.)
(Prefix)-W-01-HCC	1.5
(Prefix)-W-03-HCC	3
(Prefix)-W-04-HCC	4
(Prefix)-W-06-HCC	6

Closed End Plate

Cat. No.	Width (in.)
(Prefix)-W-01-CEP	1.5
(Prefix)-W-03-CEP	3
(Prefix)-W-04-CEP	4
(Prefix)-W-06-CEP	6

Accessories

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**

Channel Mounting Bracket

Cat. No.	Width (in.)
(Prefix)-W-01-CCB	1.5
(Prefix)-W-03-CCB	3
(Prefix)-W-04-CCB	4
(Prefix)-W-06-CCB	6

Channel to Cable Tray Plate

Cat. No.	Width (in.)
(Prefix)-W-01-CCT	1.5
(Prefix)-W-03-CCT	3
(Prefix)-W-04-CCT	4
(Prefix)-W-06-CCT	6

Channel Straight Reducer Plate

Cat. No.	Width (in.)
(*)-W-03-01-RSP	3 to 1
(*)-W-04-01-RSP	4 to 1
(*)-W-06-01-RSP	6 to 1
(*)-W-04-03-RSP	4 to 3
(*)-W-06-03-RSP	6 to 3
(*)-W-06-04-RSP	6 to 4

Channel to Floor Base Plate

Cat. No.	Width (in.)
(Prefix)-W-01-CBP	1.5
(Prefix)-W-03-CBP	3
(Prefix)-W-04-CBP	4
(Prefix)-W-06-CBP	6

Accessories

Selection Guide

Prefix: **ALT (Alum.), SPT (Pre-Galv.), SHT (Hot Dip Galv.), SST (Stainless Steel)**
Inside Channel Widths: **01=1.5 in., 03=3 in., 04=4 in., 06=6 in.**

Channel to Tray Mounting Bracket

Cat. No.	Width (in.)
(Prefix)-W-01-TCB	1.5
(Prefix)-W-03-TCB	3
(Prefix)-W-04-TCB	4
(Prefix)-W-06-TCB	6

Single Channel Hanger

Cat. No.	Width
SPT-W-06-CCH	For use with all widths
SHT-W-06-CCH	

Note: Designed for use with 1/2 in. threaded rod

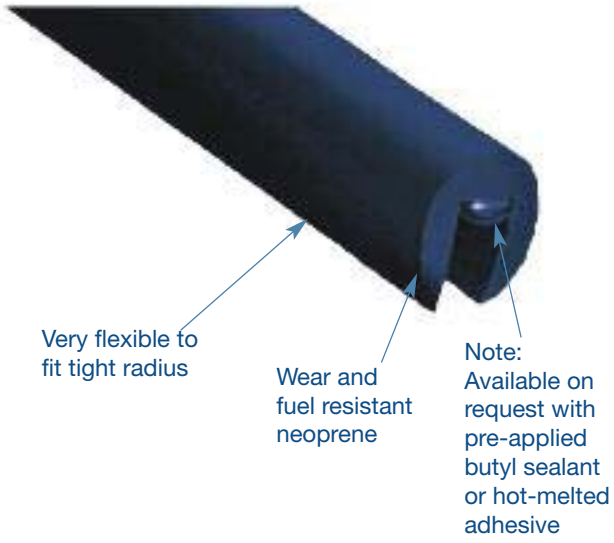
Double Channel Hanger

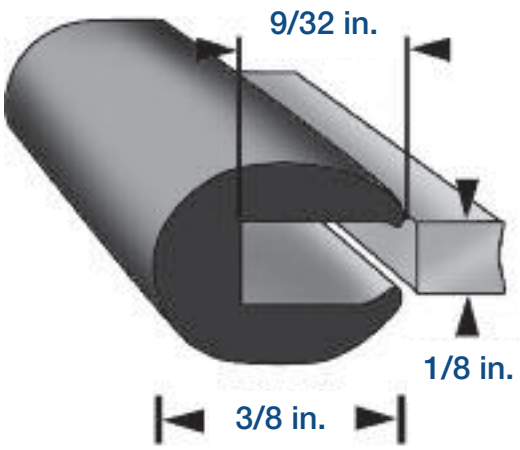
Cat. No.	Width
SPT-W-06-DCH	For use with all widths
SHT-W-06-DCH	

Note: Designed for use with 1/2 in. threaded rod

Accessories

Channel Rubber Edge Trim

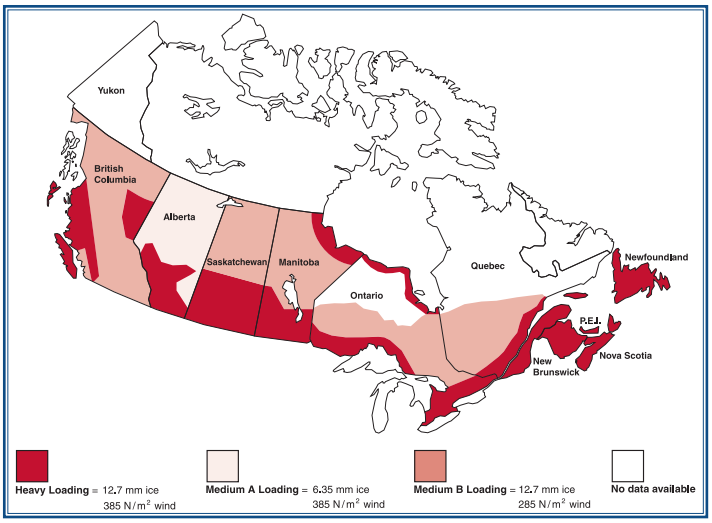




Cat. No.	Width	Description
RET-BUSH	For use with 3 in., 4 in. and 6 in.	Rubber edge trim - 10-3/4 in. Bushing - Standard pack of 10
RET-50	For use with all widths	Rubber edge trim - 50 foot roll
RET-500	For use with all widths	Rubber edge trim - 500 foot roll

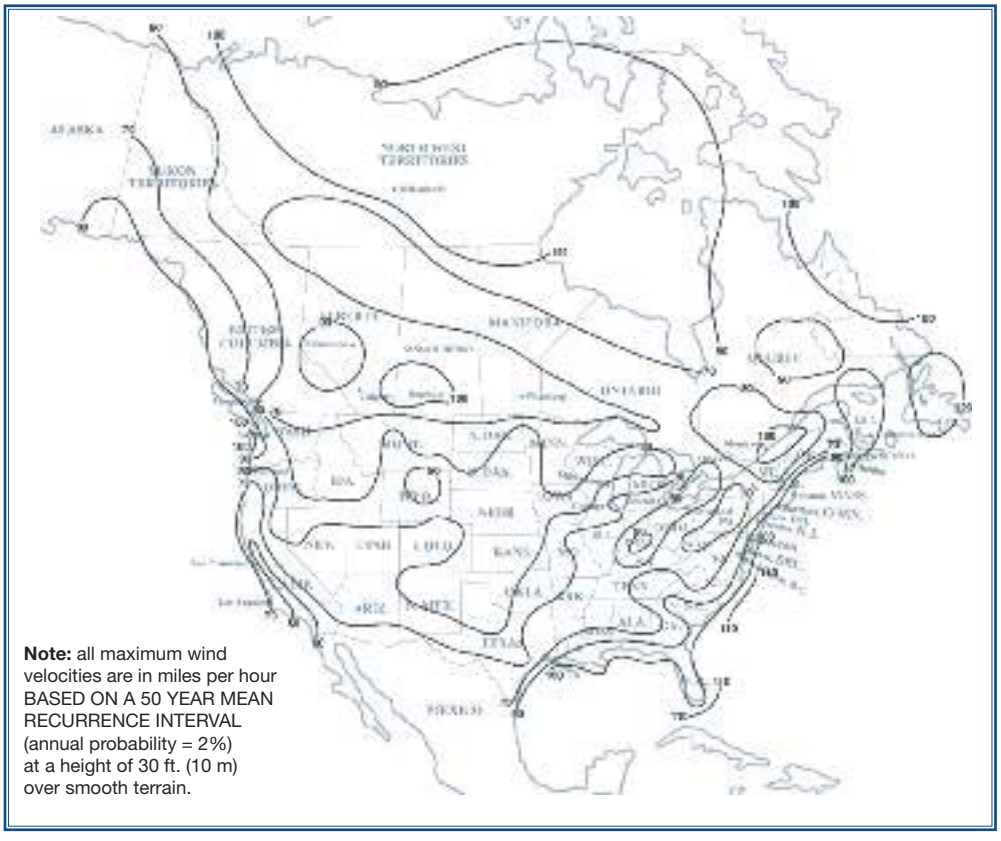
Product Specifications: Recommended temperature range: -40°C through -106°C.
Base Material: Dense Neoprene Rubber.

Figure 250-1CDN and 250-2CDN Loading for Grades B, C and D



General Loading Map of Canada with respect to loading of overhead lines.

Fig. 250-1CDN



Basic Wind Speed (miles per hour).

Fig. 250-2CDN

Figure 250-2CDN is a wind map of North America reproduced from ASCE 7-88 [52]. For Hawaii and Puerto Rico, the basic wind speeds are 80mi/h and 95 mi/h, respectively.

Note: Wind velocity usually increases with height; therefore, experience may show that the wind pressures specified herein need to be further increased.

Cable Rollers

Why should rollers be used?

1. To reduce pulling stress on cables, avoiding undue fatigue or abrasions.
2. Minimizes harmful “shear” load being placed on cable trays.
3. To reduce installation time.

Why purchase the T&B Cable Roller System?

- Universal — fits virtually all tray systems.
- Mounts from bottom of cable tray, eliminating the need for double handling cables and reducing possibility of cable damage.
- Sideways telescopic adjustment allows rollers to accommodate virtually all tray widths.
- Nylon bearings require no lubrication.
- Independent rollers limit cable abrasion.

Straight Roller

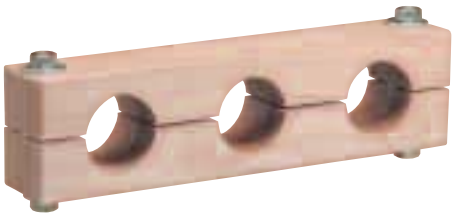
Cat. No.	Description	Fits
HAR 1224	Straight	all profiles 12 in. to 24 in. (30 cm to 60 cm)
HAR 1836	Straight	all profiles 18 in. to 36 in. (45 cm to 90 cm)

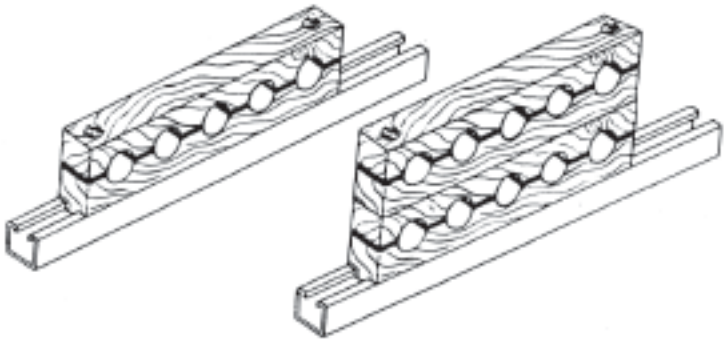
Corner Roller

Cat. No.	Description	Fits
VHR04	Corner	all profiles

Custom Maple
Hardwood Block

Custom Maple Hardwood Block





Maple hardwood, paraffin wax impregnated, multiple cable blocks can be made to your specific requirements.

Cable blocks are to ensure proper separation of single conductor cables, which prevents any interference due to magnetic fields. The maple hardwood blocks are paraffin wax impregnated to prevent moisture from penetrating and causing rotting and splitting.

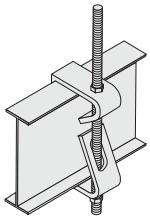
Cable blocks are also available in nylon and high density polyethylene.

Price and delivery upon request.

Electrogalvanized hardware included, however stainless steel hardware is also available upon request.

Cable Tray Support Systems

Hanger Rod Clamp



These clamps are designed for ladder and ventilated cable tray. They provide a fast and economical solution for a suspended cable tray installation. One kit is needed per each threaded rod location.

Kit consists of: - one bottom clamp
- one top clamp

Uses 1/2 in. threaded rod (order separately) / 250 lb. capacity per kit.

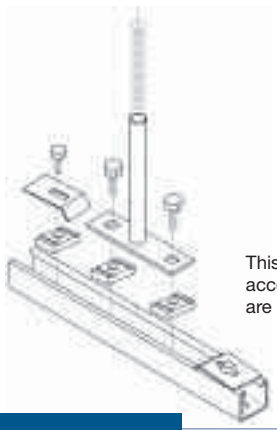
For Steel Cable Tray

Material Prefix	Height (in.)	Cat. No
SPW	3	(Prefix)-3-HRC
SHW	4	(Prefix)-4-HRC
SSW	5	(Prefix)-5-HRC
	6	(Prefix)-6-HRC
	7	(Prefix)-7-HRC

For Aluminum Cable Tray

Tray Series	Cat. No	Tray Series	Cat. No	Tray Series	Cat. No
AH04	ABW04-HRC	AH25	ABW25-HRC	AH46	ABW46-HRC
AH14	ABW14-HRC	AH35	ABW35-HRC	AH56	ABW56-HRC
AH24	ABW24-HRC	AH45	ABW45-HRC	AH66	ABW66-HRC
AH34	ABW34-HRC	AH16	ABW16-HRC	AH27	ABW27-HRC
AH44	ABW44-HRC	AH26	ABW26-HRC	AH37	ABW37-HRC
AH54	ABW54-HRC	AH36	ABW36-HRC		

Center Support Bracket

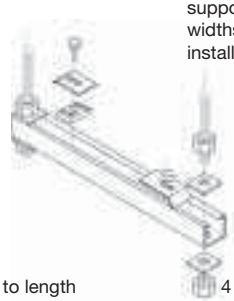


Material	Channel Width (in.)	Tray Width (in.)	Cat. No
SHW	18	6	SHW18CSB
		9	
Hot-Dip	30	12	SHW30CSB
Galvanized		18	
		24	

This system is designed to reduce cable pulling by allowing access from both sides of cable tray. Installation cost and time are reduced significantly by single point suspension.

- Supplied as a complete kit.
- Uses 1/2 in. threaded rod (order separately).
- For use with up to 24 in. wide tray.
- Load capacity : 700 lb. per kit.

Trapeze Kit



This system is designed to support various cable tray widths in a suspending installation.

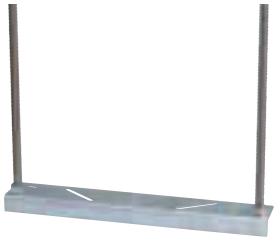
Kit consists of:
1 pc of strut cut to length
2 hold down clips
2 3/8 in. x 7/8 in. hex head cap screws
Uses 1/2 in. threaded rod (order separately)
4 3/8 in. strut nuts
4 1/2 in. hex nuts
4 1/2 in. square washers

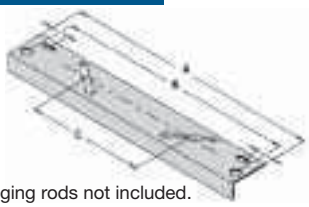
Tray Width (in.)	Channel Width (in.)	Cat. No
6	16-7/8	(*)-06-TPK
9	18-3/4	(*)-09-TPK
12	22-1/2	(*)-12-TPK
18	28-1/8	(*)-18-TPK
24	35-5/8	(*)-24-TPK
30	41-1/4	(*)-30-TPK
36	46-7/8	(*)-36-TPK
42	52-1/2	(*)-42-TPK

(*) Insert: **SHW** for hot dip galvanized.
SSW for stainless steel 316.
SPW for pre-galvanized.

Cable Tray Support Systems

Cross Member





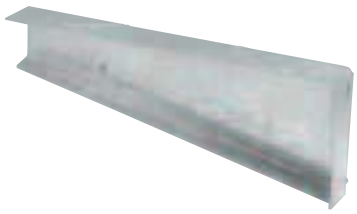
Hanging rods not included.

Standard finish:
hot dipped galvanized.

Cat. No	A	B	C
S202-6HDG	6	5	–
S202-9HDG	9	8	2
S202-15HDG	5	14	8
S202-21HDG	21	20	14
S202-27HDG	27	26	20
S202-33HDG	33	32	26

* Order hold down clips separately. Cat # SSW-SHC.

Cantilever Support



Standard finish:
hot dipped galvanized.

Cat. No	A	B	Design Load/Lb.
S203-8HDG	8-1/2	4-1/16	1200
S203-14HDG	14-1/2	5-3/8	1200
S203-20HDG	20-1/2	6-11/16	1200
S203-26HDG	26-1/2	8	1200
S203-32HDG	32-1/2	8	1200
S203-38HDG	38-1/2	8	1200

* Order hold down clips separately. Cat # SSW-SHC.

Conduit to Cable Tray Clamp

Material:
steel

Standard finish:
electro-galvanized.

Cat. No	Conduit Size (in.)
6210	1/2 – 3/4
6212	1 – 1-1-/4

Conduit to Cable Tray - Swivel Clamp

Material:
malleable iron hub
and steel U-bolt.

Standard finish:
zinc plated.

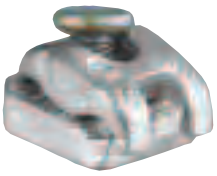
Cat. No	Conduit Size (in.)
6209	1/2 – 3/4
6211	1 – 1-1-/4
6214	1-1/2 – 2
6216	2-1/2 – 3
6218	3-1/2 – 4

Swivel Tray Clamp for aluminum and steel trays with regular or reinforced flanges.

- Serrations and biting teeth on clamping saddle provide a high quality bond between conduit and clamp.
- 1/2 to 4 inch can be clamped to any position in a 90 degree arc.

Grounding and Bonding Products

Economical Cable Tray Ground Clamp



Material:
malleable iron.

Standard finish:
zinc plated.

Cat. No	Description
10103TB	For single conductor #4 solid to 4/0 str.
MA2GC	

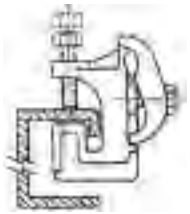
Cable Tray Ground Clamp

Showing Cat. No. 10109

Material:
malleable iron.

Standard finish:
zinc plated.

Cat. No	Description	
10105	Copper Cable	Cable for single conductors #4 solid to 2/0 str.
10109	Aluminum Cable	Cable for single conductors 2/0 solid to 4/0 str.



Blackburn® Ground Clamp

Material:
copper alloy.

Standard finish:
tin plated for
aluminum cable tray.

Cat. No	Conductor Range		
	Min.	Max.	Figure
GTC13P	#4 sol.	2/0 str.	1
GTC14P	2/0 str.	250 Kcmil	1
GTC23P	#4 sol.	2/0 str.	2
GTC24P	2/0 str.	250 Kcmil	2

Bolt has square shank to prevent turning and allow clamp to be tightened with one wrench.

Figure 1

Figure 2

Castings are of high strength, corrosion-resistant copper alloy.

For our complete offering of Grounding & Bonding products, consult our Connectivity and Grounding Catalogue.

Grounding and Bonding Products

Blackburn® Cable Tray Ground Clamp

Material:
copper alloy.

Standard finish:
tin plated.

Cat. No	Description	
CTG250	Al or Cu Cable	For parallel or tapping applications #2 solid to 250 Kcmil.

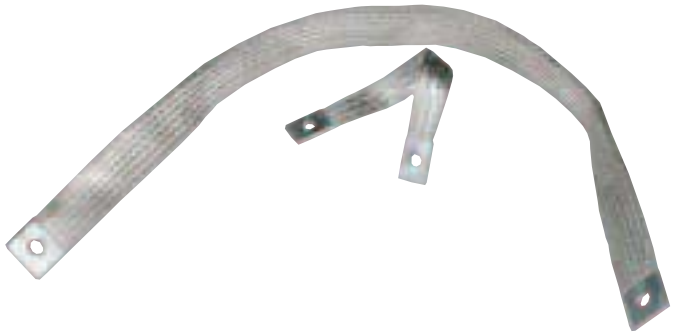
Blackburn® Lay-in Lug

Material: Tin Plated high strength 6061-T6 aluminum alloy.

Conductor Range			Stud Size	
Cat. No	Min.	Max.	(in.)	(mm^2)
LL306	#6 solid	3/0 str.	0.33	8.38
LL2506	#6 str.	250 Kcmil	0.33	8.38

These grounding connectors are dual rated for aluminum and copper conductors. The opened face design allows the installer to quickly lay-in the grounding conductor as a jumper.

Bonding Jumpers



Material: copper.
Standard finish: tin plated.

Cat. No	Bonding Amp. Capacity	Single Bolt Hole	Description
FBD12-1 *	600 Amps.	7/16	12 in. flat flexible braid
FBD16-1 *	600 Amps.	7/16	16 in. flat flexible braid
FBE12-1 *	1200 Amps.	9/16	12 in. flat flexible braid
FBE16-1 *	1200 Amps.	9/16	16 in. flat flexible braid
FB3H12-1 *	2000 Amps.	9/16	12 in. flat flexible braid
FB3H16-1 *	2000 Amps.	9/16	16 in. flat flexible braid

*UL Listed and CSA Certified for grounding & bonding equipment. Standard lengths offered in 12, 18, 24, 30 and 36 inches end to end.
Example: FBD24-1 for a 24" long bonding jumpers.
Custom braids are available.

IMPORTANT: Bonding Jumpers are required for expansion joints as well as adjustable joints. Please note due to the overall length of the expansion plate a 12 in. long bonding jumper is no longer sufficent to span the joint properly.

For our complete offering of Grounding & Bonding products, consult our Connectivity and Grounding Catalogue.

Grounding and Bonding Products

Grounding & Bonding

Table 1
(NEC TABLE 392.7 (B))
Metal Area Requirements for Cable Trays Used as Equipment Grounding Conductors

Maximum Fuse Ampere Rating, Circuit Breaker Ampere Trip Setting, or Circuit Breaker Protective Relay Ampere Trip Setting for Ground Fault Protection of any Cable Circuit in the Cable Tray System	Minimum Cross-Sectional Area of Metal* In Square Inches	
	Steel Cable Trays	Aluminum Cable Trays
60	0.20	0.20
100	0.40	0.20
200	0.70	0.20
400	1.00	0.40
600	1.50 **	0.40
1000	–	0.60
1200	–	1.00
1600	–	1.50
2000	–	2.00 **

For SI units: one square inch = 645 square millimeters.
* Total cross-sectional area of both siderails for ladder or trough-type cable trays: or the minimum cross-sectional area of metal in channel-type cable trays or cable trays of one-piece construction.
** Steel cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 600 amperes. Aluminum cable trays shall not be used as equipment grounding conductors for circuits with ground-fault protection above 2000 amperes.
For larger ampere ratings an additional grounding conductor must be used.

Table 2
Minimum Size Equipment Grounding Conductors for Grounding & Bonding Raceway and Equipment
(Based on NEC Table 250-95 and CEC Table 16)

Rating or Setting of Automatic Overcurrent Device in Circuit Ahead of Equipment, Conduit, etc. Not exceeding (Amperes)	Size	
	Copper Wire No.	Aluminum or Copper-Clad Aluminum Wire No.*
15	14	12
20	12	10
30	10	8
40	10	8
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250 kcmil
1600	4/0	350 kcmil
2000	250 kcmil	400 kcmil
2500	350 kcmil	600 kcmil
3000	400 kcmil	600 kcmil
4000	500 kcmil	800 kcmil
5000	700 kcmil	1200 kcmil

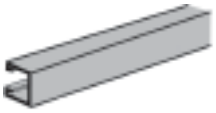
* See installation restrictions in NEC Section 250-92(a).

For more information on grounding and bonding cable tray, refer to Section 4.7 of the new NEMA VE 2-2006 Cable Tray Installation Guidelines.

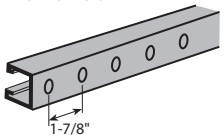
1-5/8 in. x 1-5/8 in. Channel

Superstrut® 1-5/8 in. x 1-5/8 in. - 12 Gauge Channel Type A

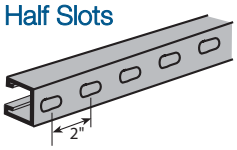
Solid Base



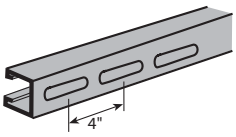
Punched



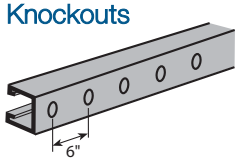
Half Slots



Long Slots



Knockouts



Back to Back

Cat. No.	Description
A1200	Solid base
A1200-P	Punched
A1200-HS	Half slots
A1200-S	Long slots
A1200-KO	Knockouts
A1202	Back to back

Example: A1200HS10ALC, A120020HDGC

Finishes & Materials	
No Suffix	Gold galvanized dichromate finish
ALC	Aluminum
EG	Electrogalvanized
HDGC	Hot dipped galvanized
PGC	Pregalvanized
T316L	Stainless steel Type 316

- Offered in 10 or 20 ft lengths.
- Aluminum, hot dipped galvanized or stainless steel channels are recommended to support aluminum steel or stainless steel cable tray.

Channel Nuts

A100
Regular Spring Nut

AC100
Springless Nut

UC100
Universal Nylon Cone Nut

For all 1-5/8 in. and 1-1/2 in. channels
May be used with ALL Strut Depths.

Cat. No.	Size	
100-1/4EGC	1/4	Standard Finish: Electrogalvanized Stainless steel channel nuts are recommended for aluminum channel and cable tray rungs. Change suffix to SS6(C).
A100-5/16EGC	5/16	
A100-3/8EGC	3/8	
A100-1/2EGC	1/2	
A100-5/8EGC	5/8	
A100-3/4	3/4	
A100-7/8EGC	7/8	
Nut is square over 1/2 in. size.		
AC100-1/4EGC	1/4	Standard Finish: Electrogalvanized Stainless steel channel nuts are recommended for aluminum channel and cable tray rungs. Change suffix to SS6(C).
AC100-3/8EGC	3/8	
AC100-1/2EGC	1/2	
AC100-5/8	5/8	
AC100-3/4	3/4	
Nut is square over 1/2 in. size.		
UC100-1/4	1/4	Not available in stainless steel.
UC100-3/8	3/8	
UC100-1/2	1/2	

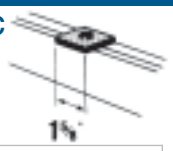
Hex. Head Cap Screw

Cat. No.	Size	
E142-1/4x100EG	1/4 x 1	Standard finish Electrogalvanized Available in stainless steel Change suffix to SS6(C)
E142-1/4x150EG	1/4 x 1-1/2	
E142-3/8x100EG	3/8 x 1	
E142-3/8x150EG	3/8 x 1-1/2	
E142-1/2x100EG	1/2 x 1	
E142-1/2x150EG	1/2 x 1-1/2	

1-5/8 in. x 1-5/8 in. Channel

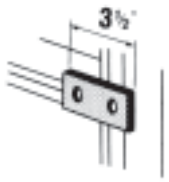
Superstrut® Fittings and Brackets

AB241HDGC

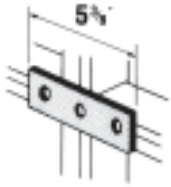


Cat. No.	Hole Size
AB241-1/4HDGC	1/4
AB241-3/8HDGC	3/8
AB241-1/2HDGC	1/2
AB241-3/4HDGC	3/4

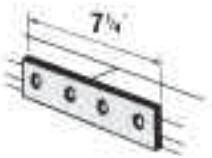
AB206HDGC



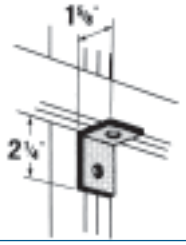
AB207HDGC



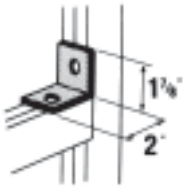
X207HDGC



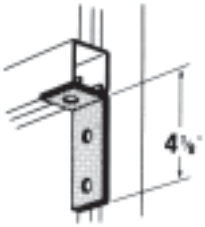
AB201HDGC



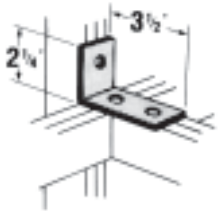
AB202HDGC



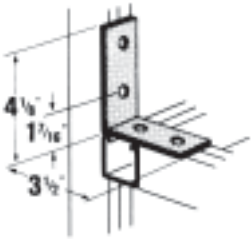
AB203HDGC



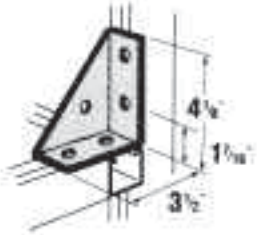
AB204HDGC



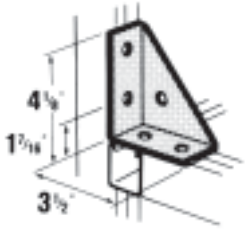
AB205HDGC



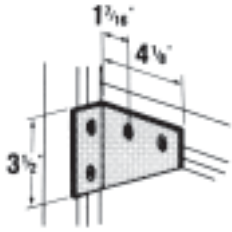
AB213HDGC



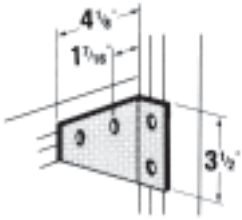
AB214HDGC



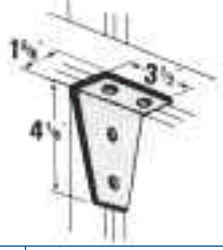
AB254-LHDGC



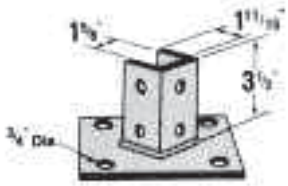
AB254-RHDGC



X289HDGC



AP232HDG

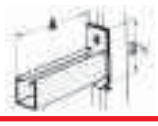


AP235HDGC

S249HDG

Cat. No.	A	B	Design Load/lb.
S249-8HDG	8-1/2	8	1500
S249-14HDG	14-1/2	9	1500
S249-20HDG	20-1/2	9	1500
S249-26HDG	26-1/2	11-1/2	1500
S249-32HDG	32-1/2	11-1/2	1500
S249-38HDG	38-1/2	11-1/2	1500

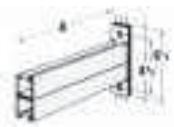
S256HDGC



Cat. No.	A	Design Load/lb.
S256-8HDGC	8-1/2	1000
S256-14HDGC	14-1/2	500
S256-20HDGC	20-1/2	300
S256-26HDGC	26-1/2	250

When installed in inverted position reduce load rating 40%. Strut section made from half slot channel.

S251HDGC



Cat. No.	A	Design Load/lb.
S251-14HDGC	14-1/2	1650
S251-20HDGC	20-1/2	800
S251-26HDGC	26-1/2	650
S251-32HDGC	32-1/2	500
S251-38HDGC	38-1/2	500

Hot dipped galvanized HDG(C) or stainless steel SS6(C) fittings are recommended to assemble aluminum channel.
Also available in Electrogalvanized (EG) and Gold galvanized dichromate (no suffix).

Standard Dimensions: Hole Spacing 13/16 in. from end, Hole Spacing 1-7/8 in. centers, Hole Size 9/16 in. dia., Fitting width 1-5/8 in.

Quick Clamp II (TBQC)

Quik-Clamp II

True one-piece construction — arrives ready to install.

NO breaking apart — half the installation time of break apart clamps.

Integral bolt and captive nut — no separate pieces to lose.

One size fits EMT and rigid conduit — takes the guesswork out of clamp selection. Pipe size and catalogue number stamped right on clamp.

Attaches a complete range of EMT and rigid conduit (1/2 in. to 4 in.) to strut channels.

Multi-driver combo bolt head — accepts a wrench, most screwdrivers or 1/2 in. nut driver.

Field-adjustable angle (± 4°) — easy installation even when strut is not square.

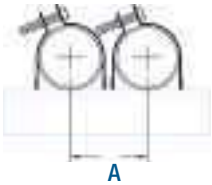
Embossed J-hooks increase loading capabilities.

T&B flex window provides wrapping action around pipes.

Easy reconfiguration without complete disassembly — easily accessible angled bolt allows for field adjustments and closer conduit spacing.

Electrogalvanized finish — additional corrosion resistance.

Ordering Information



Loading Data

Cat. No.	Design Load 1 Static Load Limit lb. (kg)	Design Load 2 lb. (kg)	Design Load 3 lb. (kg)
TBQC050	1-5/16 (33.5)	1-1/4 (31.5)	100
TBQC075	1-3/4 (44.5)	1-11/16 (43)	100
TBQC100	1-13/16 (46)	1-3/4 (44.5)	100
TBQC125	2-1/8 (54)	2 (51)	50
TBQC150	2-3/8 (60.5)	2-3/16 (55.5)	50
TBQC200	2-5/8 (66.5)	2-1/2 (63.5)	50
TBQC250	3-1/16 (78)	3-1/16 (78)	25
TBQC300	3-11/16 (93.5)	3-11/16 (93.5)	25
TBQC350	4-3/16 (106.5)	4-3/16 (106.5)	25
TBQC400	4-11/16 (119)	4-11/16 (119)	25

Cat. No.	Design Load 1 Static Load Limit lb. (kg)	Design Load 2 lb. (kg)	Design Load 3 lb. (kg)
TBQC050	200 (90)	50 (23)	50 (23)
TBQC075	200 (90)	50 (23)	50 (23)
TBQC100	200 (90)	50 (23)	50 (23)
TBQC125	200 (90)	50 (23)	50 (23)
TBQC150	200 (90)	50 (23)	50 (23)
TBQC200	200 (90)	50 (23)	50 (23)
TBQC250	350 (158)	50 (23)	50 (23)
TBQC300	350 (158)	50 (23)	50 (23)
TBQC350	350 (158)	50 (23)	50 (23)
TBQC400	350 (158)	50 (23)	50 (23)

Design Load 1 has a safety factor of 4. Design Loads 2 and 3 have a safety factor of 1.

Cobra® Cable and Pipe Clamp (CPC)

Cobra®

Clear markings on each clamp identify the catalogue number, min./max. outer cable diameters, EMT/Rigid trade sizes, CSA and UL stamps.

One size clamp works on **equal trade sizes for both EMT and rigid conduit.**

Works with **all depths of strut - 13/16 in. to 3-1/4 in.**

Two hooks on the same side make the clamp easy to install and keep conduits and cable square with strut.

Rugged stirrup and wide saddle design holds securely with no damage to conduit or cable.

Suggested design load is 200 lb. (1/2 in. to 2 in.); 350 lb. (2-1/2 in. to 4 in.). Safety factor 4:1 (safety factor = ratio of ultimate load to the design load).

Heavy-duty 5/16 in. hex bolt with multi-driver head (Robertson square, Phillips cross-recess and slot) provides full range of installation options. Virtually any tool will work!

Bright zinc finish - clamps are electogalvanized after fabrication for additional durability.

Ordering Information

Cat. No.	For EMT Trade Size	For EMT Conduit Trade Size	Cable O.D. Range (in.)	Static Load Limit (lb.) Safety Faster = 4	Quantity per Box
CPC050	1/2	1/2	0.650 – 0.890	200	100
CPC075	3/4	3/4	0.860 – 1.110	200	100
CPC100	1	1	1.100 – 1.400	200	100
CPC125	1 1/4	1 1/4	1.400 – 1.725	200	50
CPC150	1 1/2	1 1/2	1.690 – 1.980	200	50
CPC200	2	2	1.980 – 2.576	200	50
CPC250	2 1/2	2 1/2	2.576 – 3.060	350	25
CPC300	3	3	3.060 – 3.626	350	25
CPC350	3 1/2	3 1/2	3.626 – 4.126	350	25
CPC400	4	4	4.126 – 4.626	350	25

Standard material is commercial-grade, bright electrogalvanized steel. Stainless steel 316L is also available; add the suffix "SS6" to catalogue no. (i.e.: CPC050SS6). Stainless steel bolt head is hexagonal and slotted only.
Now available in aluminum. Add suffix AL to catalogue number.

King Cobra® Cable and Pipe Clamp (LKCPC)

King Cobra®

Superior design load capabilities for industrial applications: 350 lb. for 1/2 in. to 2 in. trade sizes; 450 lb. for 2-1/2 in. to 4 in. trade sizes.

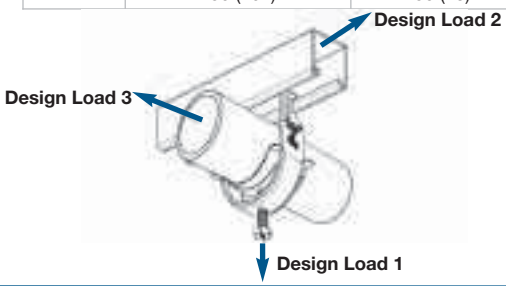
- Durable one-piece, heavy-duty steel construction – designed specifically for use in industrial applications.
- Embosses on shoulder and hooks increase loading capability and durability, preventing deformation of clamps.
- Rugged stirrup provides increased strength for heavier loads, minimizing deflection.
- Wider saddle design with anti-rotation tabs distributes load evenly over a larger surface area, preventing jacket damage.
- Increased corrosion protection - GoldGalv® (yellow zinc dichromate) finish stands up to harsh industrial applications. Compared to conventional electrogalvanization.
- Parallel hook design keeps conduit and cable square with strut.
- Heavy-duty 5/16 in. hex bolt.
- One size clamp works on equal trade sizes for both EMT and rigid conduit, simplifying clamp specification.

Ordering Information

Cat. No.	For EMT Trade Size inches (mm)	For Rigid Conduit Trade Size Inches (mm)	Cable Range (in.)	Quantity per Box
LKCPC050	1/2	1/2	0.650-0.890	100
LKCPC075	3/4	3/4	0.860-1.110	100
LKCPC100	1	1	1.100-1.400	100
LKCPC125	1-1/4	1-1/4	1.400-1.725	50
LKCPC150	1-1/2	1-1/2	1.690-1.980	50
LKCPC200	2	2	1.980-2.576	50
LKCPC250	2-1/2	2-1/2	2.576-3.060	25
LKCPC300	3	3	3.060-3.626	25
LKCPC350	3-1/2	3-1/2	3.626-4.126	25
LKCPC400	4	4	4.126-4.626	25

Loading Data

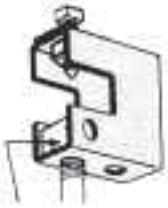
Cat. No.	Design Load 1 Static Load Limit lb. (kg)	Design Load 2 lb. (kg)	Design Load 3 lb. (kg)
	Safety Factor = 4		
LKCPC050	350 (159)	50 (23)	50 (23)
LKCPC075	350 (159)	50 (23)	50 (23)
LKCPC100	350 (159)	50 (23)	50 (23)
LKCPC125	350 (159)	50 (23)	50 (23)
LKCPC150	350 (159)	50 (23)	50 (23)
LKCPC200	350 (159)	50 (23)	50 (23)
LKCPC250	350 (159)	50 (23)	50 (23)
LKCPC300	450 (204)	50 (23)	50 (23)
LKCPC350	450 (204)	50 (23)	50 (23)
LKCPC400	450 (204)	50 (23)	50 (23)



Beam Clamps and Hanger Rods

Superstrut® Beam Clamps and Hanger Rods

U562HDG



E146

Rod Size	Design Load Load/lb.
1/2	800

E146 Square nut order separately. 1/2 in. set screw included.

For 20° swivel application use ES145-1/2 nut.

UM562HDGC

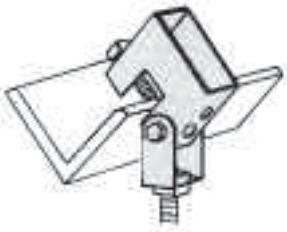
E146

Rod Size	Design Load Load/lb.
1/2	1200

E146 Square nut order separately. 1/2 in. set screw included.

For 20° swivel application use ES145-1/2 nut.

US562HDGC



Rod Size	Design Load Load/lb.
1/2	800

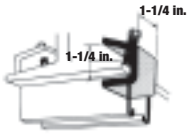
1/2 in. set screw included.

U568

Cat. No.	Beam Flange Width	A
U568-3EG	6	9
U568-4EG	9	12
U568-5EG	12	15

16 ga. material.

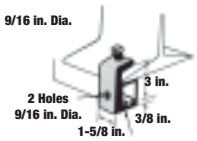
U514HDGC



3/8 in. x 1-1/2 in. set screw included.

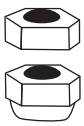
Design Load 750 lb./per pair.

U515HDGC



For all in.A in. series channel. 1/2 in. x 1-1/2 in. set screw included.
Design Load 800 lb.

ES145



Cat. No.	Size
ES145-3/8EG	3/8
ES145-1/2EG	1/2

E146

Cat. No.	Size
E146-1/4EG	1/4
E146-5/16EG	5/16
E146-3/8EG	3/8
E146-1/2EG	1/2
E146-5/8EG	5/8

H104

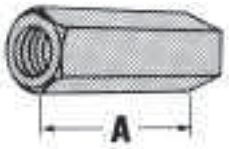
Standard length, 10 ft

Also available in stainless steel (304 and 316) in length of 6 ft.

NATIONAL COARSE THREAD

Cat. No.	Size	Threads per inch	Design Load lb.
H104-1/4x10EGC	1/4	20	150
H104-3/8x10EGC	3/8	16	610
H104-1/2x10EGC	1/2	13	1130
H104-5/8x10EGC	5/8	11	1810
H104-3/4x10EGC	3/4	10	2710
H104-7/8x10EGC	7/8	9	3770

H119



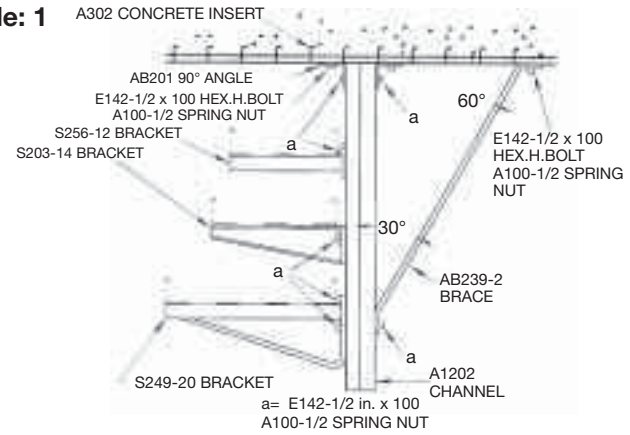
Order by product number, rod size, and finish. **Example: H119-1/2EGC.**

Rod Size	A
1/4	7/8
5/16	7/8
3/8	1-1/8
1/2	1-1/4
5/8	2-1/8
3/4	2-1/4
7/8	2-1/2
1	2-1/4

Finished & Materials: Gold Galv. dichromate (no suffix), Electrogalvanized (EG), Hot dipped Galvanized (HDGC), Stainless Steel Type 316 (SS6C).

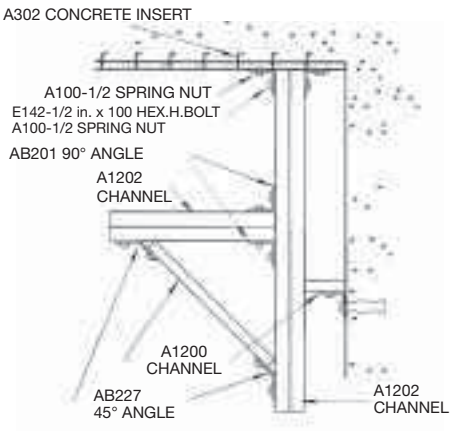
Design Applications / Mechanical Support

Example: 1



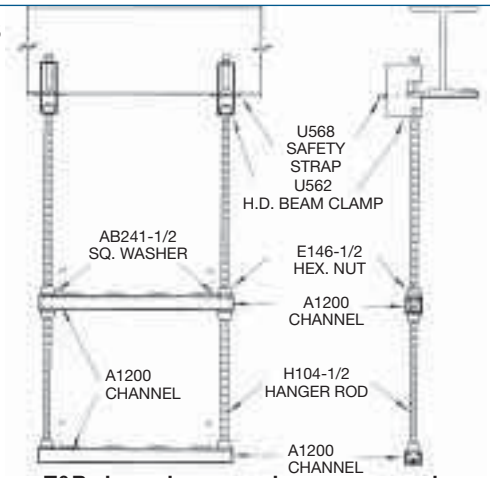
Suspended column, carrying brackets, braced to the ceiling.

Example: 2



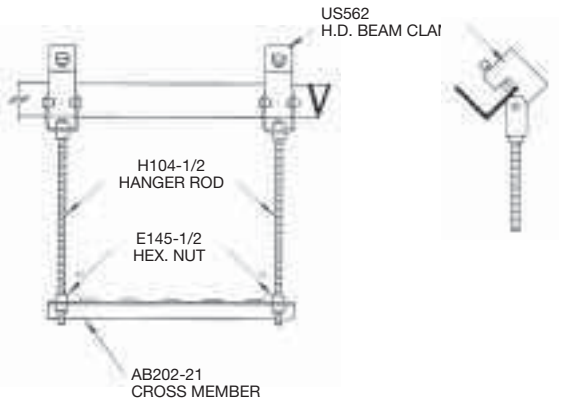
Suspended column, holding bracket and console braced to wall.

Example: 3



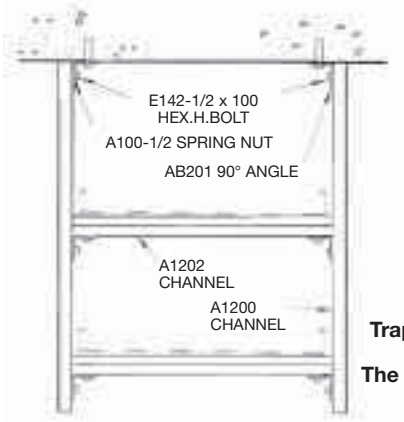
Trapeze, T&B channels are used as cross members.

Example: 4



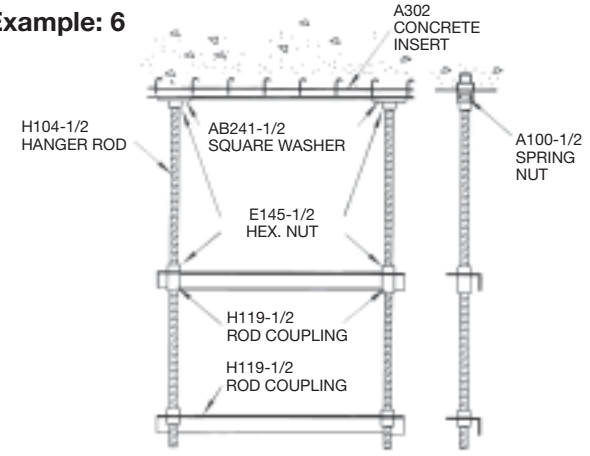
Sketch depicts the use of beam clamps on slanted beams.

Example: 5



Trapeze, constructed from T&B channels, fittings. The use of spot inserts is shown.

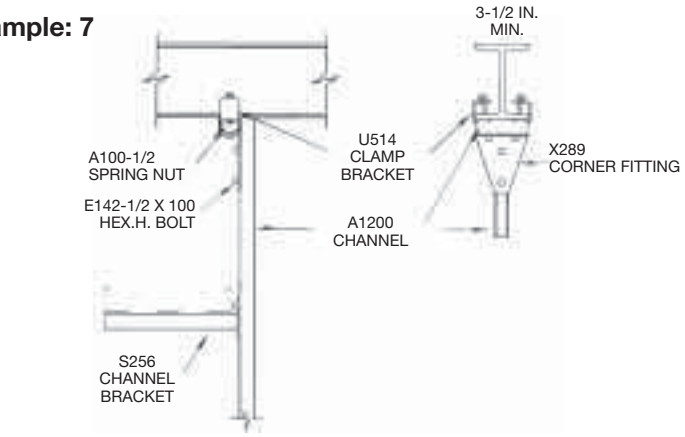
Example: 6



Trapeze, using T&B hanger rods, cross members.

Design Applications / Mechanical Support

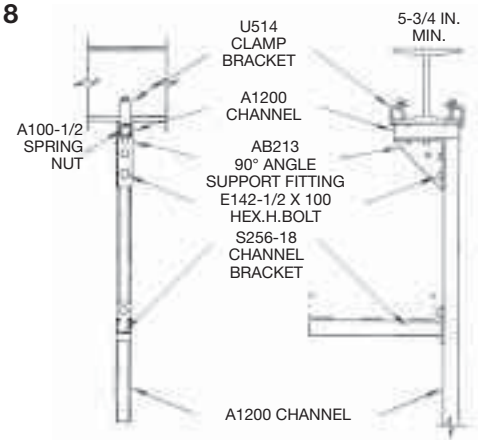
Example: 7



* NOTE: BRACE SHOULD BE USED FOR LENGTHS GREATER THEN 30 IN.

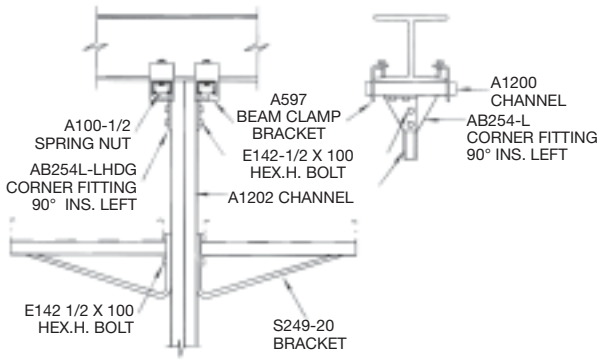
Single-sided bracket application

Example: 8



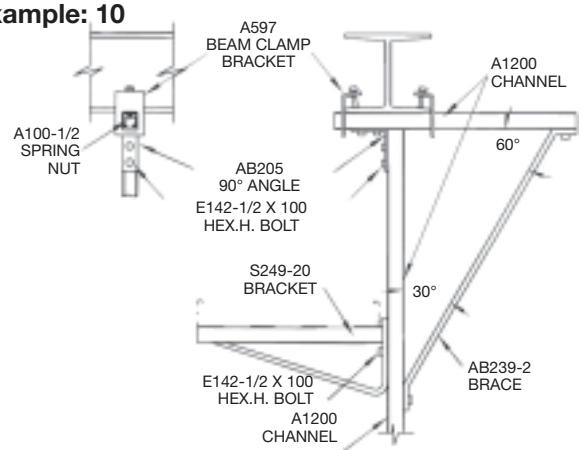
Single-sided bracket application

Example: 9



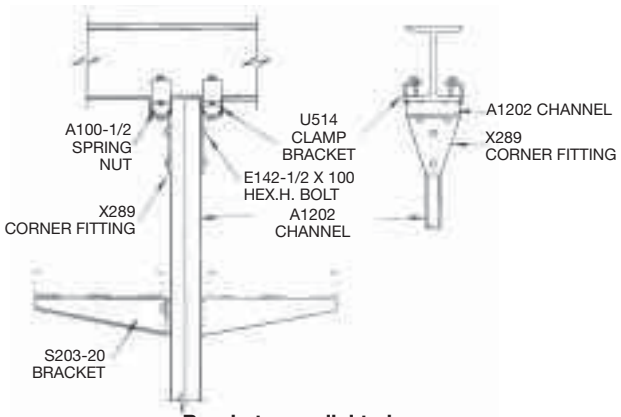
Two-sided Heavy-Duty application

Example: 10



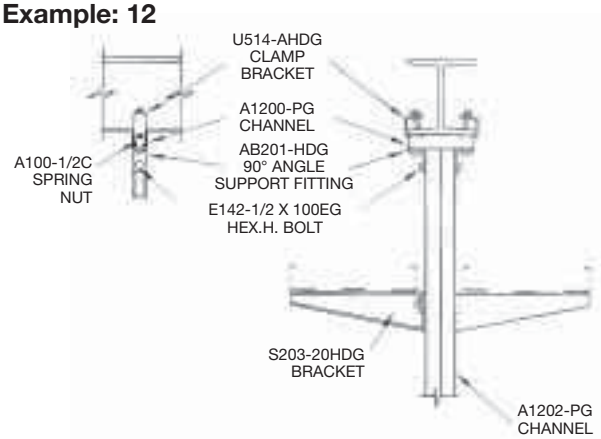
Heavy-Duty bracket application

Example: 11



Brackets parallel to beam

Example: 12



Brackets perpendicular to beam

Table of Contents

Technical Information

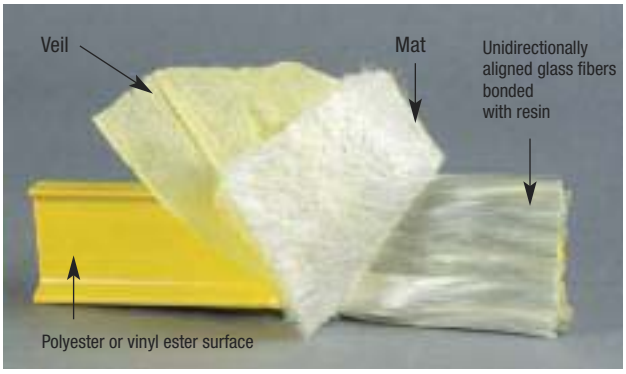
Why specify our Cable Tray?

Nonmetallic Cable Tray Systems have been tested and proven in the harsh environment of the offshore oil and gas industry. Subject to the corrosive conditions inherent in petroleum products, plus the daily punishment of exposure to wind, weather and saltwater – Nonmetallic Cable Tray has stood up!

Nonmetallic Cable Tray gives you the load capacity of steel plus the inherent characteristics afforded by our Pultrusion Technology: non-conductive, non-magnetic and corrosion-resistant. Although light in weight, their strength-to-weight ratio surpasses that of equivalent steel products. Nonmetallic Cable Tray will not rust, nor does it ever require painting. Available in both polyester and vinylester resin systems, they are manufactured to meet ASTM E-84, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635.

The CSA/NEMA loadings, both listed in this brochure, are load-tested in accordance with NEMA/CSA guidelines.

Nonmetallic Cable Tray comes in two colours: Slate grey (polyester resin) and Beige (vinyl ester resin). Custom colours are available on request. Minimum quantities required. Please contact your Regional Sales Office.



A surface veil is applied during the pultrusion process to ensure a resin-rich surface for superior corrosion resistance as well as an ultraviolet exposure barrier.

Technical Information

Typical Properties of Pultruded Components

Thomas & Betts Nonmetallic Cable Tray systems are manufactured from glass fiber-reinforced plastic shapes that meet ASTM E-84, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to ensure a resin-rich surface and ultraviolet resistance.

Properties	Test Method	Unit/ Value	3 in. & 4 in. Cable Channel		6 in. Cable Tray	
			Longitudinal	Transverse	Longitudinal	Transverse
Tensile Strength	ASTM D638	psi	30,000	7,000	40,000	4,500
Tensile Modulus	ASTM D638	psi x 106	2.5	0.8	3.2	0.6
Flexural Strength	ASTM D790	psi	30,000	10,000	40,000	10,000
Flexural Modulus	ASTM D790	psi x 106	1.6	0.8	2.1	0.8
Izod Impact	ASTM D256	ft-lbs/in	28	4	28	4
Compressive Strength	ASTM D695	psi	30,000	15,000	40,000	10,000
Compressive Modulus	ASTM D695	psi x 106	2.5	1.0	3.2	0.7
Barcol Hardness	ASTM D2583	-	45	45	45	45
Shear Strength	ASTM D732	psi	5,500	5,500	5,500	5,500
Density	ASTM D1505	lbs/in3	0.058-0.62	-	0.072-0.076	-
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	5.0 x 10-6	-	5.0 x 10-6	-
Water Absorption	ASTM D570	Max %	0.5		0.5	-
Dielectic Strength	ASTM D149	V/mil (vpm)	200	-	200	-
Flammability Classification	UL94	V0	-	-	-	-
Flame Spread	ASTM E-84	20 Max	-	-	-	-

Flame Rating Results

Test	Ignition	Burning	Rating
Flame Resistance (FTMS 406-2023)	75 seconds	75 seconds	-
Intermittent Flame Test (HLT- 15)	-	-	100
Flammability Test (ASTM D635)	None	0 second	-

Technical Information

Corrosion Guide

The information shown in this corrosion guide is based on full immersion laboratory tests and data generated from resin manufacturers. It should be noted that in some of the environments listed, splashes and spills may result in a more corrosive situation than indicated due to the evaporation of water. Regular wash down is recommended in these situations.

All data represents the best available information and is believed to be correct. The data should not be construed as a warranty of performance for that product as presented in these tables. User tests should be performed to determine suitability of service if there is any doubt or concern. Such variables as concentration, temperature, time of exposure and combined chemical effects of mixtures of chemicals make it impossible to specify the exact suitability of fiber-reinforced plastics in all environments. Thomas & Betts will be happy to supply material samples for testing. These recommendations should only be used as a guide and Thomas & Betts does not take responsibility for design or suitability of materials for service intended. In no event will Thomas & Betts be liable for any consequential or special damages for any defective material or workmanship including, without limitation, labor charges or other expenses or damage to property resulting from loss of materials or profits or increased expenses of operations.

CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER	
	Max Wt. %	Max Oper. Temp °F	Max Wt. %	Max Oper. Temp °F
Acetic Acid	10	190	10	210
Acetic Acid	50	125	50	180
Acetone	N/R	N/R	100	75
Aluminum Chloride	SAT	170	SAT	200
Aluminum Hydroxide	SAT	160	SAT	170
Aluminum Nitrate	SAT	150	SAT	170
Aluminum Sulfate	SAT	180	SAT	200
Ammonium Chloride	SAT	170	SAT	190
Ammonium Hydroxide	1	100	10	150
Ammonium Hydroxide	28	N/R	28	100
Ammonium Carbonate	N/R	N/R	SAT	150
Ammonium Bicarbonate	15	125	SAT	130
Ammonium Nitrate	SAT	160	SAT	190
Ammonium Persultate	SAT	N/R	SAT	150
Ammonium Sulfate	SAT	170	SAT	200
Amyl Alcohol	ALL	N/R	ALL	90
Amyl Alcohol Vapor	-	140	-	120
Benzene	N/R	N/R	100	140
Benzene Sulfonic Acid	25	110	SAT	200
Benzoic Acid	SAT	150	SAT	200
Benzoyl Alcohol	100	N/R	100	N/R
Borax	SAT	170	SAT	200
Calcium Carbonate	SAT	170	SAT	200
Calcium Chloride	SAT	170	SAT	200
Calcium Hydroxide	25	70	25	165
Calcium Nitrate	SAT	180	SAT	200
Calcium Sulfate	SAT	180	SAT	200
Carbon Disulfide	N/R	N/R	N/R	N/R
Carbonic Acid	SAT	130	SAT	180
Carbon Dioxide Gas	-	200	-	200
Carbon Monoxide Gas	-	200	-	200
Carbon Tetrachloride	N/R	N/R	100	75
Chlorine, Dry Gas	-	140	-	170
Chlorine, Wet Gas	-	N/R	-	180
Chlorine Water	SAT	80	SAT	180

CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER	
	Max Wt. %	Max Oper. Temp °F	Max Wt. %	Max Oper. Temp °F
Chromic Acid	5	70	10	120
Citric Acid	SAT	170	SAT	200
Copper Chloride	SAT	170	SAT	200
Copper Cyanide	SAT	170	SAT	200
Copper Nitrate	SAT	170	SAT	200
Crude Oil, Sour	100	170	100	200
Cyclohexane	N/R	N/R	N/R	N/R
Cyclohexane, Vapor	ALL	100	ALL	130
Diesel Fuel	100	160	100	180
Diethyl Ether	N/R	N/R	N/R	N/R
Dimethyl Phthalate	N/R	N/R	N/R	N/R
Ethanol	50	75	50	90
Ethyl Acetate	N/R	N/R	N/R	N/R
Ethylene Chloride	N/R	N/R	N/R	N/R
Ethylene Glycol	100	90	100	200
Fatty Acids	SAT	180	SAT	200
Ferric Chloride	SAT	170	SAT	200
Ferric Nitrate	SAT	170	SAT	200
Ferric Sulfate	SAT	170	SAT	200
Ferrous Chloride	SAT	170	SAT	200
Fluoboric Acid	N/R	N/R	SAT	165
Fluosilicic Acid	N/R	N/R	SAT	70
Formaldehyde	50	75	50	100
Formic Acid	N/R	N/R	50	100
Gasoline	100	80	100	150
Glucose	100	170	100	200
Glycerine	100	150	100	200
Heptane	100	110	100	200
Hexane	100	90	100	130
Hydrobromic Acid	50	120	50	120
Hydrochloric Acid	10	150	10	200
Hydrochloric Acid	20	140	20	190
Hydrochloric Acid	37	75	37	95
Hydrochloric Acid	N/R	N/R	15	80
Hydrogen Bromide, Dry	100	190	100	200

-: No Information Available
N/R: Not Recommended
SAT: Saturated Solution
FUM: Fumes

Technical Information

Corrosion Guide (cont'd)

CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER	
	Max Wt. %	Max Oper. Temp °F	Max Wt. %	Max Oper. Temp °F
Hydrogen Bromide, Wet	100	75	100	130
Hydrogen Chloride	-	120	-	200
Hydrogen Peroxide	5	100	30	100
Hydrogen Sulfide, Dry	100	170	100	210
Hydrogen Sulfide, Wet	100	170	100	210
Hypochlorous Acid	20	80	20	150
Isopropyl Alcohol	N/R	N/R	15	80
Kerosene	100	140	100	80
Lactic Acid	SAT	170	SAT	200
Lead Acetate	SAT	170	SAT	200
Lead Chloride	SAT	140	SAT	200
Lead Nitrate	SAT	-	SAT	200
Linseed Oil	100	150	100	190
Lithium Chloride	SAT	150	SAT	190
Magnesium Carbonate	SAT	140	SAT	170
Magnesium Chloride	SAT	170	SAT	200
Magnesium Hydroxide	SAT	150	SAT	190
Magnesium Nitrate	SAT	140	SAT	180
Magnesium Sulfate	SAT	170	SAT	190
Mercuric Chloride	SAT	150	SAT	190
Mercurous Chloride	SAT	140	SAT	180
Methyl Ethyl ketone	N/R	N/R	N/R	N/R
Mineral Oils	100	170	100	200
Monochlorobenzene	N/R	N/R	N/R	N/R
Naphtha	100	140	100	170
Nickel Chloride	SAT	170	SAT	200
Nickel Nitrate	SAT	170	SAT	200
Nickel Sulfate	SAT	170	SAT	200
Nitric Acid	5	140	5	150
Nitric Acid	20	70	20	100
Oleic Acid	100	170	100	90
Oxalic Acid	ALL	75	ALL	120
Paper Mill Liquors	-	100	-	120
Perchlorethylene	100	N/R	100	N/R
Perchloric Acid	N/R	N/R	10	150
Perchloric Acid	N/R	N/R	30	80
Phosphoric Acid	10	160	10	200
Phosphoric Acid	100	120	100	200
Potassium Alum. Sulfate	SAT	170	SAT	200
Potassium Bicarbonate	50	80	50	140
Potassium Bichromate	SAT	170	SAT	200
Potassium Carbonate	10	N/R	10	120
Potassium Chloride	SAT	170	SAT	200

CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER	
	Max Wt. %	Max Oper. Temp °F	Max Wt. %	Max Oper. Temp °F
Potassium Hydroxide	N/R	N/R	25	150
Potassium Nitrate	SAT	170	SAT	200
Potassium Permanganate	100	80	100	210
Potassium Sulfate	SAT	170	SAT	200
Propylene Glycol	ALL	170	ALL	200
Phthalic Acid	-	-	SAT	200
Sodium Acetate	SAT	160	SAT	200
Sodium Benzoate	SAT	170	SAT	200
Sodium Bicarbonate	SAT	160	SAT	175
Sodium Bisulfate	ALL	170	ALL	200
Sodium Bromide	ALL	170	ALL	200
Sodium Carbonate	10	80	35	160
Sodium Chloride	SAT	170	SAT	200
Sodium Cyanide	SAT	170	SAT	200
Sodium Hydroxide	N/R	N/R	50	150
Sodium Hydroxide	N/R	N/R	25	80
Sodium Hypochloride	N/R	N/R	10	150
Sodium Monophosphate	SAT	170	SAT	200
Sodium Nitrate	SAT	170	SAT	200
Sodium Sulfate	SAT	170	SAT	200
Sodium Thiosulfate	ALL	100	ALL	120
Stannic Chloride	SAT	160	SAT	190
Styrene	N/R	N/R	N/R	N/R
Sulfated Detergent	0/50	170	0/50	200
Sulfur Dioxide	100	80	100	200
Sulfur Trioxide	100	80	100	200
Sulfuric Acid	93	N/R	93	N/R
Sulfuric Acid	50	N/R	50	180
Sulfuric Acid	25	75	25	190
Sulfurous Acid	SAT	80	N/R	N/R
Tartaric Acid	SAT	170	SAT	200
Tetrachloroethylene	N/R	N/R	FUM	75
Toluene	N/R	N/R	N/R	N/R
Trisodium Phosphate	N/R	N/R	SAT	175
Urea	SAT	130	SAT	140
Vinegar	100	170	100	200
Water, Distilled	100	170	100	190
Water, Tap	100	170	100	190
Water, Sea	SAT	170	SAT	190
Xylene	N/R	N/R	N/R	N/R
Zinc Chloride	SAT	170	SAT	200
Zinc Nitrate	SAT	170	SAT	200
Zinc Sulfate	SAT	170	SAT	200

-: No Information Available
N/R: Not Recommended
SAT: Saturated Solution
FUM: Fumes

Technical Information

CSA & NEMA Loading Classes

LOADING

Select the Tray Class / Load Capacity

The standard classes of cable trays, as related to their maximum design loads and to the associated design support spacing based on a simple beam span requirement, shall be designated in accordance with Table 1.

Please note the load ratings in Table 1 are those most commonly used. Other load ratings are acceptable.

TABLE 1

TRADITIONAL NEMA DESIGNATIONS USA see Clauses 4.8.1, 4.8.2 and 6.1.2 (c)

Load		Span, m (ft.)				
kg/m	(lb/ft.)	1.5 (5)	2.4	3.0 (10)	3.7 (12)	6.0 (20)
37	(25)	5AA	8AA	10AA	12AA	20AA
74	(50)	5A	8A	10A	12A	20A
112	(75)	-	8B	-	12B	20B
149	(100)	-	8C	-	12C	20C

TABLE 2

LOAD / SPAN CLASS DESIGNATION CANADA see Clauses 4.8.1, 4.8.2 and 6.1.2(c)

Load		Span, m (ft.)						
kg/m	(lb/ft.)	1.5 (5)	2.0	2.5	3.0 (10)	4.0	5.0	6.0 (20)
37	(25)				A			
45	(30)			A				
62	(42)		A					
67	(45)							D
82	(55)						D	
97	(65)				C			
99	(67)	A						
112	(75)							E
113	(76)					D		
119	(80)			C				
137	(92)						E	
164	(110)		C					
179	(120)				D			
189	(127)					E		
259	(174)	C						
299	(200)				E			

Technical Information

LOADING CAPACITY

Strength properties of reinforced plastics are reduced when continuously exposed to elevated temperatures. Working loads shall be reduced based on the following:

Cable Loads The cable load is the total weight, expressed in lb./ft., of all the cables that will be placed in the cable tray.

Snow Loads Depending on the area, snowfall could indicate an additional design load. If snowfall is a factor and the tray has a solid cover in outdoor installations, a minimum load of 5 lb. per square foot should be used.

Ice Loads If a cable tray system is subject to icing conditions, usually only the top surface or cover and the windwardside will be coated with any significant amount. It is generally assumed that ice weighs 57 lb. per cubic foot.

Wind Loads All outdoor cable tray installations should factor in wind loads, especially the pressure exerted on siderails of ladder trays. There have also been instances of strong winds lifting covers off trays, which can be minimized with the use of wraparound cover clamps.

CONCENTRATED LOADS

A concentrated static load is not included in Table 1 (page A234). Some user applications may require that a given concentrated static load be imposed over and above the working load.

Such a concentrated static load represents a static weight applied on the centerline of the tray at midspan. When so specified, the concentrated static load may be converted to an equivalent uniform load (W_e) in kilograms/metre (pounds/linear foot),

using the following formula, and added to the static weight of cable in the tray:

$$W_e = \frac{2 \times (\text{concentrated static load, kg (lb.)})}{\text{Span length, m (ft.)}}$$

This combined load may be used to select a suitable load/span designation. If the combined load exceeds the working load shown on pages A238-A242, the manufacturer should be consulted.

EFFECT OF TEMPERATURE

Strength properties of reinforced plastics are reduced when continuously exposed to elevated temperatures. Working loads shall be reduced based on the following:

Temperature		Approximate Percent of Strength
°C	(°F)	
23.8	(75)	100
37.7	(100)	90
51.6	(125)	78
65.5	(150)	68
79.4	(175)	60
93.3	(200)	52

NEMA Standard 8-10-1986

If unusual temperature conditions exist, the manufacturer should be consulted.

Technical Information

THERMAL CONTRACTION AND EXPANSION

It is important that thermal contraction and expansion be considered when installing cable tray systems. The length of the straight cable tray runs and the temperature differential govern the number of expansion splice plates required (see Figure 1 below). The cable tray should be anchored at the support nearest to its midpoint between the expansion splice plates and secured by expansion guides at all other support locations (see Figure 2). The cable tray should be permitted longitudinal movement in both directions from that fixed point.

Accurate gap setting at the time of installation is necessary for the proper operation of the expansion splice plates. The following procedure should assist the installer in determining the correct gap: (see Figure 3)

1. Plot the highest expected tray temperature on the maximum temperature line.
2. Plot the lowest expected tray temperature on the minimum temperature.
3. Draw a line between the maximum and minimum points.
4. Plot the tray temperature at the time of installation to determine the gap setting.

FIGURE 1

Expansion or Contraction for Various Temperature Differences

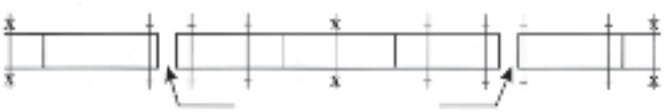
Temperature differential		Max. distance between expansion connector* for 1 in. expansion		Max. distance between expansion connector* for 5/8 in. expansion	
°C	(°F)	metres	(feet)	metres	(feet)
14	(25)	203,3	(667)	127,1	(417)
28	(50)	101,5	(333)	63,3	(208)
42	(75)	67,6	(222)	42,3	(139)
56	(100)	50,9	(167)	31,7	(104)
70	(125)	40,5	(133)	25,2	(83)
83	(150)	33,8	(111)	21,0	(69)
97	(175)	28,9	(95)	17,9	(59)

Gap set and hold down/guide location, see installation instruction above.

*1 slotted hole in each expansion connector allow 5/8 total expansion or contraction.

FIGURE 2

TYPICAL CABLE TRAY INSTALLATION

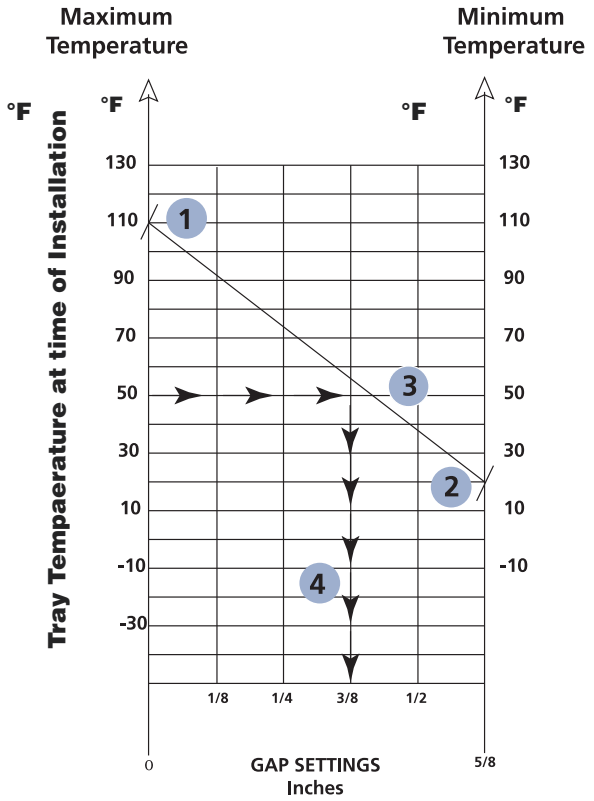


X : Denotes hold-down clamp (anchor) at support.

- : Denotes expansion guide/clamp at support.

FIGURE 3

PROPER GAP SETTINGS



Technical Information

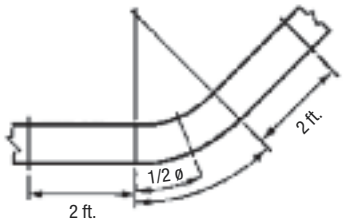
Installation Guidelines

Installation of Thomas & Betts Nonmetallic Cable Tray should be made in accordance with the standards set by NEMA VE2-2000 Publication and CSA Standards.

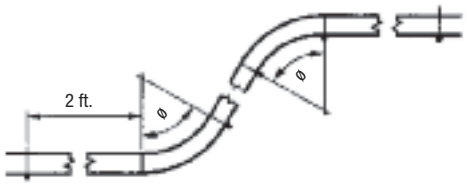
- Always observe common safety practices when assembling tray and fittings. Installations generally require some field cutting. Dust created during fabrication presents no serious health hazard, but skin irritation may be experienced by some workers.
- Operators of saws and drills should wear masks, long-sleeve shirts or coveralls.
- Fabrication with Nonmetallic Cable Tray is relatively easy and comparable to working with wood. Ordinary hand tools may be used in most cases.
- Avoid excessive pressure when sawing or drilling. Too much force can rapidly dull tools and also produce excessive heat which softens the bonding resin in the Nonmetallic Cable Tray resulting in a ragged edge rather than a cleancut edge.
- Field cutting is simple and can be accomplished with a circular power saw with an abrasive cut-off wheel (masonry type) or hack saw (24 to 32 teeth per inch).
- Drill Nonmetallic as you would drill hardwood. Standard twist drills are more than adequate.
- Any surface that has been drilled, cut, sanded or otherwise broken, **must be sealed** with a compatible resin.
- Carbide tipped saw blades and drill bits are recommended when cutting large quantities.
- Support the Nonmetallic Cable Tray material firmly during cutting operations to keep material from shifting which may cause chipping at the cut edge.
- Each tray section length should be equal to or greater than the support span.
- When possible, the splice should be located at quarter span.
- Fittings should be supported as per NEMA VE2-2006 Section 4.4.

Technical Information

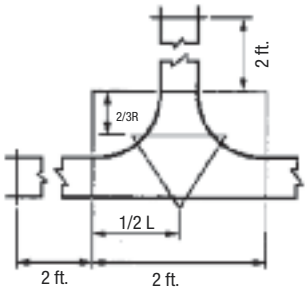
CABLE TRAY SUPPORT LOCATIONS FOR FITTINGS



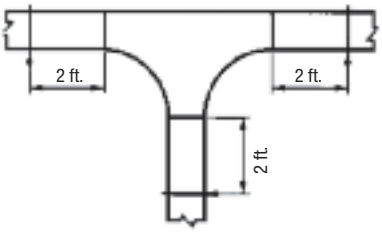
Horizontal Elbow



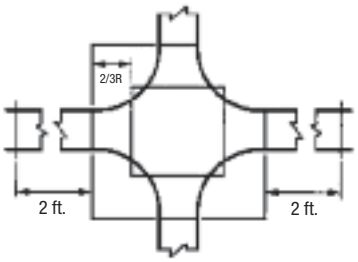
Vertical Elbow



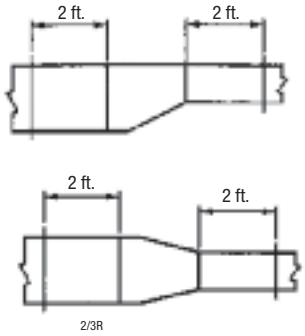
Horizontal Tee



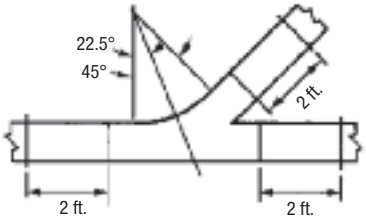
Horizontal Tee



Horizontal Cross



Horizontal Reducer



Horizontal Wye

Note: ø = 30°, 45°, 60°, 90° (degree of fitting)

Technical Information

Sample Recommended Specifications

CABLE TRAY SYSTEM

- Cable Tray System shall be made of straight sections, fittings and accessories as defined in the latest CSA/NEMA standards publication.

CABLE TRAY DESIGN

- Straight section structural elements; side rails, rungs and splice plates shall be pultruded from glass fiber reinforced polyester or vinyl ester resin.
- Pultruded shapes shall be constructed with a surface veil to ensure a resin-rich and ultraviolet resistant surface.
- Pultruded shapes shall meet ASTM E-84, Class 1 flame-rating and self-extinguishing requirements of ASTM D-635.

CONSTRUCTION

- Straight section lengths will be 120 inches (10 ft.) or 240 inches (20 ft.) standard.
- Side rails will be inward "C" configuration and be predrilled to accept splice plates.
- Overall heights shall be 6 in., 4 in. or 3 in. respectively.
- Loading depths for cable tray systems shall be 5 in., 3 in. or 2 in. as per CSA/NEMA tolerances
- Loading classifications arid test specimens shall be per CSA/NEMA.

FITTINGS

- Molded fittings shall be formed with a minimum 3 in. tangent following the radius.
- 3 in. or 5 in. loading depth systems shall have 90° and 45° molded fittings in 12 in. or 24 in. radius.
- All fittings not included in above statement should be of mitered construction.
- Width (usable inside tray width) shall be 6 in., 9 in., 12 in., 18 in., 24 in., 30 in. or 36 in.
- Outside width shall not exceed inside width by more than a total of 2 in.
- Straight and expansion splice plates will be of stainless steel or fiberglass design with an eight-bolt pattern in 5 in. fill systems and four-bolt pattern in 3 in. and 2 in. fill systems.
- Dimension tolerances will be per CSA/NEMA.
- Cable tray must have integral connection between side rails and rungs consisting of Nonmetallic mechanical fasteners and adhesive bonding.

MANUFACTURE

- All manufacturing practices will be in accordance with CSA/NEMA.
- Cable trays shall be by Thomas & Betts, or approved CSA/NEMA member.

Technical Information

Application Photos

Nonmetallic Cable Tray Systems

have been tested and proven
in the harsh environment of the
offshore oil and gas industry.
Subject to the corrosive conditions
inherent in petroleum products,
plus the daily punishment of exposure
to wind, weather and saltwater –

Nonmetallic Cable Tray Systems have stood up to these challenges.

Horizontal and vertical drops, exterior installation

Horizontal (suspended) tray, with vertical drop to machinery below

Vertical cable dropout from horizontal run

Horizontal bends change direction of tray suspended from deck above

Straight Lengths

Straight Section Numbering System

To order

To order a straight section of cable tray, select the appropriate size and material from the charts below and place those symbols in the sequence shown to form the complete catalogue number.

SELECTION PROCESS					
1	**2**	**3**	**4**	**5**	**6**
Nonmetallic cable tray system	Select the correct Thomas & Betts series cable tray using the Load Data for straight sections found on pages A239-A244.	Select the resin required. Refer to Corrosion Guide on pages A232-A233 of the Technical Data section for the effect of enviromental conditions on the desired material. For the effective temperature range, see page A234 of the same section.	Select the rung spacing required to properly support cables in tray.	Select the desired width in inches.	Select the straight section length in inches.

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 4**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	3 4 6B 6C H6C	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft

Example: NM-4P0924-120 for 4 ft side rail, polyester resin, 9 in. rung spacing, 24 in. wide, 120 in. (10 ft.) length.

Note : One pair of stainless steel SS6 splice plates with SS6 hardware included with each length.

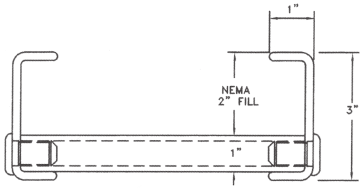
For other types of splice plates, see page A272.

Straight Lengths

3 in. Straight Section

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 3**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	3	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft

Side Rail Height : 3 in. (2 in. loading depth)



Specifications

Series	Safety Factor	Support Span (ft.)					
			6	8	10	12	14
Series 3: Loading-NEMA 8C							
3	1.5	Design Load lb./ft.	257	145	93	64	47
		Deflection in.	1.3	2.3	3.7	5.3	7.2
		K Factor	0.005	0.016	0.040	0.083	0.153

Loading

- CSA load class: C/3M
- NEMA 8C
- 12 in. rung spacing

Splice Plates

One pair of stainless steel SS6 splice plates with SS6 (316 Stainless Steel) hardware included.

Deflection factor

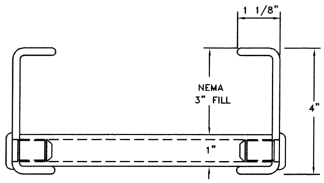
To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor.

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Straight Lengths

4 in. Straight Section

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 4**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	4	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft



Side Rail Height : 4 in. (3 in. loading depth)

Specifications

Series	Safety Factor	Support Span (ft.)					
			10	12	14	16	18
Series 4: Loading-NEMA 12C							
4	1.5	Design Load lb./ft.	157	109	80	61	48
		Deflection in.	2.1	3.0	4.0	5.3	6.7
		K Factor	0.013	0.028	0.050	0.087	0.140

Loading

- CSA load class: C/3M
- NEMA 12C
- 12 in. rung spacing

Splice Plates

One pair of stainless steel SS6 splice plates with SS6 (316 Stainless Steel) hardware included.

Deflection Factor

To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor.

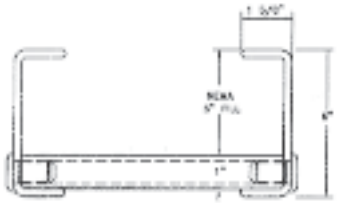
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Straight Lengths

6 in. Straight Section

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 6B**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	6B	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft

Side Rail Height : 6 in. (5 in. loading depth)



Specifications

Series	Safety Factor	Support Span (ft.)					
			12	14	16	18	20
Series 6B: Loading-NEMA 20B							
6B	1.5	Design Load lb./ft.	254	186	143	113	91
		Deflection in.	1.6	2.2	2.8	3.6	4.4
		K Factor	0.006	0.012	0.020	0.032	0.048

Loading

- CSA load class: E/3M
- NEMA 20B
- 12 in. rung spacing

Splice Plates

One pair of stainless steel SS6 splice plates with SS6 (316 Stainless Steel) hardware included.

Deflection factor

To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor.

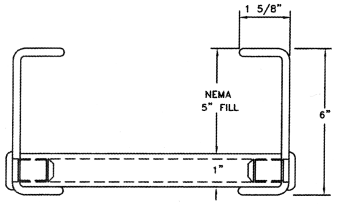
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Straight Lengths

6 in. Straight Section

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 6C**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	6C	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft

Side Rail Height : 6 in. (5 in. loading depth)



Specifications

Series	Safety Factor	Support Span (ft.)					
			12	14	16	18	20
Series 6C: Loading-NEMA 20C-S.F.1.5							
6C	1.5	Design Load lb./ft.	356	262	200	158	128
		Deflection in.	1.6	2.2	2.9	3.7	4.6
		K Factor	0.004	0.008	0.015	0.023	0.136

Loading

- CSA load class: E/3M, D/6M
- NEMA 20C
- 12 in. rung spacing

Splice Plates

One pair of stainless steel SS6 splice plates with SS6 (316 Stainless Steel) hardware included.

Deflection Factor

To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor.

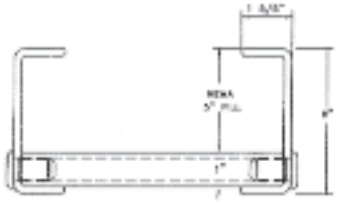
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Straight Lengths

6 in. Straight Section

STRAIGHT SECTION CATALOGUE SELECTOR					
NM	**- 6HC**	**P**	**09**	**24**	**- 120**
CABLE TRAY SYSTEM	**SERIES**	**MATERIAL**	**RUNG SPACING (in.)**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	6HC	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18	06 09 12 18 24 30 36	120 in. = 10 ft 240 in. = 20 ft

Side Rail Height : 6 in. (5 in. loading depth)



Specifications

Series	Safety Factor	Support Span (ft.)					
			12	14	16	18	20
Series H6C: Loading-NEMA 20C-S.F.2.0							
6HC	1.5	Design Load lb./ft.	386	283	217	171	139
		Deflection in.	1.8	2.4	3.2	4.0	5.0
		K Factor	0.005	0.008	0.015	0.023	0.036
	2.0	Design Load lb./ft.	289	212	163	129	104
		Deflection in.	1.3	1.8	2.4	3.0	3.7
		K Factor	0.004	0.008	0.015	0.023	0.036

Loading

- D/6M (with safety factor of 1.5 only), E/3M
- NEMA 20C
- 12 in. rung spacing

Splice Plates

One pair of stainless steel SS6 splice plates with SS6 (316 Stainless Steel) hardware included.

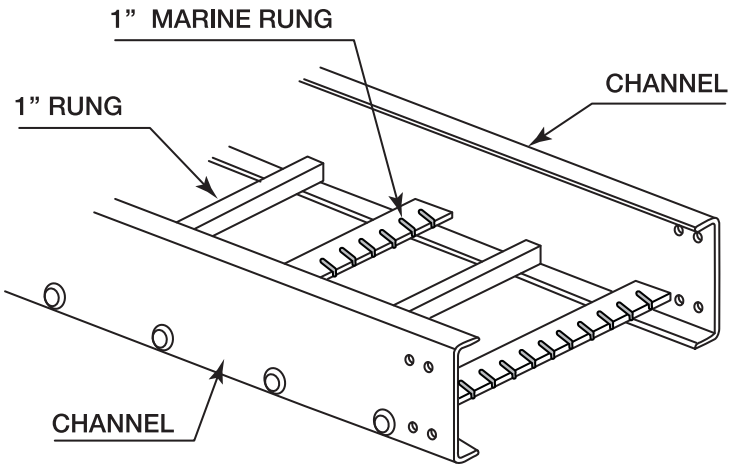
Deflection factor

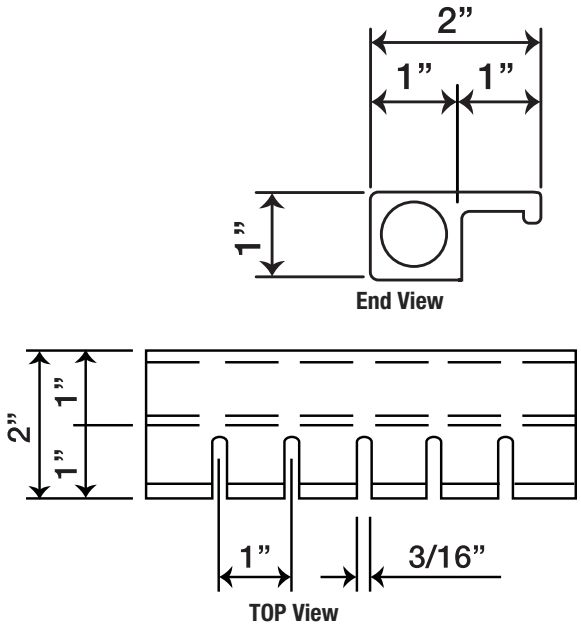
To calculate deflection at any span length for lighter loads than listed, multiply the load by the K factor.

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

Fittings

Marine Rung Cable Tray





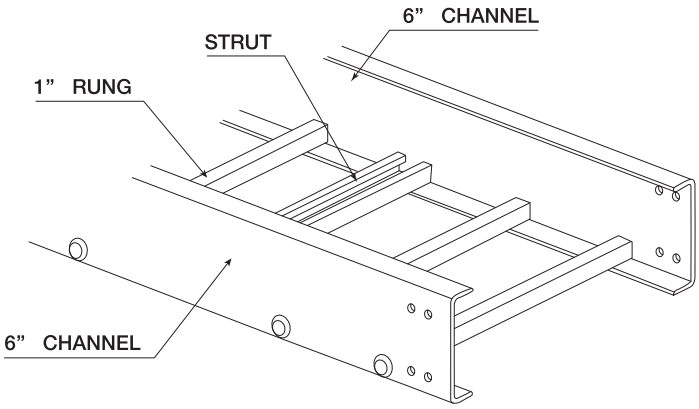
Meets U.S. Coast Guard Requirements

Catalogue Number: Add MR after rung spacing

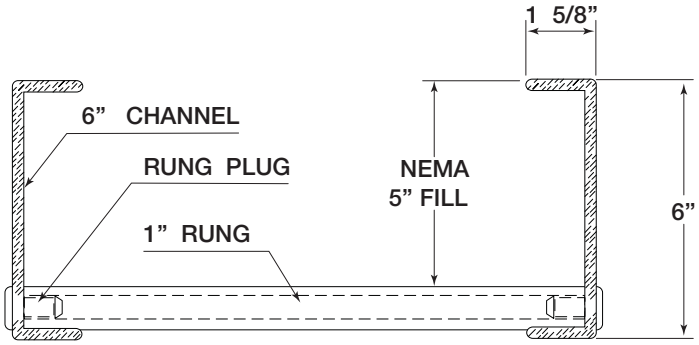
Example: 4P-09MR-24-120

Call your Regional Sales Office for documentation.

Strut Rung Cable Tray



Isometric View



Section View

Catalogue Number: Add SR after rung spacing

Call your Regional Sales Office for documentation.

Fittings

Fittings Numbering System

To order

To order a fitting for a complete cable tray system, select the appropriate size, material, angle, type and radius from the charts below. Place those symbols in the sequence shown to form the complete catalogue number.

SELECTION PROCESS

1	2	3	4	5	6	7	8
Nonmetallic cable tray system	For mitered fittings when available	Select height of fitting required for application. This should match tray series and height selection.	Select the resin required. Refer to Corrosion Guide on pages A232-A233 of the Technical Data section for the effect of enviromental conditions on the desired material, for the effective temperature range, see page A236 of the same section.	Select the desired width in inches	Angle of fitting required for application	Type of fitting required for application. See choices below.	Radius required for application. This would be determined by allowable radius of cables being installed. Standard radius is 24".

FITTING SECTION CATALOGUE SELECTOR

NM	- M	4	P	24	90	HB	24
CABLE TRAY SYSTEM	MITERED	SERIES	MATERIAL	WIDTH (in.)	ANGLE	TYPE	RADIUS (in.)
Nonmetallic	When available	3 4 6	P - Polyester Resin V- Vinyl Ester Resin	06 09 12 18 24 30 36	30˚ 45˚ 60˚ 90˚	HB-Horizontal Bend HT-Horizontal Tee HX-Horizontal Cross VI-Vertical Inside Bend VO-Vertical Outside Bend VT-Vertical Tee VTD-Vertical Tee, Down VTU-Vertical Tee, Up RR-Right Reducer LR-Left Reducer SR-Straight Reducer HYR-Horizontal Wye, Right HYL-Horizontal Wye, Left CSF-Cable Support Fitting	12 24 36

Example: NM-4P0924-120 for 4 ft side rail, polyester resin, 9 in. rung spacing, 24 in. wide, 120 in. (10 ft.) length.

Note : One pair of stainless steel SS6 splice plates with SS6 hardware included with each length.

For other types of splice plates, see page A272.

Note : Custom Fittings are available on request. Contact your Regional Sales Office.

Fittings

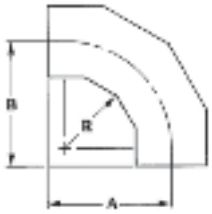
3 in. Horizontal Bends

PART NUMBERING SYSTEM

NM	-	M	3	P	24	90	HB	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

Sample mitered fitting

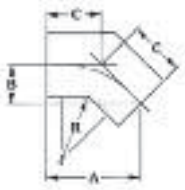
90º Horizontal Bend



-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M3-(Matl)-06-90HB12	20-3/8	20-3/8
	9	NM-M3-(Matl)-09-90HB12	21-7/8	21-7/8
	12	NM-M3-(Matl)-12-90HB12	22-3/4	22-3/4
	18	NM-M3-(Matl)-18-90HB12	26-5/16	26-5/16
	24	NM-M3-(Matl)-24-90HB12	29-3/8	29-3/8

One pair of stainless steel SS6 splice plates with SS6 hardware included.

45º Horizontal Bend



-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)	Dimensions C (in.)
12	6	NM-M3-(Matl)-06-45HB12	22-13/16	9-7/16	13-3/8
	9	NM-M3-(Matl)-09-45HB12	23-7/8	9-7/8	14
	12	NM-M3-(Matl)-12-45HB12	24-7/8	10-5/16	14-5/8
	18	NM-M3-(Matl)-18-45HB12	27	11-3/16	15-7/8
	24	NM-M3-(Matl)-24-45HB12	29-1/8	12-1/16	17-1/16

One pair of stainless steel SS6 splice plates with SS6 hardware included.

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

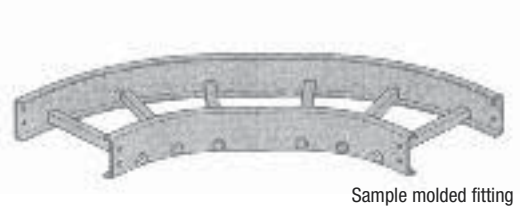
Fittings

4 in. Horizontal Bends

PART NUMBERING SYSTEM

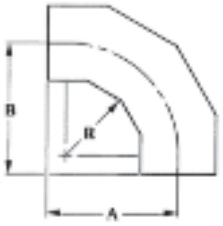
NM	-	M	4	P	24	90	HB	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

† For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-4P-24-90HB12



Sample molded fitting

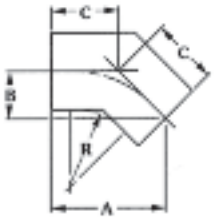
90º Horizontal Bend



One pair of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M4-(Matl)-06-90HB12	22-1/4	22-1/4
	9	NM-M4-(Matl)-09-90HB12	23-3/4	23-3/4
	12	†NM-M4-(Matl)-12-90HB12	25-1/4	25-1/4
	18	†NM-M4-(Matl)-18-90HB12	28-1/4	28-1/4
	24	†NM-M4-(Matl)-24-90HB12	31-1/4	31-1/4
	30	†NM-M4-(Matl)-30-90HB12	34-1/4	34-1/4
	36	†NM-M4-(Matl)-36-90HB12	37-1/4	37-1/4
24	6	†NM-M4-(Matl)-06-90HB24	34-1/4	34-1/4
	9	NM-M4-(Matl)-09-90HB24	35-3/4	34-3/4
	12	†NM-M4-(Matl)-12-90HB24	37-1/4	37-1/4
	18	†NM-M4-(Matl)-18-90HB24	40-1/4	40-1/4
	24	†NM-M4-(Matl)-24-90HB24	43-1/4	43-1/4
	30	NM-M4-(Matl)-30-90HB24	46-1/4	46-1/4
	36	NM-M4-(Matl)-36-90HB24	49-1/4	49-1/4
36	6	NM-M4-(Matl)-06-90HB36	44-5/8	44-5/8
	9	NM-M4-(Matl)-09-90HB36	46-1/8	46-1/8
	12	NM-M4-(Matl)-12-90HB36	47-5/8	47-5/8
	18	NM-M4-(Matl)-18-90HB36	50-5/8	50-5/8
	24	NM-M4-(Matl)-24-90HB36	53-5/8	53-5/8
	30	NM-M4-(Matl)-30-90HB36	56-5/8	56-5/8
	36	NM-M4-(Matl)-36-90HB36	59-5/8	59-5/8

45º Horizontal Bend



One pair of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)	Dimensions C (in.)
12	6	NM-M4-(Matl)-06-45HB12	15-3/4	6-1/2	9-3/16
	9	NM-M4-(Matl)-09-45HB12	16-13/16	10-1/2	9-13/16
	12	†NM-M4-(Matl)-12-45HB12	17-7/8	7-3/8	10-7/16
	18	†NM-M4-(Matl)-18-45HB12	20	8-1/4	11-11/16
	24	†NM-M4-(Matl)-24-45HB12	22-1/16	9-1/8	12-15/16
	30	†NM-M4-(Matl)-30-45HB12	24-3/16	10	14-3/16
	36	†NM-M4-(Matl)-36-45HB12	26-5/16	10-15/16	15-7/16
24	6	†NM-M4-(Matl)-06-45HB24	24-3/16	10	14-3/16
	9	NM-M4-(Matl)-09-45HB24	25-1/4	10-1/2	14-13/16
	12	†NM-M4-(Matl)-12-45HB24	26-5/16	10-15/16	15-7/16
	18	†NM-M4-(Matl)-18-45HB24	28-7/16	11-13/16	16-11/16
	24	†NM-M4-(Matl)-24-45HB24	30-9/16	12-11/16	17-15/16
	30	NM-M4-(Matl)-30-45HB24	32-11/16	13-9/16	19-1/8
	36	NM-M4-(Matl)-36-45HB24	34-13/16	14-7/16	20-3/8
36	6	NM-M4-(Matl)-06-45HB36	39-7/8	16-1/2	23-3/8
	9	NM-M4-(Matl)-09-45HB36	40-15/16	16-15/16	23-15/16
	12	NM-M4-(Matl)-12-45HB36	42	17-3/8	24-9/16
	18	NM-M4-(Matl)-18-45HB36	44-1/8	18-1/4	25-13/16
	24	NM-M4-(Matl)-24-45HB36	46-3/16	19-1/8	27-1/16
	30	NM-M4-(Matl)-30-45HB36	48-5/16	20	28-5/16
	36	NM-M4-(Matl)-36-45HB36	50-7/16	20-7/8	29-9/16

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

6 in. Horizontal Bends

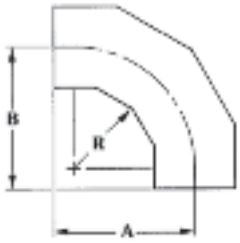
PART NUMBERING SYSTEM

NM	-	M	6	P	24	90	HB	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-6P2490HB12

Sample mitered fitting

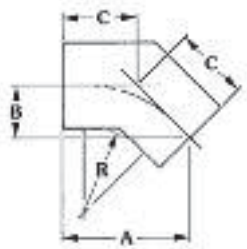
90º Horizontal Bend



One pair of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M6-(Matl)-06-90HB12	20-3/8	20-3/8
	9	NM-M6-(Matl)-09-90HB12	21-7/8	21-7/8
	12	NM-M6-(Matl)-12-90H812	22-3/4	22-3/4
	18	NM-M6-(Matl)-18-90HB12	26-5/16	26-5/16
	24	NM-M6-(Matl)-24-90HB12	29-3/8	29-3/8
	30	NM-M6-(Matl)-30-90HB12	32-3/8	32-3/8
	36	NM-M6-(Matl)-36-90HB12	35-3/8	35-3/8
24	6	NM-M6-(Matl)-06-90HB24	34-1/4	34-1/4
	9	NM-M6-(Matl)-09-90HB24	35-1/4	35-3/4
	12	†NM-M6-(Matl)-12-90HB24	37-1/4	37-1/4
	18	†NM-M6-(Matl)-18-90HB24	40-1/4	40-1/4
	24	†NM-M6-(Matl)-24-90HB24	43-1/4	43-1/4
	30	NM-M6-(Matl)-30-90HB24	46-1/4	46-1/4
	36	†NM-M6-(Matl)-36-90HB24	49-1/4	49-1/4
36	6	NM-M6-(Matl)-06-90HB36	46-1/4	46-1/4
	9	NM-M6-(Matl)-09-90HB36	47-3/4	47-3/4
	12	NM-M6-(Matl)-12-90HB36	49-1/4	49-1/4
	18	NM-M6-(Matl)-18-90HB36	52-1/4	52-1/4
	24	NM-M6-(Matl)-24-90HB36	55-1/4	55-1/4
	30	NM-M6-(Matl)-30-90HB36	58-1/4	58-1/4
	36	NM-M6-(Matl)-36-90HB36	61-1/4	61-1/4

45º Horizontal Bend



One pair of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)	Dimensions C (in.)
12	6	NM-M6-(Matl)-06-45HB12	22-13/16	9-7/16	13-3/8
	9	NM-M6-(Matl)-09 45HB12	23-7/8	9-7/8	14
	12	NM-M6-(Matl)-12-45HB12	24-7/8	10-5/16	14-5/8
	18	NM-M6-(Matl)-18-45HB12	27	11-3/16	15-7/8
	24	NM-M6-(Matl)-24-45HB12	29-1/8	12-1/16	17-1/16
	30	NM-M6-(Matl)-30-45HB12	31-1/4	12-15/16	18-5/16
	36	NM-M6-(Matl)-36-45HB12	33-3/8	13-13/16	19-9/16
24	6	NM-M6-(Matl)-06-45HB24	24-3/16	10	14-3/16
	9	NM-M6-(Matl)-09-45HB24	25-1/4	10-1/2	14-13/16
	12	†NM-M6-(Matl)-12-45HB24	26-5/16	10-15/16	15-7/16
	18	†NM-M6-(Matl)-18-45HB24	28-7/16	11-13/16	16-11/16
	24	†NM-M6-(Matl)-24-45HB24	30-9/16	12-11/16	17-15/16
	30	NM-M6-(Matl)-30-45HB24	32-11/16	13-9/16	19-1/8
	36	†NM-M6-(Matl)-36-45HB24	34-13/16	14-7/16	20-3/8
36	6	NM-M6-(Matl)-06-45HB36	32-11/16	13-9/16	19-1/8
	9	NM-M6-(Matl)-09-45HB36	33-3/4	14	19-3/4
	12	NM-M6-(Matl)-12-45HB36	34-13/16	14-7/16	20-3/8
	18	NM-M6-(Matl)-18-45HB36	36-15/16	15-5/16	21-5/8
	24	NM-M6-(Matl)-24-45HB36	39-1/16	16-3/16	22-7/8
	30	NM-M6-(Matl)-30-45HB36	41-3/16	17-1/16	24-1/8
	36	NM-M6-(Matl)-36-45HB36	43-5/16	17-15/16	25-3/8

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

3 in. Horizontal Tee and Cross

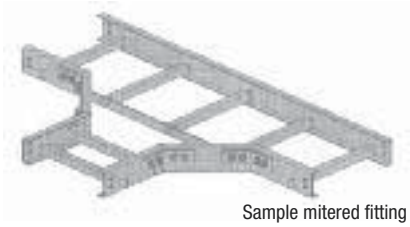
PART NUMBERING SYSTEM

NM	-	M	3	P	24	HT	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

Horizontal Tee

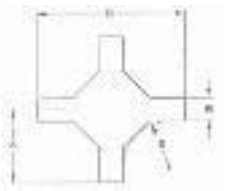
-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M3-(Matl)-06-HT12	19-1/4	38
	9	NM-M3-(Matl)-09-HT12	20-3/4	41-1/2
	12	NM-M3-(Matl)-12-HT12	22-1/4	44-1/2
	18	NM-M3-(Matl)-18-HT12	25-1/4	50-1/2
	24	NM-M3-(Matl)-24-HT12	28-1/4	56-1/2

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.



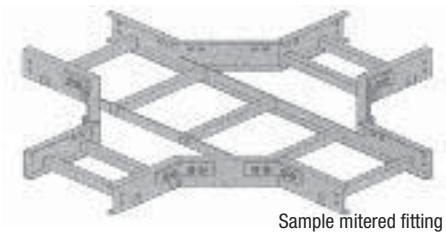
Sample mitered fitting

Horizontal Cross



-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M3-(Matl)-06-45HX12	19-1/4	38-1/2
	9	NM-M3-(Matl)-09-45HX12	20-3/4	41-1/2
	12	NM-M3-(Matl)-12-45HX12	22-1/4	44-1/2
	18	NM-M3-(Matl)-18-45HX12	25-1/4	50-1/2
	24	NM-M3-(Matl)-24-45HX12	28-1/4	56-1/2

Three pairs of stainless steel SS6 splice plates with SS6 hardware included.



Sample mitered fitting

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

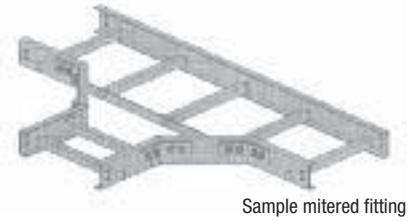
Fittings

4 in. Horizontal Tee and Cross

PART NUMBERING SYSTEM

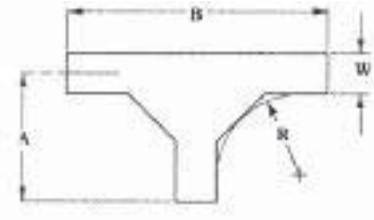
NM	-	M	4	P	24	HT	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-4P-24HT12



Sample mitered fitting

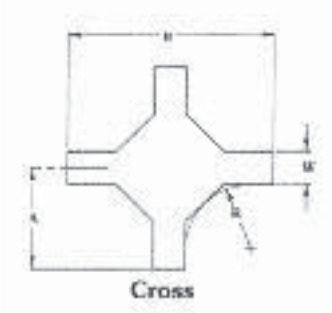
Horizontal Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	†NM-M4-(Matl)-06-HT12	22-1/4	44-1/2
	9	†NM-M4-(Matl)-09-HT12	23-3/4	47-1/2
	12	†NM-M4-(Matl)-12-HT12	25-1/4	50-1/2
	18	†NM-M4-(Matl)-18-HT12	28-1/4	56-1/2
	24	†NM-M4-(Matl)-24-HT12	31-1/4	62-1/2
	30	†NM-M4-(Matl)-30-HT12	34-1/4	68-1/2
	36	†NM-M4-(Matl)-36-HT12	37-1/4	74-1/2
24	6	†NM-M4-(Matl)-06-HT24	34-1/4	68-1/2
	9	†NM-M4-(Matl)-09-HT24	35-3/4	71-1/2
	12	†NM-M4-(Matl)-12-HT24	37-1/4	74-1/2
	18	†NM-M4-(Matl)-18-HT24	40-1/4	80-1/2
	24	†NM-M4-(Matl)-24-HT24	43-1/4	86-1/2
	30	†NM-M4-(Matl)-30-HT24	46-1/4	92-1/2
	36	†NM-M4-(Matl)-36-HT24	49-1/4	98-1/2
36	6	NM-M4-(Matl)-06-HT36	43-1/4	86-1/2
	9	NM-M4-(Matl)-09-HT36	44-3/4	89-1/2
	12	NM-M4-(Matl)-12-HT36	46-1/4	92-1/2
	18	NM-M4-(Matl)-18-HT36	49-1/4	98-1/2
	24	NM-M4-(Matl)-24-HT36	52-1/4	104-1/2
	30	NM-M4-(Matl)-30-HT36	55-1/4	110-1/2
	36	NM-M4-(Matl)-36-HT36	58-1/4	116-1/2

Horizontal Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	†NM-M4-(Matl)-06-HX12	22-1/4	44-1/2
	9	†NM-M4-(Matl)-09-HX12	23-3/4	47-1/2
	12	†NM-M4-(Matl)-12-HX12	25-1/4	50-1/2
	18	†NM-M4-(Matl)-18-HX12	28-1/4	56-1/2
	24	†NM-M4-(Matl)-24-HX12	31-1/4	62-1/2
	30	†NM-M4-(Matl)-30-HX12	34-1/4	68-1/2
	36	†NM-M4-(Matl)-36-HX12	37-1/4	74-1/2
24	6	†NM-M4-(Matl)-06-HX24	34-1/4	68-1/2
	9	†NM-M4-(Matl)-09-HX24	35-3/4	71-1/2
	12	†NM-M4-(Matl)-12-HX24	37-1/4	74-1/2
	18	†NM-M4-(Matl)-18-HX24	40-1/4	80-1/2
	24	†NM-M4-(Matl)-24-HX24	43-1/4	86-1/2
	30	†NM-M4-(Matl)-30-HX24	46-1/4	92-1/2
	36	†NM-M4-(Matl)-36-HX24	49-1/4	98-1/2
36	6	NM-M4-(Matl)-06-HX36	43-1/4	86-1/2
	9	NM-M4-(Matl)-09-HX36	44-3/4	89-1/2
	12	NM-M4-(Matl)-12-HX36	46-1/4	92-1/2
	18	NM-M4-(Matl)-18-HX36	49-1/4	98-1/2
	24	NM-M4-(Matl)-24-HX36	52-1/4	104-1/2
	30	NM-M4-(Matl)-30-HX36	55-1/4	110-1/2
	36	NM-M4-(Matl)-36-HX36	58-1/4	116-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

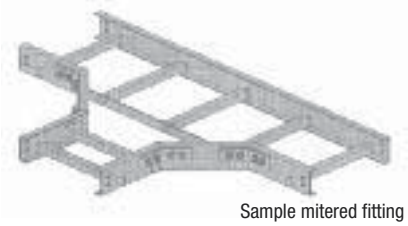
Fittings

6 in. Horizontal Tee & Cross

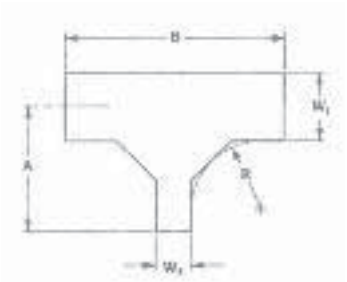
PART NUMBERING SYSTEM

NM	-	M	6	P	24	HT	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-6P24HT12


Sample mitered fitting

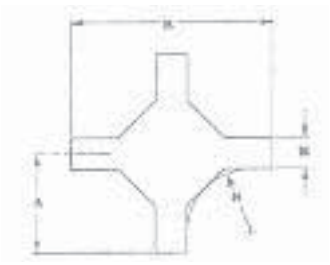
Horizontal Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M6-(Matl)-06-HT12	19-1/4	38
	9	NM-M6-(Matl)-09-HT12	20-3/4	41
	12	NM-M6-(Matl)-12-HT12	22-1/4	44
	18	NM-M6-(Matl)-18-HT12	25-1/4	50
	24	NM-M6-(Matl)-24-HT12	28-1/4	56
	30	NM-M6-(Matl)-30-HT12	31-1/4	62
	36	NM-M6-(Matl)-36-HT12	34-1/4	68
24	6	†NM-M6-(Matl)-06-HT24	34-1/4	68-1/2
	9	†NM-M6-(Matl)-09-HT24	35-3/4	71-1/2
	12	†NM-M6-(Matl)-12-HT24	37-1/4	74-1/2
	18	†NM-M6-(Matl)-18-HT24	40-1/4	81-1/2
	24	†NM-M6-(Matl)-24-HT24	43-1/4	86-1/2
	30	†NM-M6-(Matl)-30-HT24	46-1/4	92-1/2
	36	†NM-M6-(Matl)-36-HT24	49-1/4	98-1/2
36	6	NM-M6-(Matl)-06-HT36	46-1/4	92-1/2
	9	NM-M6-(Matl)-09-HT36	47-3/4	95-1/2
	12	NM-M6-(Matl)-12-HT36	49-1/4	98-1/2
	18	NM-M6-(Matl)-18-HT36	52-1/4	104-1/2
	24	NM-M6-(Matl)-24-HT36	55-1/4	110-1/2
	30	NM-M6-(Matl)-30-HT36	58-1/4	116-1/2
	36	NM-M6-(Matl)-36-HT36	61-1/4	122-1/2

Horizontal Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	Dimensions A (in.)	Dimensions B (in.)
12	6	NM-M6-(Matl)-06-HX12	19-1/4	38
	9	NM-M6-(Matl)-09-HX12	20-3/4	41
	12	NM-M6-(Matl)-12-HX12	22-1/4	44
	18	NM-M6-(Matl)-18-HX12	25-1/4	50
	24	NM-M6-(Matl)-24-HX12	28-1/4	56
	30	NM-M6-(Matl)-30-HX12	31-1/4	62
	36	NM-M6-(Matl)-36-HX12	34-1/4	68
24	6	†NM-M6-(Matl)-06-HX24	34-1/4	68-1/2
	9	†NM-M6-(Matl)-09-HX24	35-3/4	71-1/2
	12	†NM-M6-(Matl)-12-HX24	37-1/4	74-1/2
	18	†NM-M6-(Matl)-18-HX24	40-1/4	80-1/2
	24	†NM-M6-(Matl)-24-HX24	43-1/4	86-1/2
	30	†NM-M6-(Matl)-30-HX24	46-1/4	92-1/2
	36	†NM-M6-(Matl)-36-HX24	49-1/4	98-1/2
36	6	NM-M6-(Matl)-06-HX36	46-1/4	92-1/2
	9	NM-M6-(Matl)-09-HX36	47-3/4	95-1/2
	12	NM-M6-(Matl)-12-HX36	49-1/4	98-1/2
	18	NM-M3-(Matl)-18-HX36	52-1/4	104-1/2
	24	NM-M3-(Matl)-24-HX36	55-1/4	110-1/2
	30	NM-M3-(Matl)-30-HX36	58-1/4	116-1/2
	36	NM-M3-(Matl)-36-HX36	61-1/4	122-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

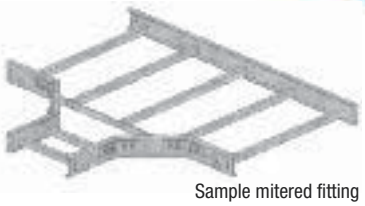
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

3 in. Horizontal Reducing Tee

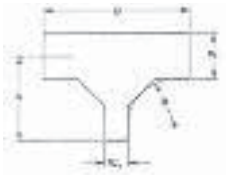
PART NUMBERING SYSTEM

NM	-	M	3	P	24	12	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius



Sample mitered fitting

Horizontal Reducing Tee



Tray Width		Cat. No.	12 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)
9	6	NM-M3-(Matl)-09-06-HT12	20-3/4	38-1/2
12	6	NM-M3-(Matl)-12-06-HT12	22-1/4	38-1/2
	9	NM-M3-(Matl)-12-09-HT12	22-1/4	41-1/2
18	6	NM-M3-(Matl)-18-06-HT12	25-1/4	38-1/2
	9	NM-M3-(Matl)-18-09-HT12	25-1/4	41-1/2
	12	NM-M3-(Matl)-18-12-HT12	25-1/4	41-1/2
24	6	NM-M3-(Matl)-24-06-HT12	28-1/4	38-1/2
	9	NM-M3-(Matl)-24-09-HT12	28-1/4	41-1/2
	12	NM-M3-(Matl)-24-12-HT12	28-1/4	44-1/2
	18	NM-M3-(Matl)-24-18-HT12	28-1/4	50-1/2

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

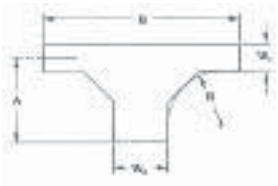
3 in. Horizontal Expanding Tee

PART NUMBERING SYSTEM

NM	-	M	3	P	12	24	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius

Sample mitered fitting

Horizontal Expanding Tee



Tray Width		Cat. No.	12 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)
9	9	NM-M3-(Matl)-06-09-HT12	19-1/4	41-1/2
	12	NM-M3-(Matl)-12-12-HT12	19-1/4	44-1/2
	18	NM-M3-(Matl)-06-18-HT12	19-1/4	50-1/2
	24	NM-M3-(Matl)-06-24-HT12	19-1/4	56-1/2
12	12	NM-M3-(Matl)-09-12-HT12	20-3/4	44-1/2
	18	NM-M3-(Matl)-09-18-HT12	20-3/4	50-1/2
	24	NM-M3-(Matl)-09-24-HT12	20-3/4	56-1/2
18	18	NM-M3-(Matl)-12-18-HT12	22-1/4	50-1/2
	24	NM-M3-(Matl)-12-24-HT12	22-1/4	50-1/2
24	24	NM-M3-(Matl)-18-24-HT12	25-1/4	56-1/2

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

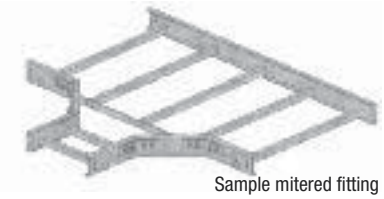
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

4 in. Horizontal Reducing Tee

PART NUMBERING SYSTEM

NM	-	M	4	P	24	12	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius



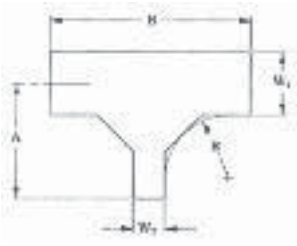
Sample mitered fitting

Horizontal Reducing Tee

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No. *Insert radius (12 in. or 24 in.)	12 in. Radius A (in.)	12 in. Radius B (in.)	24 in. Radius A (in.)	24 in. Radius B (in.)
9	6	NM-M4-(Matl)-09-06-HT*	23-3/4	44-1/2	35-3/4	68-1/2
12	6	NM-M4-(Matl)-12-06-HT*	25-1/4	44-1/2	37-1/4	68-1/2
	9	NM-M4-(Matl)-12-09-HT*	25-1/4	47-1/2	37-1/4	71-1/2
18	6	NM-M4-(Matl)-18-06-HT*	28-1/4	44-1/2	40-1/4	68-1/2
	9	NM-M4-(Matl)-18-09-HT*	28-1/4	47-1/2	40-1/4	71-1/2
	12	NM-M4-(Matl)-18-12-HT*	28-1/4	50-1/2	40-1/4	74-1/2
24	6	NM-M4-(Matl)-24-06-HT*	31-1/4	44-1/2	43-1/4	68-1/2
	9	NM-M4-(Matl)-24-09-HT*	31-1/4	47-1/2	43-1/4	71-1/2
	12	NM-M4-(Matl)-24-12-HT*	31-1/4	50-1/2	43-1/4	74-1/2
	18	NM-M4-(Matl)-24-18-HT*	31-1/4	56-1/2	43-1/4	80-1/2
30	6	NM-M4-(Matl)-30-06-HT*	34-1/4	44-1/2	46-1/4	68-1/2
	9	NM-M4-(Matl)-30-09-HT*	34-1/4	47-1/2	46-1/4	71-1/2
	12	NM-M4-(Matl)-30-12-HT*	34-1/4	50-1/2	46-1/4	74-1/2
	18	NM-M4-(Matl)-30-18-HT*	34-1/4	56-1/2	46-1/4	80-1/2
	24	NM-M4-(Matl)-30-24-HT*	34-1/4	62-1/2	46-1/4	86-1/2
36	6	NM-M4-(Matl)-36-06-HT*	37-1/4	44-1/2	49-1/4	68-1/2
	9	NM-M4-(Matl)-36-09-HT*	37-1/4	47-1/2	49-1/4	71-1/2
	12	NM-M4-(Matl)-36-12-HT*	37-1/4	50-1/2	49-1/4	74-1/2
	18	NM-M4-(Matl)-36-18-HT*	37-1/4	56-1/2	49-1/4	80-1/2
	24	NM-M4-(Matl)-36-24-HT*	37-1/4	62-1/2	49-1/4	86-1/2
	30	NM-M4-(Matl)-36-30-HT*	37-1/4	68-1/2	49-1/4	92-1/2

Horizontal Reducing Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No.	36 in. Radius A (in.)	36 in. Radius B (in.)
9	6	NM-M4-(Matl)-09-06-HT36	44-3/4	86-1/2
12	6	NM-M4-(Matl)-12-06-HT36	46-1/4	86-1/2
	9	NM-M4-(Matl)-12-09-HT36	46-1/4	89-1/2
18	6	NM-M4-(Matl)-18-06-HT36	49-1/4	86-1/2
	9	NM-M4-(Matl)-18-09-HT36	49-1/4	89-1/2
	12	NM-M4-(Matl)-18-12-HT36	49-1/4	92-1/2
24	6	NM-M4-(Matl)-24-06-HT36	52-1/4	86-1/2
	9	NM-M4-(Matl)-24-09-HT36	52-1/4	89-1/2
	12	NM-M4-(Matl)-24-12-HT36	52-1/4	92-1/2
	18	NM-M4-(Matl)-24-18-HT36	52-1/4	98-1/2
30	6	NM-M4-(Matl)-30-06-HT36	55-1/4	86-1/2
	9	NM-M4-(Matl)-30-09-HT36	55-1/4	89-1/2
	12	NM-M4-(Matl)-30-12-HT36	55-1/4	92-1/2
	18	NM-M4-(Matl)-30-18-HT36	55-1/4	98-1/2
	24	NM-M4-(Matl)-30-24-HT36	55-1/4	104-1/2
36	6	NM-M4-(Matl)-36-06-HT36	58-1/4	86-1/2
	9	NM-M4-(Matl)-36-09-HT36	58-1/4	89-1/2
	12	NM-M4-(Matl)-36-12-HT36	58-1/4	92-1/2
	18	NM-M4-(Matl)-36-18-HT36	58-1/4	98-1/2
	24	NM-M4-(Matl)-36-24-HT36	58-1/4	104-1/2
	30	NM-M4-(Matl)-36-30-HT36	58-1/4	110-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

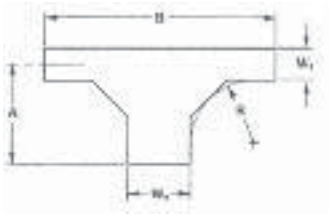
4 in. Horizontal Expanding Tee

PART NUMBERING SYSTEM

NM	-	M	4	P	12	24	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius

Sample mitered fitting

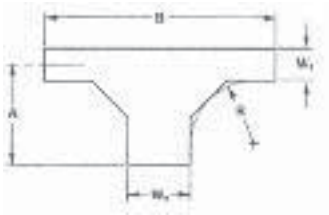
Horizontal Expanding Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		Cat. No.	12 in. Radius		24 in. Radius	
W1 (in.)	W2 (in.)	*Insert radius (12 in. or 24 in.)	A (in.)	B (in.)	A (in.)	B (in.)
6	9	NM-M4-(Matl)-06-09-HT*	22-1/4	47-1/2	34-1/4	71-1/2
	12	NM-M4-(Matl)-06-12-HT*	22-1/4	50-1/2	34-1/4	74-1/2
	18	NM-M4-(Matl)-06-18-HT*	22-1/4	56-1/2	34-1/4	80-1/2
	24	NM-M4-(Matl)-06-24-HT*	22-1/4	62-1/2	34-1/4	86-1/2
	30	NM-M4-(Matl)-06-30-HT*	22-1/4	68-1/2	34-1/4	92-1/2
	36	NM-M4-(Matl)-06-36-HT*	22-1/4	74-1/2	34-1/4	98-1/2
9	12	NM-M4-(Matl)-09-12-HT*	23-3/4	50-1/2	35-3/4	74-1/2
	18	NM-M4-(Matl)-09-18-HT*	23-3/4	56-1/2	35-3/4	80-1/2
	24	NM-M4-(Matl)-09-24-HT*	23-3/4	62-1/2	35-3/4	86-1/2
	30	NM-M4-(Matl)-09-30-HT*	23-3/4	68-1/2	35-3/4	92-1/2
	36	NM-M4-(Matl)-09-36-HT*	23-3/4	74-1/2	35-3/4	98-1/2
12	18	NM-M4-(Matl)-12-18-HT*	25-1/4	56-1/2	37-1/4	80-1/2
	24	NM-M4-(Matl)-12-24-HT*	25-1/4	62-1/2	37-1/4	86-1/2
	30	NM-M4-(Matl)-12-30-HT*	25-1/4	68-1/2	37-1/4	92-1/2
	36	NM-M4-(Matl)-12-36-HT*	25-1/4	74-1/2	37-1/4	98-1/2
18	24	NM-M4-(Matl)-18-24-HT*	28-1/4	62-1/2	40-1/4	86-1/2
	30	NM-M4-(Matl)-18-30-HT*	28-1/4	68-1/2	40-1/4	92-1/2
	36	NM-M4-(Matl)-18-36-HT*	28-1/4	74-1/2	40-1/4	98-1/2
24	30	NM-M4-(Matl)-24-30-HT*	31-1/4	68-1/2	43-1/4	92-1/2
	36	NM-M4-(Matl)-24-36-HT*	31-1/4	74-1/2	43-1/4	98-1/2
30	36	NM-M4-(Matl)-30-36-HT*	34-1/4	74-1/2	46-1/4	98-1/2

Horizontal Expanding Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		Cat. No.	36 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)
6	9	NM-M4-(Matl)-06-09-HT36	43-1/4	89-1/2
	12	NM-M4-(Matl)-06-12-HT36	43-1/4	92-1/2
	18	NM-M4-(Matl)-06-18-HT36	43-1/4	98-1/2
	24	NM-M4-(Matl)-06-24-HT36	43-1/4	104-1/2
	30	NM-M4-(Matl)-06-30-HT36	43-1/4	110-1/2
	36	NM-M4-(Matl)-06-36-HT36	43-1/4	116-1/2
9	12	NM-M4-(Matl)-09-12-HT36	44-3/4	92-1/2
	18	NM-M4-(Matl)-09-18-HT36	44-3/4	98-1/2
	24	NM-M4-(Matl)-09-24-HT36	44-3/4	104-1/2
	30	NM-M4-(Matl)-09-30-HT36	44-3/4	110-1/2
	36	NM-M4-(Matl)-09-36-HT36	44-3/4	116-1/2
12	18	NM-M4-(Matl)-12-18-HT36	46-1/4	98-1/2
	24	NM-M4-(Matl)-12-24-HT36	46-1/4	104-1/2
	30	NM-M4-(Matl)-12-30-HT36	46-1/4	110-1/2
	36	NM-M4-(Matl)-12-36-HT36	46-1/4	116-1/2
18	24	NM-M4-(Matl)-18-24-HT36	49-1/4	104-1/2
	30	NM-M4-(Matl)-18-30-HT36	49-1/4	110-1/2
	36	NM-M4-(Matl)-18-36-HT36	49-1/4	116-1/2
24	30	NM-M4-(Matl)-24-30-HT36	52-1/4	110-1/2
	36	NM-M4-(Matl)-24-36-HT36	52-1/4	116-1/2
30	36	NM-M4-(Matl)-30-36-HT36	52-1/4	116-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

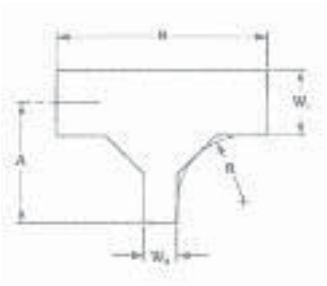
6 in. Horizontal Reducing Tee

PART NUMBERING SYSTEM

NM	-	M	6	P	24	12	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius

Sample mitered fitting

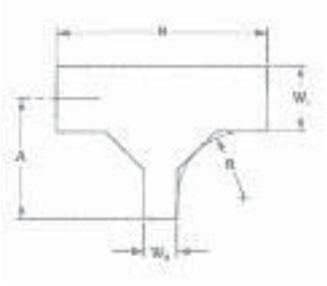
Horizontal Reduction Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		Cat. No.	12 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)
9	6	NM-M6-(Matl)-09-06-HT12	20-3/4	38-1/2
12	6	NM-M6-(Matl)-12-06-HT12	22-1/2	38-1/2
	9	NM-M6-(Matl)-12-09-HT12	22-1/4	41-1/2
18	6	NM-M6-(Matl)-18-06-HT12	25-1/4	38-1/2
	9	NM-M6-(Matl)-18-09-HT12	25-1/4	41-1/2
	12	NM-M6-(Matl)-18-12-HT12	25-1/4	44-1/2
24	6	NM-M6-(Matl)-24-06-HT12	28-1/4	38-1/2
	9	NM-M6-(Matl)-24-09-HT12	28-1/4	41-1/2
	12	NM-M6-(Matl)-24-12-HT12	28-1/4	44-1/2
	18	NM-M6-(Matl)-24-18-HT12	28-1/4	50-1/2
30	6	NM-M6-(Matl)-30-06-HT12	31-1/4	38-1/2
	9	NM-M6-(Matl)-30-09-HT12	31-1/4	41-1/2
	12	NM-M6-(Matl)-30-12-HT12	31-1/4	44-1/2
	18	NM-M6-(Matl)-30-18-HT12	31-1/4	50-1/2
	24	NM-M6-(Matl)-30-24-HT12	31-1/4	56-1/2
36	6	NM-M6-(Matl)-36-06-HT12	34-1/4	38-1/2
	9	NM-M6-(Matl)-36-09-HT12	34-1/4	41-1/2
	12	NM-M6-(Matl)-36-12-HT12	34-1/4	
	18	NM-M6-(Matl)-36-18-HT12	34-1/4	50-1/2
	24	NM-M6-(Matl)-36-24-HT12	34-1/4	56-1/2
	30	NM-M6-(Matl)-36-30-HT12	34-1/4	62-1/2

Horizontal Reduction Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		Cat. No. *Insert radius (24 in. or 36 in.)	24 in. Radius		36 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)	A (in.)	B (in.)
9	6	NM-M6-(Matl)-09-06HT*	35-3/4	68-1/2	47-3/4	92-1/2
12	6	NM-M6-(Matl)-12-06HT*	37-1/4	68-1/2	49-1/4	92-1/2
	9	NM-M6-(Matl)-12-09HT*	37-1/4	71-1/2	49-1/4	95-1/2
18	6	NM-M6-(Matl)-18-06HT*	40-1/4	68-1/2	52-1/4	92-1/2
	9	NM-M6-(Matl)-18-09HT*	40-1/4	71-1/2	52-1/4	95-1/2
	12	NM-M6-(Matl)-18-12HT*	40-1/4	74-1/2	52-1/4	98-1/2
24	6	NM-M6-(Matl)-24-06HT*	43-1/4	68-1/2	55-1/4	92-1/2
	9	NM-M6-(Matl)-24-09HT*	43-1/4	71-1/2	55-1/4	95-1/2
	12	NM-M6-(Matl)-24-12HT*	43-1/4	74-1/2	55-1/4	98-1/2
	18	NM-M6-(Matl)-24-18HT*	43-1/4	80-1/2	55-1/4	104-1/2
30	6	NM-M6-(Matl)-30-06HT*	46-1/4	68-1/2	58-1/4	92-1/2
	9	NM-M6-(Matl)-30-09HT*	46-1/4	71-1/2	58-1/4	95-1/2
	12	NM-M6-(Matl)-30-12HT*	46-1/4	74-1/2	58-1/4	98-1/2
	18	NM-M6-(Matl)-30-18HT*	46-1/4	80-1/2	58-1/4	104-1/2
	24	NM-M6-(Matl)-30-24HT*	46-1/4	80-1/2	58-1/4	110-1/2
36	6	NM-M6-(Matl)-36-06HT*	49-1/4	68-1/2	61-1/4	92-1/2
	9	NM-M6-(Matl)-36-09HT*	49-1/4	71-1/2	61-1/4	95-1/2
	12	NM-M6-(Matl)-36-12HT*	49-1/4	74-1/2	61-1/4	98-1/2
	18	NM-M6-(Matl)-36-18HT*	49-1/4	80-1/2	61-1/4	104-1/2
	24	NM-M6-(Matl)-36-24HT*	49-1/4	86-1/2	61-1/4	110-1/2
	30	NM-M6-(Matl)-36-30HT*	49-1/4	92-1/2	61-1/4	116-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

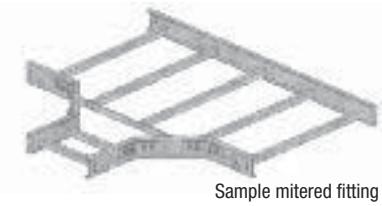
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

6 in. Horizontal Expanding Tee

PART NUMBERING SYSTEM

NM	-	M	6	P	12	24	HT	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius



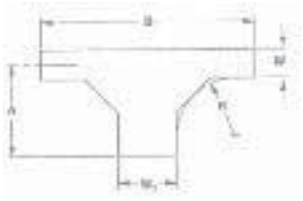
Sample mitered fitting

Horizontal Expanding Tee

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No.	12 in. Radius A (in.)	12 in. Radius B (in.)
6	9	NM-M6-(Matl)-06-09-HT12	19-1/4	41-1/2
	12	NM-M6-(Matl)-06-12-HT12	19-1/4	44-1/2
	18	NM-M6-(Matl)-06-18-HT12	19-1/4	50-1/2
	24	NM-M6-(Matl)-06-24-HT12	19-1/4	56-1/2
	30	NM-M6-(Matl)-06-30-HT12	19-1/4	62-1/2
	36	NM-M6-(Matl)-06-36-HT12	19-1/4	68-1/2
9	12	NM-M6-(Matl)-09-12-HT12	20-3/4	44-1/2
	18	NM-M6-(Matl)-09-18-HT12	20-3/4	50-1/2
	24	NM-M6-(Matl)-09-24-HT12	20-3/4	56-1/2
	30	NM-M6-(Matl)-09-30-HT12	20-3/4	62-1/2
	36	NM-M6-(Matl)-09-36-HT12	20-3/4	68-1/2
12	18	NM-M6-(Matl)-12-18-HT12	22-1/4	50-1/2
	24	NM-M6-(Matl)-12-24-HT12	22-1/4	56-1/2
	30	NM-M6-(Matl)-12-30-HT12	22-1/4	62-1/2
	36	NM-M6-(Matl)-12-36-HT12	22-1/4	68-1/2
18	24	NM-M6-(Matl)-18-24-HT12	25-1/4	56-1/2
	30	NM-M6-(Matl)-18-30-HT12	25-1/4	62-1/2
	36	NM-M6-(Matl)-18-36-HT12	25-1/4	68-1/2
24	30	NM-M6-(Matl)-24-30-HT12	28-1/4	62-1/2
	36	NM-M6-(Matl)-24-36-HT12	28-1/4	68-1/2
30	36	NM-M6-(Matl)-30-36-HT12	31-3/4	68-1/2

Horizontal Expanding Tee



Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No. *Insert radius (24 in. or 36 in.)	24 in. Radius A (in.)	24 in. Radius B (in.)	36 in. Radius A (in.)	36 in. Radius B (in.)
6	9	NM-M6-(Matl)-06-09-HT*	34-1/4	71-1/2	46-1/4	95-1/2
	12	NM-M6-(Matl)-06-12-HT*	34-1/4	74-1/2	46-1/4	98-1/2
	18	NM-M6-(Matl)-06-18-HT*	34-1/4	80-1/2	46-1/4	104-1/2
	24	NM-M6-(Matl)-06-24-HT*	34-1/4	86-1/2	46-1/4	110-1/2
	30	NM-M6-(Matl)-06-30-HT*	34-1/4	92-1/2	46-1/4	116-1/2
	36	NM-M6-(Matl)-06-36-HT*	34-1/4	98-1/2	46-1/4	122-1/2
9	12	NM-M6-(Matl)-09-12-HT*	35-3/4	74-1/2	47-3/4	98-1/2
	18	NM-M6-(Matl)-09-18-HT*	35-3/4	80-1/2	47-3/4	104-1/2
	24	NM-M6-(Matl)-09-24-HT*	35-3/4	86-1/2	47-3/4	110-1/2
	30	NM-M6-(Matl)-09-30-HT*	35-3/4	92-1/2	47-3/4	116-1/2
	36	NM-M6-(Matl)-09-36-HT*	35-3/4	98-1/2	47-3/4	122-1/2
12	18	NM-M6-(Matl)-12-18-HT*	37-1/4	80-1/2	49-1/4	104-1/2
	24	NM-M6-(Matl)-12-24-HT*	37-1/4	86-1/2	49-1/4	110-1/2
	30	NM-M6-(Matl)-12-30-HT*	37-1/4	92-1/2	49-1/4	116-1/2
	36	NM-M6-(Matl)-12-36-HT*	37-1/4	98-1/2	49-1/4	122-1/2
18	24	NM-M6-(Matl)-18-24-HT*	40-1/4	86-1/2	52-1/4	110-1/2
	30	NM-M6-(Matl)-18-30-HT*	40-1/4	92-1/2	52-1/4	116-1/2
	36	NM-M6-(Matl)-18-36-HT*	40-1/4	98-1/2	52-1/4	122-1/2
24	30	NM-M6-(Matl)-24-30-HT*	43-1/4	92-1/2	55-1/4	116-1/2
	36	NM-M6-(Matl)-24-36-HT*	43-1/4	98-1/2	55-1/4	122-1/2
30	36	NM-M6-(Matl)-30-36-HT*	46-1/4	98-1/2	58-1/4	122-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

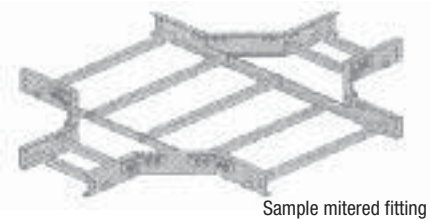
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

3 in. Horizontal Expanding / Reducing Cross

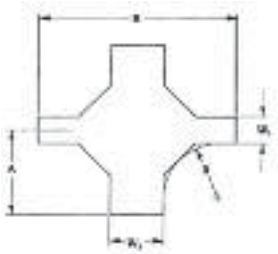
PART NUMBERING SYSTEM

NM	-	M	3	P	24	12	HX	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius



Sample mitered fitting

Horizontal Expanding/ Reducing Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		Cat. No.	12 in. Radius	
W1 (in.)	W2 (in.)		A (in.)	B (in.)
9	6	NM-M3-(Matl)-09-06-HX12	19-1/4	41-1/2
12	6	NM-M3-(Matl)-12-06-HX12	19-1/4	44-1/2
	9	NM-M3-(Matl)-12-09-HX12	20-3/4	44-1/2
18	6	NM-M3-(Matl)-18-06-HX12	19-1/4	50-1/2
	9	NM-M3-(Matl)-18-09-HX12	20-3/4	50-1/2
	12	NM-M3-(Matl)-18-12-HX12	22-1/4	50-1/2
24	6	NM-M3-(Matl)-24-06-HX12	19-1/4	56-1/2
	9	NM-M3-(Matl)-24-09-HX12	20-3/4	56-1/2
	12	NM-M3-(Matl)-24-12-HX12	22-1/4	56-1/2
	18	NM-M3-(Matl)-24-18-HX12	25-1/4	56-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

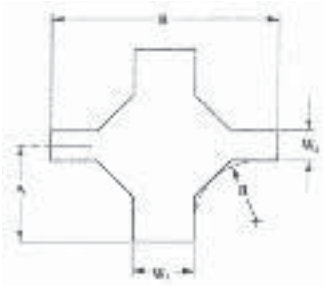
4 in. Horizontal Expanding / Reducing Cross

PART NUMBERING SYSTEM

NM	-	M	4	P	24	30	HX	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius

Sample mitered fitting

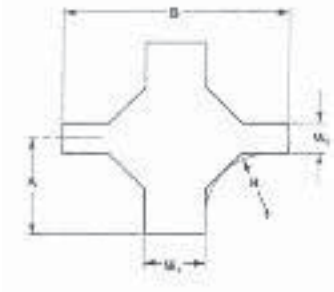
Horizontal Expanding/ Reducing Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No. *Insert radius (24 in. or 36 in.)	24 in. Radius A (in.)	24 in. Radius B (in.)	36 in. Radius A (in.)	36 in. Radius B (in.)
9	9	NM-M4-(Matl)-06-09-HX*	22-1/4	47-1/2	34-1/4	71-1/2
	12	NM-M4-(Matl)-06-12-HX*	22-1/4	50-1/2	34-1/4	74-1/2
	18	NM-M4-(Matl)-06-18-HX*	22-1/4	56-1/2	34-1/4	80-1/2
	24	NM-M4-(Matl)-06-24-HX*	22-1/4	62-1/2	34-1/4	86-1/2
	30	NM-M4-(Matl)-06-30-HX*	22-1/4	68-1/2	34-1/4	92-1/2
	36	NM-M4-(Matl)-06-36-HX*	22-1/4	74-1/2	34-1/4	98-1/2
12	12	NM-M4-(Matl)-09-12-HX*	23-3/4	50-1/2	35-3/4	74-1/2
	18	NM-M4-(Matl)-09-18-HX*	23-3/4	56-1/2	35-3/4	80-1/2
	24	NM-M4-(Matl)-09-24-HX*	23-3/4	62-1/2	35-3/4	86-1/2
	30	NM-M4-(Matl)-09-30-HX*	23-3/4	68-1/2	35-3/4	92-1/2
	36	NM-M4-(Matl)-09-36-HX*	23-3/4	74-1/2	35-3/4	98-1/2
18	18	NM-M4-(Matl)-12-18-HX*	25-1/4	56-1/2	37-1/4	80-1/2
	24	NM-M4-(Matl)-12-24-HX*	25-1/4	62-1/2	37-1/4	86-1/2
	30	NM-M4-(Matl)-12-30-HX*	25-1/4	68-1/2	37-1/4	92-1/2
	36	NM-M4-(Matl)-12-36-HX*	25-1/4	74-1/2	37-1/4	98-1/2
24	24	NM-M4-(Matl)-18-24-HX*	28-1/4	62-1/2	40-1/4	86-1/2
	30	NM-M4-(Matl)-18-30-HX*	28-1/4	68-1/2	40-1/4	92-1/2
	36	NM-M4-(Matl)-18-36-HX*	28-1/4	74-1/2	40-1/4	98-1/2
30	30	NM-M4-(Matl)-24-30-HX*	31-1/4	68-1/2	43-1/4	92-1/2
	36	NM-M4-(Matl)-24-36-HX*	31-1/4	74-1/2	43-1/4	98-1/2
36	36	NM-M4-(Matl)-30-36-HX*	34-1/4	74-1/2	46-1/4	98-1/2

Horizontal Expanding/ Reducing Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No.	36 in. Radius A (in.)	36 in. Radius B (in.)
9	9	NM-M4-(Matl)-06-09-HX36	43-1/4	89-1/2
	12	NM-M4-(Matl)-06-12-HX36	43-1/4	92-1/2
	18	NM-M4-(Matl)-06-18-HX36	43-1/4	98-1/2
	24	NM-M4-(Matl)-06-24-HX36	43-1/4	104-1/2
	30	NM-M4-(Matl)-06-30-HX36	43-1/4	110-1/2
	36	NM-M4-(Matl)-06-36-HX36	43-1/4	116-1/2
12	12	NM-M4-(Matl)-09-12-HX36	44-3/4	92-1/2
	18	NM-M4-(Matl)-09-18-HX36	44-3/4	98-1/2
	24	NM-M4-(Matl)-09-24-HX36	44-3/4	104-1/2
	30	NM-M4-(Matl)-09-30-HX36	44-3/4	110-1/2
	36	NM-M4-(Matl)-09-36-HX36	44-3/4	116-1/2
18	18	NM-M4-(Matl)-12-18-HX36	46-1/4	98-1/2
	24	NM-M4-(Matl)-12-24-HX36	46-1/4	104-1/2
	30	NM-M4-(Matl)-12-30-HX36	46-1/4	110-1/2
	36	NM-M4-(Matl)-12-36-HX36	46-1/4	116-1/2
24	24	NM-M4-(Matl)-18-24-HX36	49-1/4	104-1/2
	30	NM-M4-(Matl)-18-30-HX36	49-1/4	110-1/2
	36	NM-M4-(Matl)-18-36-HX36	49-1/4	116-1/2
30	30	NM-M4-(Matl)-24-30-HX36	52-1/4	110-1/2
	36	NM-M4-(Matl)-24-36-HX36	52-1/4	116-1/2
36	36	NM-M4-(Matl)-30-36-HX36	52-1/4	116-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

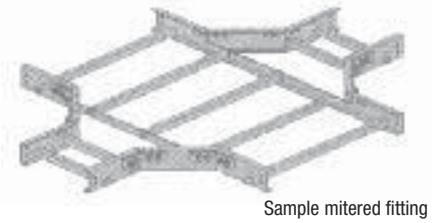
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

6 in. Horizontal Expanding / Reducing Cross

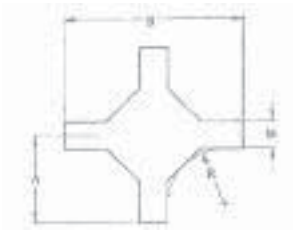
PART NUMBERING SYSTEM

NM	-	M	6	P	24	12	HX	12
Nonmetallic		Mitered	Height	Material	Width 1	Width 2	Type	Radius



Sample mitered fitting

Horizontal Expanding/ Reducing Cross



Three pairs of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No.	12 in. Radius A (in.)	12 in. Radius B (in.)
9	6	NM-M6-(Matl)-09-06-HX12	19-1/4	41-1/2
12	6	NM-M6-(Matl)-12-06-HX12	19-1/4	44-1/2
	9	NM-M6-(Matl)-12-09-HX12	20-3/4	44-1/2
18	6	NM-M6-(Matl)-18-06-HX12	19-1/4	50-1/2
	9	NM-M6-(Matl)-18-09-HX12	20-3/4	50-1/2
	12	NM-M6-(Matl)-18-12-HX12	22-1/4	50-1/2
24	6	NM-M6-(Matl)-24-06-HX12	19-1/4	56-1/2
	9	NM-M6-(Matl)-24-09-HX12	20-3/4	56-1/2
	12	NM-M6-(Matl)-24-12-HX12	22-1/4	56-1/2
	18	NM-M6-(Matl)-24-18-HX12	25-1/4	56-1/2
30	6	NM-M6-(Matl)-30-06-HX12	19-1/4	62-1/2
	9	NM-M6-(Matl)-30-09-HX12	20-3/4	62-1/2
	12	NM-M6-(Matl)-30-12-HX12	22-1/4	62-1/2
	18	NM-M6-(Matl)-30-18-HX12	25-1/4	62-1/2
	24	NM-M6-(Matl)-30-24-HX12	28-1/4	62-1/2
36	6	NM-M6-(Matl)-36-06-HX12	19-1/4	68-1/2
	9	NM-M6-(Matl)-36-09-HX12	20-3/4	68-1/2
	12	NM-M6-(Matl)-36-12-HX12	22-1/4	68-1/2
	18	NM-M6-(Matl)-36-18-HX12	25-1/4	68-1/2
	24	NM-M6-(Matl)-36-24-HX12	28-1/4	68-1/2
	30	NM-M6-(Matl)-36-30-HX12	31-1/4	68-1/2

Horizontal Expanding/ Reducing Cross

Three pairs of stainless steel SS6 splice plates with SS6 hardware included.

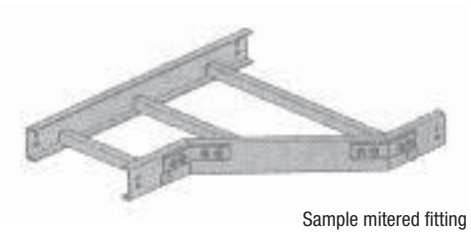
Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No. *Insert radius (24 in. or 36 in.)	24 in. Radius A (in.)	24 in. Radius B (in.)	36 in. Radius A (in.)	36 in. Radius B (in.)
6	9	NM-M6-(Matl)-06-09-HT*	34-1/4	71-1/2	46-1/4	95-1/2
	12	NM-M6-(Matl)-06-12-HT*	34-1/4	74-1/2	46-1/4	98-1/2
	18	NM-M6-(Matl)-06-18-HT*	34-1/4	80-1/2	46-1/4	104-1/2
	24	NM-M6-(Matl)-06-24-HT*	34-1/4	86-1/2	46-1/4	110-1/2
	30	NM-M6-(Matl)-06-30-HT*	34-1/4	92-1/2	46-1/4	116-1/2
	36	NM-M6-(Matl)-06-36-HT*	34-1/4	98-1/2	46-1/4	122-1/2
12	12	NM-M6-(Matl)-09-12-HT*	35-3/4	74-1/2	47-3/4	98-1/2
	18	NM-M6-(Matl)-09-18-HT*	35-3/4	80-1/2	47-3/4	104-1/2
	24	NM-M6-(Matl)-09-24-HT*	35-3/4	86-1/2	47-3/4	110-1/2
	30	NM-M6-(Matl)-09-30-HT*	35-3/4	92-1/2	47-3/4	116-1/2
	36	NM-M6-(Matl)-09-36-HT*	35-3/4	98-1/2	47-3/4	122-1/2
18	18	NM-M6-(Matl)-12-18-HT*	37-1/4	80-1/2	49-1/4	104-1/2
	24	NM-M6-(Matl)-12-24-HT*	37-1/4	86-1/2	49-1/4	110-1/2
	30	NM-M6-(Matl)-12-30-HT*	37-1/4	92-1/2	49-1/4	116-1/2
	36	NM-M6-(Matl)-12-36-HT*	37-1/4	98-1/2	49-1/4	122-1/2
24	24	NM-M6-(Matl)-18-24-HT*	40-1/4	86-1/2	52-1/4	110-1/2
	30	NM-M6-(Matl)-18-30-HT*	40-1/4	92-1/2	52-1/4	116-1/2
	36	NM-M6-(Matl)-18-36-HT*	40-1/4	98-1/2	52-1/4	122-1/2
30	30	NM-M6-(Matl)-24-30-HT*	43-1/4	92-1/2	55-1/4	116-1/2
	36	NM-M6-(Matl)-24-36-HT*	43-1/4	98-1/2	55-1/4	122-1/2
36	36	NM-M6-(Matl)-30-36-HT*	46-1/4	98-1/2	58-1/4	122-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

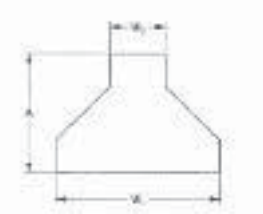
Fittings

3 in. Horizontal Reducers

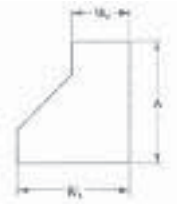


Sample mitered fitting

Left Hand Reducer



Straight Reducer



Right Hand Reducer

PART NUMBERING SYSTEM

NM	-	M	3	P	24	LR	12
Nonmetallic		Mitered	Height	Material	Width 1	Type	Width 2

Horizontal Reducers

One pair of stainless steel SS6 splice plates with SS6 hardware included.

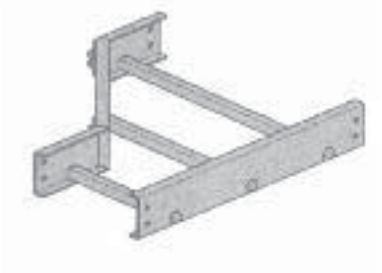
Tray Width		LEFT HAND REDUCER		STRAIGHT REDUCER		RIGHT HAND REDUCER	
W1 (in.)	W2 (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)
9	6	NM-M3-(Matl)-09-LR06	17-1/2	NM-M3-(Matl)-09-SR06	16	NM-M3-(Matl)-09-RR06	17-1/2
12	9	NM-M3-(Matl)-12-LR09	17-1/2	NM-M3-(Matl)-12-SR09	16	NM-M3-(Matl)-12-RR09	17-1/2
	6	NM-M3-(Matl)-18-LR06	26-1/2	NM-M3-(Matl)-18-SR06	20-1/2	NM-M3-(Matl)-18-RR06	26-1/2
18	9	NM-M3-(Matl)-18-LR09	23-1/2	NM-M3-(Matl)-18-SR09	19	NM-M3-(Matl)-18-RR09	23-1/2
	12	NM-M3-(Matl)-18-LR12	20-1/2	NM-M3-(Matl)-18-SR12	17-1/2	NM-M3-(Matl)-18-RR12	20-1/2
24	6	NM-M3-(Matl)-24-LR06	32-1/2	NM-M3-(Matl)-24-SR06	23-1/2	NM-M3-(Matl)-24-RR06	32-1/2
	9	NM-M3-(Matl)-24-LR09	29-1/2	NM-M3-(Matl)-24-SR09	22	NM-M3-(Matl)-24-RR09	29-1/2
	12	NM-M3-(Matl)-24-LR12	26-1/2	NM-M3-(Matl)-24-SR12	20-1/2	NM-M3-(Matl)-24-RR12	26-1/2
	18	NM-M3-(Matl)-24-LR18	20-1/2	NM-M3-(Matl)-24-SR18	17-1/2	NM-M3-(Matl)-24-RR18	20-1/2

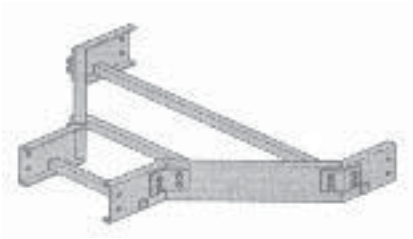
Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

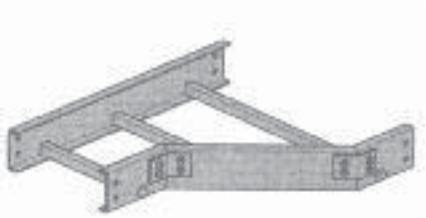
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

4 in. Horizontal Reducers

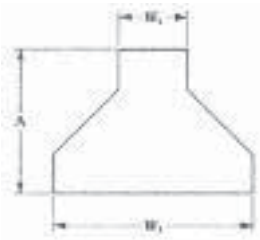






Sample mitered fitting

Left Hand Reducer



Straight Reducer

Right Hand Reducer

PART NUMBERING SYSTEM

NM	-	M	4	P	24	LR	12
Nonmetallic		Mitered	Height	Material	Width 1	Type	Width 2

Horizontal Reducers

One pair of stainless steel SS6 splice plates with SS6 hardware included.

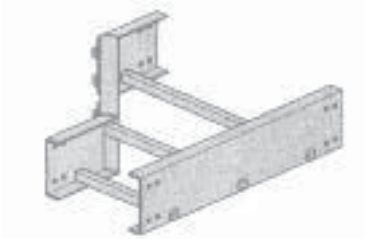
Tray Width		LEFT HAND REDUCER		STRAIGHT REDUCER		RIGHT HAND REDUCER	
W1 (in.)	W2 (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)
9	6	NM-M4-(Matl)-09-LR06	17-1/2	NM-M4-(Matl)-09-SR06	16	NM-M4-(Matl)-09-RR06	17-1/2
12	6	NM-M4-(Matl)-12-LR06	20-1/2	NM-(Matl)-12-SR06	17-1/2	NM-(Matl)-12-RR06	20-1/2
	9	NM-M4-(Matl)-12-LR09	17-1/2	NM-(Matl)-12-SR09	16	NM-(Matl)-12-RR09	17-1/2
18	6	NM-M4-(Matl)-18-LR06	26-1/2	NM-(Matl)-18-SR06	20-1/2	NM-(Matl)-18-RR06	26-1/2
	9	NM-M4-(Matl)-18-LR09	23-1/2	NM-(Matl)-18-SR09	19	NM-(Matl)-18-RR09	23-1/2
	12	NM-M4-(Matl)-18-LR12	20-1/2	NM-(Matl)-18-SR12	17-1/2	NM-(Matl)-18-RR12	20-1/2
24	6	NM-M4-(Matl)-24-LR06	32-1/2	NM-(Matl)-24-SR06	23-1/2	NM-(Matl)-24-RR06	32-1/2
	9	NM-M4-(Matl)-24-LR09	29-1/2	NM-(Matl)-24-SR09	22	NM-(Matl)-24-RR09	29-1/2
	12	NM-M4-(Matl)-24-LR12	26-1/2	NM-(Matl)-24-SR12	20-1/2	NM-(Matl)-24-RR12	26-1/2
	18	NM-M4-(Matl)-24-LR18	20-1/2	NM-(Matl)-24-SR18	17-1/2	NM-(Matl)-24-RR18	20-1/2
30	6	NM-M4-(Matl)-30-LR06	38-1/2	NM-(Matl)-30-SR06	26-1/2	NM-(Matl)-30-RR06	38-1/2
	9	NM-M4-(Matl)-30-LR09	35-1/2	NM-(Matl)-30-SR09	25	NM-(Matl)-30-RR09	35-1/2
	12	NM-M4-(Matl)-30-LR12	32-1/2	NM-(Matl)-30-SR12	23-1/2	NM-(Matl)-30-RR12	32-1/2
	18	NM-M4-(Matl)-30-LR18	26-1/2	NM-(Matl)-30-SR18	20-1/2	NM-(Matl)-30-RR18	26-1/2
	24	NM-M4-(Matl)-30-LR24	20-1/2	NM-(Matl)-30-SR24	17-1/2	NM-(Matl)-30-RR24	20-1/2
36	6	NM-M4-(Matl)-36-LR06	44-1/2	NM-(Matl)-36-SR06	29-1/2	NM-(Matl)-36-RR06	44-1/2
	9	NM-M4-(Matl)-36-LR09	41-1/2	NM-(Matl)-36-SR09	28	NM-(Matl)-36-RR09	41-1/2
	12	NM-M4-(Matl)-36-LR12	38-1/2	NM-(Matl)-36-SR12	26-1/2	NM-(Matl)-36-RR12	38-1/2
	18	NM-M4-(Matl)-36-LR18	32-1/2	NM-(Matl)-36-SR18	23-1/2	NM-(Matl)-36-RR18	32-1/2
	24	NM-M4-(Matl)-36-LP24	26-1/2	NM-(Matl)-36-SP24	20-1/2	NM-(Matl)-36-RR24	26-1/2
	30	NM-M4-(Matl)-36-LR30	20-1/2	NM-(Matl)-36-SR30	17-1/2	NM-(Matl)-36-RR30	20-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

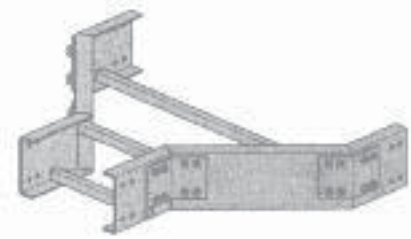
Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

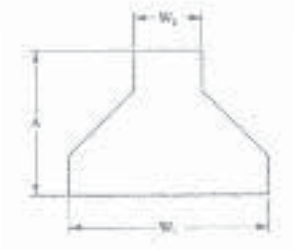
Fittings

6 in. Horizontal Reducers

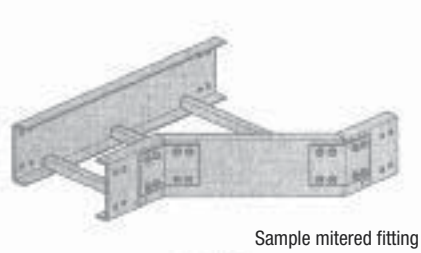


Left Hand Reducer





Straight Reducer



Sample mitered fitting

Right Hand Reducer

PART NUMBERING SYSTEM

NM	-	M	6	P	24	LR	12
Nonmetallic		Mitered	Height	Material	Width 1	Type	Width 2

Horizontal Reducers

One pair of stainless steel SS6 splice plates with SS6 hardware included.

Tray Width		LEFT HAND REDUCER		STRAIGHT REDUCER		RIGHT HAND REDUCER	
W1 (in.)	W2 (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)	Cat. No.	A (in.)
9	6	NM-M6-(Matl)-09-LR06	17-1/2	NM-M6-(Matl)-09-SR06	16	NM-M6-(Matl)-09-RR06	17-1/2
12	6	NM-(Matl)-12-LR06	20-1/2	NM-(Matl)-12-SR06	17-1/2	NM-(Matl)-12-RR06	20-1/2
	9	NM-(Matl)-12-LR09	17-1/2	NM-(Matl)-12-SR09	16	NM-(Matl)-12-RR09	17-1/2
18	6	NM-(Matl)-18-LR06	26-1/2	NM-(Matl)-18-SR06	20-1/2	NM-(Matl)-18-RR06	6-1/2
	9	NM-(Matl)-18-LR09	23-1/2	NM-(Matl)-18-SR09	19	NM-(Matl)-18-RR09	23-1/2
	12	NM-(Matl)-18-LR12	20-1/2	NM-(Matl)-18-SR12	17-1/2	NM-(Matl)-18-RR12	20-1/2
24	6	NM-(Matl)-24-LR06	32-1/2	NM-(Matl)-24-SR06	23-1/2	NM-(Matl)-24-RR06	32-1/2
	9	NM-(Matl)-24-LR09	29-1/2	NM-(Matl)-24-SR09	22	NM-(Matl)-24-RR09	29-1/2
	12	NM-(Matl)-24-LR12	26-1/2	NM-(Matl)-24-SR12	20-1/2	NM-(Matl)-24-RR12	26-1/2
	18	NM-(Matl)-24-LR18	20-1/2	NM-(Matl)-24-SR18	17-1/2	NM-(Matl)-24-RR18	20-1/2
30	6	NM-(Matl)-30-LR06	38-1/2	NM-(Matl)-30-SR06	26-1/2	NM-(Matl)-30-RR06	38-1/2
	9	NM-(Matl)-30-LR09	35-1/2	NM-(Matl)-30-SR09	25	NM-(Matl)-30-RR09	35-1/2
	12	NM-(Matl)-30-LR12	32-1/2	NM-(Matl)-30-SR12	23-1/2	NM-(Matl)-30-RR12	32-1/2
	18	NM-(Matl)-30-LR18	26-1/2	NM-(Matl)-30-SR18	20-1/2	NM-(Matl)-30-RR18	26-1/2
	24	NM-(Matl)-30-LR24	20-1/2	NM-(Matl)-30-SR24	17-1/2	NM-(Matl)-30-RR24	20-1/2
36	6	NM-(Matl)-36-LR06	44-1/2	NM-(Matl)-36-SR06	29-1/2	NM-(Matl)-36-RR06	44-1/2
	9	NM-(Matl)-36-LR09	41-1/2	NM-(Matl)-36-SR09	28	NM-(Matl)-36-RR09	41-1/2
	12	NM-(Matl)-36-LR12	38-1/2	NM-(Matl)-36-SR12	26-1/2	NM-(Matl)-36-RR12	38-1/2
	18	NM-(Matl)-36-LR18	32-1/2	NM-(Matl)-36-SR18	23-1/2	NM-(Matl)-36-RR18	32-1/2
	24	NM-(Matl)-36-LR24	26-1/2	NM-(Matl)-36-SR24	20-1/2	NM-(Matl)-36-RR24	26-1/2
	30	NM-(Matl)-36-LR30	20-1/2	NM-(Matl)-36-SR30	17-1/2	NM-(Matl)-36-RR30	20-1/2

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

3 in. Vertical Bends

PART NUMBERING SYSTEM

NM	-	M	3	P	24	90	VI	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

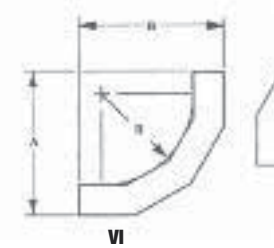
VO Vertical Outside Bend
Sample Mitered

VI Vertical Inside Bend
Sample Mitered

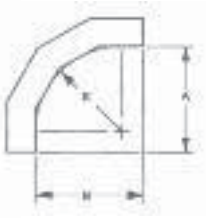
Vertical Bend

* Add: VI - For vertical inside /
VO - For vertical outside
One pair of stainless steel SS6 splice plates with SS6 hardware included.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL BEND 90°			
			Vertical Outside Bend		Vertical Inside Bend	
			A (in.)	B (in.)	A (in.)	B (in.)
12	6	NM-M3-(Matl)-06-90(*)12	23-15/16	23-15/16	26-15/16	26-15/16
	9	NM-M3-(Matl)-09-90(*)12				
	12	NM-M3-(Matl)-12-90(*)12				
	18	NM-M3-(Matl)-18-90(*)12				
	24	NM-M3-(Matl)-24-90(*)12				



VI
90° Mitered

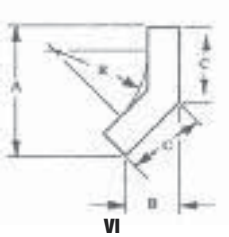


VO
90° Mitered

Vertical Bend

* Add: VI - For vertical inside /
VO - For vertical outside
One pair of stainless steel SS6 splice plates with SS6 hardware included.

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL BEND 45°					
			Vertical Outside Bend			Vertical Inside Bend		
			A (in.)	B (in.)	C (in.)	A (in.)	B (in.)	C (in.)
12	6	NM-M3-(Matl)-06-45(*)12	20-1/2	8-1/2	12	22-5/8	9-3/8	13-1/4
	9	NM-M3-(Matl)-09-45(*)12						
	12	NM-M3-(Matl)-12-45(*)12						
	18	NM-M3-(Matl)-18-45(*)12						
	24	NM-M3-(Matl)-24-45(*)12						



VI
45° Mitered

VO
45° Mitered

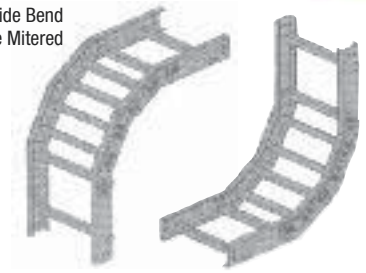
Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

4 in. Vertical Bends

VO Vertical Outside Bend
Sample Mitered



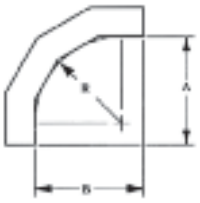
VI Vertical Inside Bend
Sample Mitered

PART NUMBERING SYSTEM

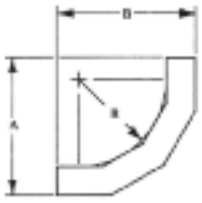
NM	-	M	4	P	24	90	VI	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-4P2490VI12

Vertical Bend



VO
Vertical Outside Bend



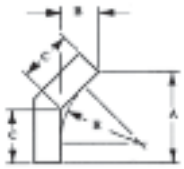
VI
Vertical Inside Bend

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL OUTSIDE BEND A (in.)	VERTICAL OUTSIDE BEND B (in.)	VERTICAL INSIDE BEND A (in.)	VERTICAL INSIDE BEND B (in.)
12	6	†NM-M4-(Matl)-06-90(*)12	19-1/4	19-1/4	23-1/4	23-1/4
	9	†NM-M4-(Matl)-09-90(*)12				
	12	†NM-M4-(Matl)-12-90(*)12				
	18	†NM-M4-(Matl)-18-90(*)12				
	24	†NM-M4-(Matl)-24-90(*)12				
	30	†NM-M4-(Matl)-30-90(*)12				
	36	†NM-M4-(Matl)-36-90(*)12				
24	6	NM-M4-(Matl)-06-90(*)24	31-1/4	31-1/4	35-1/4	35-1/4
	9	NM-M4-(Matl)-09-90(*)24				
	12	NM-M4-(Matl)-12-90(*)24				
	18	NM-M4-(Matl)-18-90(*)24				
	24	NM-M4-(Matl)-24-90(*)24				
	30	NM-M4-(Matl)-30-90(*)24				
	36	NM-M4-(Matl)-36-90(*)24				
36	6	NM-M4-(Matl)-06-90(*)36	37-3/4	37-3/4	41-3/4	41-3/4
	9	NM-M4-(Matl)-09-90(*)36				
	12	NM-M4-(Matl)-12-90(*)36				
	18	NM-M4-(Matl)-18-90(*)36				
	24	NM-M4-(Matl)-24-90(*)36				
	30	NM-M4-(Matl)-30-90(*)36				
	36	NM-M4-(Matl)-36-90(*)36				

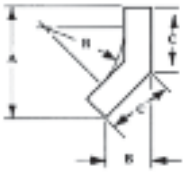
One pair of stainless steel SS6 splice plates with SS6 hardware included. † Denotes molded fitting available.

***Add**
VI - For vertical inside
VO - For vertical outside

Vertical Bend



VO
Vertical Outside Bend



VI
Vertical Inside Bend

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL OUTSIDE BEND A (in.)	VERTICAL OUTSIDE BEND B (in.)	VERTICAL OUTSIDE BEND C (in.)	VERTICAL INSIDE BEND A (in.)	VERTICAL INSIDE BEND B (in.)	VERTICAL INSIDE BEND C (in.)
12	6	†NM-M4-(Matl)-06-45(*)12	13-5/8	5-5/8	8	16-7/8	2-13/16	6-13/16
	9	†NM-M4-(Matl)-09-45(*)12						
	12	†NM-M4-(Matl)-12-45(*)12						
	18	†NM-M4-(Matl)-18-45(*)12						
	24	†NM-M4-(Matl)-24-45(*)12						
	30	†NM-M4-(Matl)-30-45(*)12						
	36	†NM-M4-(Matl)-36-45(*)12						
24	6	NM-M4-(Matl)-06-45(*)24	22-1/16	9-1/8	12-15/16	24-15/16	10-5/16	14-5/8
	9	NM-M4-(Matl)-09-45(*)24						
	12	NM-M4-(Matl)-12-45(*)24						
	18	NM-M4-(Matl)-18-45(*)24						
	24	NM-M4-(Matl)-24-45(*)24						
	30	NM-M4-(Matl)-30-45(*)24						
	36	NM-M4-(Matl)-36-45(*)24						
36	6	NM-M4-(Matl)-06-45(*)36	37-7/16	15-1/2	21-15/16	40-5/16	16-11/16	23-5/8
	9	NM-M4-(Matl)-09-45(*)36						
	12	NM-M4-(Matl)-12-45(*)36						
	18	NM-M4-(Matl)-18-45(*)36						
	24	NM-M4-(Matl)-24-45(*)36						
	30	NM-M4-(Matl)-30-45(*)36						
	36	NM-M4-(Matl)-36-45(*)36						

One pair of stainless steel SS6 splice plates with SS6 hardware included. † Denotes molded fitting available.

***Add**
VI - For vertical inside
VO - For vertical outside

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

6 in. Vertical Bends

PART NUMBERING SYSTEM

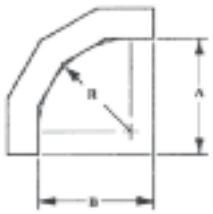
NM	-	M	6	P	24	90	VI	12
Nonmetallic		Mitered	Height	Material	Width	Angle	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-6P2490VI12

VO Vertical Outside Bend
Sample Mitered

VI Vertical Inside Bend
Sample Mitered

Vertical Bend



VO
Vertical Outside Bend

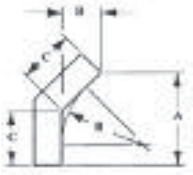
VI
Vertical Inside Bend

Tray Width W1 (in.)	Tray Width W2 (in.)	Cat. No.	VERTICAL OUTSIDE BEND A (in.)	VERTICAL OUTSIDE BEND B (in.)	VERTICAL INSIDE BEND A (in.)	VERTICAL INSIDE BEND B (in.)
12	6	NM-M6-(Matl)-06-90(*)12	26	26	26-13/16	26-13/16
	9	NM-M6-(Matl)-09-90(*)12				
	12	NM-M6-(Matl)-12-90(*)12				
	18	NM-M6-(Matl)-18-90(*)12				
	24	NM-M6-(Matl)-24-90(*)12				
	30	NM-M6-(Matl)-30-90(*)12				
	36	NM-M6-(Matl)-36-90(*)12				
24	6	†NM-M6-(Matl)-06-90(*)24	31-1/4	31-1/4	37-1/4	37-1/4
	9	†NM-M6-(Matl)-09-90(*)24				
	12	†NM-M6-(Matl)-12-90(*)24				
	18	†NM-M6-(Matl)-18-90(*)24				
	24	†NM-M6-(Matl)-24-90(*)24				
	30	†NM-M6-(Matl)-30-90(*)24				
	36	†NM-M6-(Matl)-36-90(*)24				
36	6	NM-M6-(Matl)-06-90(*)36	43-1/4	43-1/4	49-1/4	49-1/4
	9	NM-M6-(Matl)-09-90(*)36				
	12	NM-M6-(Matl)-12-90(*)36				
	18	NM-M6-(Matl)-18-90(*)36				
	24	NM-M6-(Matl)-24-90(*)36				
	30	NM-M6-(Matl)-30-90(*)36				
	36	NM-M6-(Matl)-36-90(*)36				

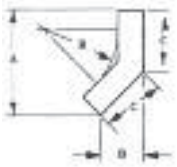
One pair of stainless steel SS6 splice plates with SS6 hardware included. † Denotes molded fitting available.

***Add**
VI - For vertical inside
VO - For vertical outside

Vertical Bend



VO
Vertical Outside Bend



VI
Vertical Inside Bend

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL OUTSIDE BEND A (in.)	VERTICAL OUTSIDE BEND B (in.)	VERTICAL OUTSIDE BEND C (in.)	VERTICAL INSIDE BEND A (in.)	VERTICAL INSIDE BEND B (in.)	VERTICAL INSIDE BEND C (in.)
12	6	NM-M6-(Matl)-06-45(*)24	20-1/2	8-1/2	12	24-3/4	10-1/4	14-1/2
	9	NM-M6-(Matl)-09-45(*)24						
	12	NM-M6-(Matl)-12-45(*)24						
	18	NM-M6-(Matl)-18-45(*)24						
	24	NM-M6-(Matl)-24-45(*)12						
	30	NM-M6-(Matl)-30-45(*)12						
	36	NM-M6-(Matl)-36-45(*)12						
24	6	†NM-M6-(Matl)-06-45(*)24	22-1/4	9-1/8	12-15/16	26-5/16	10-15/16	15-7/16
	9	†NM-M6-(Matl)-09-45(*)24						
	12	†NM-M6-(Matl)-12-45(*)24						
	18	†NM-M6-(Matl)-18-45(*)24						
	24	†NM-M6-(Matl)-24-45(*)24						
	30	†NM-M6-(Matl)-30-45(*)24						
	36	†NM-M6-(Matl)-36-45(*)24						
36	6	NM-M6-(Matl)-06-45(*)36	30-9/16	12-11/16	17-15/16	34-13/16	14-7/16	20-3/8
	9	NM-M6-(Matl)-09-45(*)36						
	12	NM-M6-(Matl)-12-45(*)36						
	18	NM-M6-(Matl)-18-45(*)36						
	24	NM-M6-(Matl)-24-45(*)36						
	30	NM-M6-(Matl)-30-45(*)36						
	36	NM-M6-(Matl)-36-45(*)36						

One pair of stainless steel SS6 splice plates with SS6 hardware included. † Denotes molded fitting available.

***Add**
VI - For vertical inside
VO - For vertical outside

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

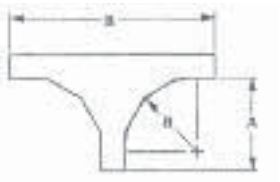
Fittings

3 in. Vertical Tees

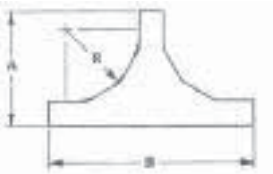
PART NUMBERING SYSTEM

NM	-	M	3	P	24	VTD	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

Vertical Tees



VTD
Vertical Tee Down
Mitered



VTU
Vertical Tee Up
Mitered

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL TEE DOWN		VERTICAL TEE UP	
			A (in.)	B (in.)	A (in.)	B (in.)
12	6	NM-M3-(Matl)-06-(*)12	23-15/16	50-7/8	26-15/16	50-7/8
	9	NM-M3-(Matl)-09-(*)12				
	12	NM-M3-(Matl)-12-(*)12				
	18	NM-M3-(Matl)-18-(*)12				
	24	NM-M3-(Matl)-24-(*)12				

* Add: VTD - For vertical tee down / VTU - For vertical tee up

Two pairs of stainless steel SS6 splice plates with SS6 hardware included.

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

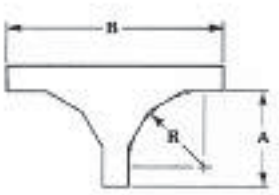
4 in. Vertical Tees

PART NUMBERING SYSTEM

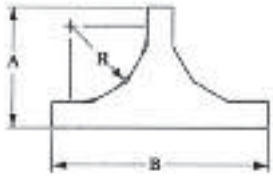
NM	-	M	4	P	24	VTD	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-4P24VTD12

Vertical Tees



VTD
Vertical Tee Down



VTU
Vertical Tee Up

-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL TEE DOWN A (in.)	VERTICAL TEE DOWN B (in.)	VERTICAL TEE UP A (in.)	VERTICAL TEE UP B (in.)
12	6	†NM-M4-(Matl)-06-(*)12	19-1/4	42-1/2	23-1/4	42-1/2
	9	†NM-M4-(Matl)-09-(*)12				
	12	†NM-M4-(Matl)-12-(*)12				
	18	†NM-M4-(Matl)-18-(*)12				
	24	†NM-M4-(Matl)-24-(*)12				
	30	†NM-M4-(Matl)-30-(*)12				
	36	†NM-M4-(Matl)-36-(*)12				
24	6	NM-M4-(Matl)-06-(*)24	31-1/4	66-1/2	35-1/4	66-1/2
	9	NM-M4-(Matl)-09-(*)24				
	12	NM-M4-(Matl)-12-(*)24				
	18	NM-M4-(Matl)-18-(*)24				
	24	NM-M4-(Matl)-24-(*)24				
	30	NM-M4-(Matl)-30-(*)24				
	36	NM-M4-(Matl)-36-(*)24				
36	6	NM-M4-(Matl)-06-(*)36	37-3/4	79-1/2	41-3/4	79-1/2
	9	NM-M4-(Matl)-09-(*)36				
	12	NM-M4-(Matl)-12-(*)36				
	18	NM-M4-(Matl)-18-(*)36				
	24	NM-M4-(Matl)-24-(*)36				
	30	NM-M4-(Matl)-30-(*)36				

* Add: VTD - For vertical tee down / VTU - For vertical tee up
Two pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

Standard rung spacing for fittings is 9in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Fittings

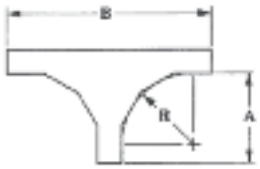
6 in. Vertical Tees

PART NUMBERING SYSTEM

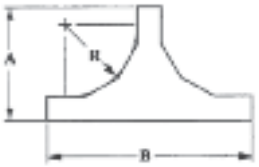
NM	-	M	6	P	24	VTD	12
Nonmetallic		Mitered	Height	Material	Width	Type	Radius

†For molded fitting, if available, please remove "M" in the catalogue number.
Ex: NM-6P24VTD12

Vertical Tees



VTD
Vertical Tee Down



VTU
Vertical Tee Up

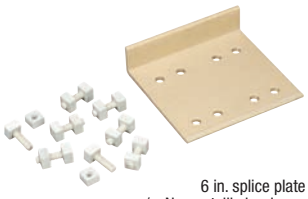
-R- Bend Radius (in.)	Tray Width (in.)	Cat. No.	VERTICAL TEE DOWN A (in.)	VERTICAL TEE DOWN B (in.)	VERTICAL TEE UP A (in.)	VERTICAL TEE UP B (in.)
12	6	NM-M6-(Matl)-06-(*)12	26	58	32	58
	9	NM-M6-(Matl)-09-(*)12				
	12	NM-M6-(Matl)-12-(*)12				
	18	NM-M6-(Matl)-18-(*)12				
	24	NM-M6-(Matl)-24-(*)12				
	30	NM-M6-(Matl)-30-(*)12				
24	6	†NM-M6-(Matl)-06-(*)24	31-1/4	68-1/2	37-1/4	68-1/2
	9	†NM-M6-(Matl)-09-(*)24				
	12	†NM-M6-(Matl)-12-(*)24				
	18	†NM-M6-(Matl)-18-(*)24				
	24	†NM-M6-(Matl)-24-(*)24				
	30	†NM-M6-(Matl)-30-(*)24				
	36	†NM-M6-(Matl)-36-(*)24				
36	6	NM-M6-(Matl)-06-(*)36	43-1/2	92-1/2	49-1/2	92-1/2
	9	NM-M6-(Matl)-09-(*)36				
	12	NM-M6-(Matl)-12-(*)36				
	18	NM-M6-(Matl)-18-(*)36				
	24	NM-M6-(Matl)-24-(*)36				
	30	NM-M6-(Matl)-30-(*)36				
	36	NM-M6-(Matl)-36-(*)36				

* Add: VTD - For vertical tee down / VTU - For vertical tee up
Two pairs of stainless steel SS6 splice plates with SS6 hardware included.
† Denotes molded fitting available.

Standard rung spacing for fittings is 9 in. For other types of splice plates, see page A272.

Dimensions for reference only, when critical contact factory. Consult factory for availability of molded fittings.

Splice Plates



6 in. splice plate
c/w Nonmetallic hardware

6 in. splice plate
c/w metallic hardware

Stainless steel 4 in. splice plate
c/w metallic hardware

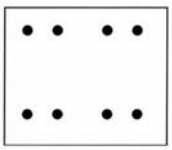
SPLICE PLATE SELECTION GUIDE

NM	- X	SS	4	00	4	( )	SS6
CABLE TRAY SYSTEM	**ACCESSORY NUMBER**	**MATERIAL**	**# OF HOLES IN PLATE**	**TYPE/ ANGLE**	**TRAY SERIES**	**TYPE**	**HARDWARE**
Nonmetallic		SS - Stainless Steel FP - Polyester Resin FV - Vinylester Resin	4 8	00 -Straight 01 -Slotted Straight 02 -Vertical Adjustable 03 -Horizontal Adjustable 04 - Step Down 05 - Tray to Box 30 - 30° Angle 45 - 45° Angle 90 - 90° Angle	3 in. 4 in. 6 in.	V - Vertical H - Horizontal	SS6 - 316 Stainless Steel MO - Monel SB - Silicon Bronze FR - Fiberglass

Example: NM-XSS4004SS6, Stainless steel 316, 4 holes supplied with stainless steel 316 hardware for a 4 in. deep straight section.

Note: Splice plates shown on pages A272-A274 represent splices for 6 in. side rail height. Number of holes may vary with other side rail heights.

Standard Splice Plates



Quantity required supplied with each tray section.

Order only pairs of splice plates needed for field modifications.

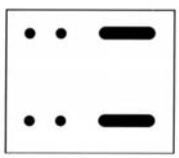
SS6 hardware supplied as standard - use SS6 suffix.

Other hardware available, specify by hardware suffix. Hardware other than SS6 is considered special.

Material	Cat. No.	Height (in.)
Stainless Steel	NM-XSS-8006*	6
	NM-XSS-4004*	4
	NM-XSS-4003*	3

* Hardware suffix needed to complete part number

Expansion Splice Plates



These plates allow for up to 1 in. expansion or contraction of tray system.

For correct gap setting procedure, see page A236.

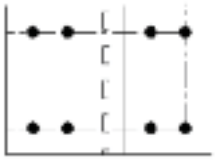
Material	Cat. No.	Side Rail Height (in.)
Stainless Steel 316 (16 gauge)	NM-XSS-8016*	6
	NM-XSS-4014*	4
	NM-XSS-4013*	3

* Hardware suffix needed to complete part number

All splice plate hardware is 3/8 in.

Splice Plates

Horizontal Adjustable Splice Plates



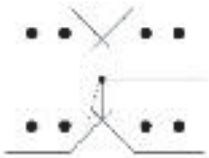
These plates provide for changes in the horizontal direction that do not conform to standard fittings.

Furnished in pairs.

Material	Cat. No.	Siderail Height (in.)
Stainless Steel 316 (16 gauge)	NM-XSS-8036*	6
	NM-XSS-4034*	4
	NM-XSS-4033*	3

* Hardware suffix needed to complete part number

Vertical Adjustable Splice Plates



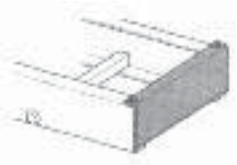
These plates provide for changes in elevation that do not conform to standard vertical fittings.

Furnished in pairs.

Material	Cat. No.	Siderail Height (in.)
Stainless Steel 316 (16 gauge)	NM-XSS-8026*	6
	NM-XSS-4024*	4
	NM-XSS-4023*	3

* Hardware suffix needed to complete part number

Blind End Plates



This plate forms a closure for any tray that dead ends.

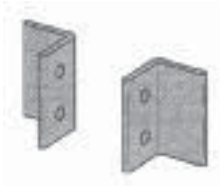
Furnished as one plate.

Material	Cat. No.	Height (in.)
Stainless Steel	NM-XBE*1086W**	6
	NM-XBE*1084W**	4
	NM-XBE*1083W**	3

* Material suffix: P=Polyester, V= Vinylester,

** Hardware suffix needed to complete part number
W = tray width

Tray to Box Splice Plates



These plates are used to attach the end of a tray run to a distribution box or control center.

Furnished in pairs.

Cat. No. Stainless Steel	Cat. No. Polyester Resin	Cat. No. Vinylester Resin	Height (in.)
NM-XSS8056*	NM-XFRP8056*	NM-XFRV8056*	6
NM-XSS4054*	NM-XFRP4054*	NM-XFRV4054*	4
NM-XSS4053*	NM-XFRP4053*	NM-XFRV053*	3

* Hardware suffix needed to complete part number

Step Down Plates

These splice plates provide for changes in side rail heights.

Furnished in pairs.

Cat. No. Stainless Steel 316 (16 gauge)	Cat. No. Polyester Resin	Cat. No. Vinylester Resin	Height (in.)
NM-XSS-8063*	NM-XFRP-8063*	NM-XFRV-8063*	6 to 3
NM-XSS-8064*	NM-XFRP-8064*	NM-XFRV-8064*	6 to 4
NM-XSS-4043*	NM-XFRP-4043*	NM-XFRV-4043*	4 to 3

* Hardware suffix needed to complete part number

All splice plate hardware is 3/8 in. Splice plates shown represent splices for 6 in. side rail height. Number of holes may vary with other siderail heights.

Splice Plates

Vertical Splice Plates

These splice plates provide for changes in elevation.

Furnished in pairs.

	Cat. No. Stainless Steel 316 (16 gauge)	Cat. No. Polyester Resin	Cat. No. Vinylester Resin	Siderail Height (in.)
90°				
	NM-XSS-8906V*	NM-XFRP-8906V*	NM-XFRV-8906V*	6
	NM-XSS-4904V*	NM-XFRP-4904V*	NM-XFRV-4904V*	4
	NM-XSS-4903V*	NM-XFRP-4903V*	NM-XFRV-4903V*	3
45°				
	NM-XSS-8456V*	NM-XFRP-8456V*	NM-XFRV-8456V*	6
	NM-XSS-4454V*	NM-XFRP-4454V*	NM-XFRV-4454V*	4
	NM-XSS-4453V*	NM-XFRP-4453V*	NM-XFRV-4453V*	3
30°				
	NM-XSS-8306V*	NM-XFRP-8306V*	NM-XFRV-8306V*	6
	NM-XSS-4304V*	NM-XFRP-4304V*	NM-XFRV-4304V*	4
	NM-XSS-4303V*	NM-XFRP-4303V*	NM-XFRV-4303V*	3

* Hardware suffix needed to complete part number

Horizontal Splice Plates

These splice plates provide for changes in the horizontal direction.

Furnished in pairs.

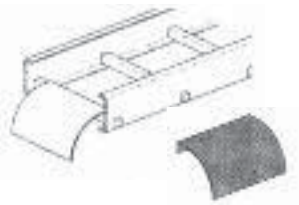
	Cat. No. Stainless Steel 316 (16 gauge)	Cat. No. Polyester Resin	Cat. No. Vinylester Resin	Siderail Height (in.)
90°				
	NM-XSS-8906H*	NM-XFRP-8906H*	NM-XFRV-8906H*	6
	NM-XSS-4904H*	NM-XFRP-4904H*	NM-XFRV-4904H*	4
	NM-XSS-4903H*	NM-XFRP-4903H*	NM-XFRV-4903H*	3
45°				
	NM-XSS-8456H*	NM-XFRP-8456H*	NM-XFRV-8456H*	6
	NM-XSS-4454H*	NM-XFRP-4454H*	NM-XFRV-4454H*	4
	NM-XSS-4453H*	NM-XFRP-4453H*	NM-XFRV-4453H*	3
30°				
	NM-XSS-8306H*	NM-XFRP-8306H*	NM-XFRV-8306H*	6
	NM-XSS-4304H*	NM-XFRP-4304H*	NM-XFRV-4304H*	4
	NM-XSS-4303H*	NM-XFRP-4303H*	NM-XFRV-4303H*	3

* Hardware suffix needed to complete part number

All splice plate hardware is 3/8 in. Splice plates shown represent splices for 6 in. side rail height. Number of holes may vary with other siderail heights.

Drop Out and Barrier Strips

Ladder Drop-out



Specially-designed Ladder Drop-Outs provide a rounded surface with adequate radius to protect cable as it exists from the tray, preventing damage to insulation.

Material	Cat. No.	Height (in.)
Polyester Resin	NM-XP-1104-W	6 to 36

Supplied with a 4 in. radius.
W = tray width

Barriers

Furnished with #10 x 3/4 in. self-tapping stainless steel screws

Material	Cat. No.	Siderail Height (in.)
Polyester Resin	NM-BS06P-120	6
	NM-BS04P-120	4
	NM-BS03P-120	3
Vinyl Ester Resin	NM-BS06V-120	6
	NM-BS04V-120	4
	NM-BS03V-120	3

Flexible Horizontal Barrier Kit

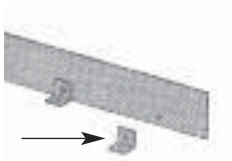
One Kit allows up to 38" radius position of the barrier. For larger than 38" radius barrier position, two kits are required.

Kit Contents

- 1 pc - 72 in. Straight Barrier
- 4 pc - XF-9002 Barrier Strip Clip
- 8 pc - SS6 "Pop" Rivets
- 4 Pc - #10 x 3/4 in. Stainless steel self-tapping screw
- Assembly required - directions included.

Material	Cat. No.	Siderail Height (in.)	Loading Depth 'H' (in.)
Polyester Resin	NM-BS06P-90HBFL	6	4-11/16
	NM-BS04P-90HBFL	4	2-11/16
	NM-BS03P-90HBFL	3	1-3/4
Vinyl Ester Resin	NM-BS06V-90HBFL	6	4-11/16
	NM-BS04V-90HBFL	4	2-11/16
	NM-BS03V-90HBFL	3	1-3/4

Barrier Mounting Angle Clips with Fasteners

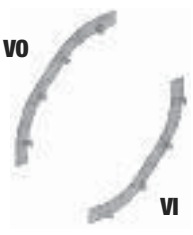


1 pack contains

- 4 angle clips and fasteners.
- 2 SS6 "Pop" Rivets
- 1 #10 x 3/4 in. Stainless steel self-tapping screw.

Material	Cat. No.
Injection molded Glass Filled Nylon (Black colour)	NM-PK-BAC

Vertical Barrier



Barriers for vertical fitting.

Please add angle (X) and radius (†) to catalogue number.

Furnished with #10 X 3/4 in. self-tapping stainless steel screws.

VI = Inside vertical
VO = Outside vertical

Material	Cat. No.	Siderail Height (in.)
Polyester Resin	NM-BS06P(X)VI/VO(†)	6
	NM-BS06P(X)VI/VO(†)	4
	NM-BS06P(X)VI/VO(†)	3
Vinyl Ester Resin	NM-BS06V(X)VI/VO(†)	6
	NM-BS06V(X)VI/VO(†)	4
	NM-BS06V(X)VI/VO(†)	3

Sealants

Spray Sealant

Spray acrylic to reseal fiberglass after field modifications.

Description	Cat. No.
12 fl. oz. can	NM-CLEAR-1215

Should be used for top coating polyester applications only. Not recommended to seal vinylester.

Resin Seal Kit

To reseal fiberglass after field modifications. Vinylester and Polyester Resin "wicks" into cut ends.

Kit Contents

- Resin
- Catalyst
- Stir stick and applicator

Description	Cat. No.
1/2 pint	NM-RSK-05
1 pint	NM-RSK-10

Covers and Accessories + 1 Pop Rivet

Covers for Straight Sections

Material thickness: 1/8 in.
Standard cover length: 120 in. (10 ft)
Standard mounting hardware: (10 each) #10 x 1/2 in. stainless, self-tapping screws provided with each section.

COVERS SELECTION GUIDE

NM	- FC	P	12	120
CABLE TRAY SYSTEM	TYPE OF COVER	MATERIAL	TRAY WIDTH	LENGTH
NONMETALLIC	FC = Flat PC = Peaked	P - Polyester Resin V - Vinyl Ester Resin	6 in. to 36 in.	120 in. (10 ft.)

Note : Peaked covers available for straight sections only.

Covers for Fittings

Material thickness: 1/8 in.
Standard mounting hardware: (10 each) #10 x 1/2 in. stainless, self-tapping screws provided with each section.

COVERS SELECTION GUIDE

NM	- FC	P	12	HB	90	24
CABLE TRAY SYSTEM	TYPE OF COVER	MATERIAL	WIDTH	FITTING DESIGNATION	ANGLE	RADIUS
NONMETALLIC	FC = Flat	P - Polyester Resin V- Vinyl Ester Resin	6 in. to 36 in.	HB IV/OV HT HX	30 45 60 90	12 24 36

Note : Peaked covers not available.
Other fitting covers are available. Please consult your Regional Sales office.

Heavy-Duty Cover Clamp

Recommended for outdoor service.

Heavy-duty cover clamp available for flat covers only. Available in both Polyester and Vinyl Ester Resin.

Material	Cat. No.	Siderail Height (in.)
Polyester Resin	NM-XWC-P-W*-9064-SS6	6
	NM-XWC-P-W*-9044-SS6	4
	NM-XWC-P-W*-9034-SS6	3
Vinyl Ester Resin	NM-XWC-V-W*-9064-SS6	6
	NM-XWC-V-W*-9044-SS6	4
	NM-XWC-V-W*-9034-SS6	3

* W = tray width

SS Pop Rivets

Shipped in packages of 25 pcs.

Material	Cat. No.
Thermoplastic	TPDR

Raised cover clamps available.
Please consult your Regional Sales office.

Straight Lengths

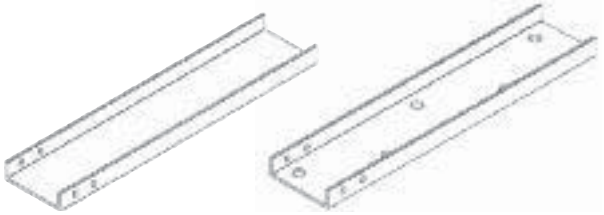
Thomas & Betts offers Nonmetallic cable channel in solid or ventilated straight sections. Horizontal and vertical solid bottom fittings are also available to complete your system layout.

STRAIGHT SECTION CATALOGUE SELECTOR

NM	- FCC	V	P	04	- 120
CABLE TRAY SYSTEM	**SERIES**	**BOTTOM TYPE**	**MATERIAL**	**WIDTH (in.)**	**LENGTH**
Nonmetallic	Fiberglass Cable Channel	V = Ventilated N = Non ventilated	P - Polyester Resin V- Vinyl Ester Resin	02 = 2 03 = 3 04 = 4 06 = 6 08 = 8	120 in. = 10 ft 240 in. = 20 ft

Example: NM-FCCVP04-120 for Polyester Resin Cable Channel, 4 in. wide ventilated bottom, 120 in. (10 ft) length.

Note: Straights are provided without splice plate holes.



Specifications

VENTILATED

Width (in.)	Height (in.)	Length (in.)	Polyester	Vinyl Ester
2	1	10	NM-FCCVP-02-120	NM-FCCVV-02-120
	1	20	NM-FCCVP-02-240	NM-FCCVV-02-24
3	1	10	NM-FCCVP-03-120	NM-FCCVV-03-120
	1	20	NM-FCCVP-03-240	NM-FCCVV-03-240
4	1-1/8	10	NM-FCCVP-04-120	NM-FCCVV-04-120
	1-1/8	20	NM-FCCVP-04-240	NM-FCCVV-04-240
6	1-5/8	10	NM-FCCVP-06-120	NM-FCCVV-06-120
	1-5/8	20	NM-FCCVP-06-240	NM-FCCVV-06-240
8	2-3/16	10	NM-FCCVP-08-120	NM-FCCVV-08-120
	2-3/16	20	NM-FCCVP-08-240	NM-FCCVV-08-240

NON VENTILATED

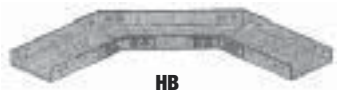
Width (in.)	Height (in.)	Length (in.)	Polyester	Vinyl Ester
2	1	10	NM-FCCNP-02-120	NM-FCCNV-02-120
	1	20	NM-FCCNP-02-240	NM-FCCNV-02-240
3	1	10	NM-FCCNP-03-120	NM-FCCNV-03-120
	1	20	NM-FCCNP-03-240	NM-FCCNV-03-240
4	1-1/8	10	NM-FCCNP-04-120	NM-FCCNV-04-120
	1-1/8	20	NM-FCCNP-04-240	NM-FCCNV-04-240
6	1-5/8	10	NM-FCCNP-06-120	NM-FCCNV-06-120
	1-5/8	20	NM-FCCNP-06-240	NM-FCCNV-06-240
8	2-3/16	10	NM-FCCNP-08-120	NM-FCCNV-09-120
	2-3/16	20	NM-FCCNP-08-240	NM-FCCNV-08-240

Splice plates NOT included. See page A272 for type of splice plates available.

Covers are available. Please consult your Regional Sales Office.

Fittings

Horizontal

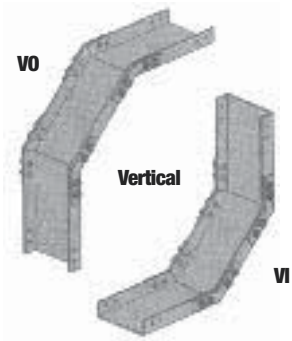


HB
Horizontal Bend

One pair of splice plates with SS6 hardware included.
For vinyl ester resin, use "V" instead of "P" in part number.
Example: FCCNV-04-90HB12

Angle	Cat. No.	Width (in.)
90	NM-FCCNP-03-90HB12	3
	NM-FCCNP-04-90HB12	4
	NM-FCCNP-06-90HB12	6
	NM-FCCNP-08-90HB12	8
45	NM-FCCNP-03-45HB12	3
	NM-FCCNP-04-45HB12	4
	NM-FCCNP-06-45HB12	6
	NM-FCCNP-08-45HB12	8

Vertical



One pair of splice plates with SS6 hardware included.
For vinyl ester resin, use "V" instead of "P" in part number.
Example: FCCNV-04-90VI12

Angle	Cat. No.	Width (in.)
90	NM-FCCNP-03-90V12	3
	NM-FCCNP-04-90V12	4
	NM-FCCNP-06-90V12	6
	NM-FCCNP-08-90V12	8
45	NM-FCCNP-03-45V12	3
	NM-FCCNP-04-45V12	4
	NM-FCCNP-06-45V12	6
	NM-FCCNP-08-45V12	8

Horizontal Tees

HT

Two pairs of splice plates included.
For vinyl ester resin, use "V" instead of "P" in part number.
Example: FCCNV-04-HT12

Cat. No.	Width (in.)
NM-FCCNP-03-HT12	3
NM-FCCNP-04-HT12	4
NM-FCCNP-06-HT12	6
NM-FCCNP-08-HT12	8

Horizontal Crosses

HX

Three pairs of splice plates included.
For vinyl ester resin, use "V" instead of "P" in part number.
Example: FCCNV-04-HX12

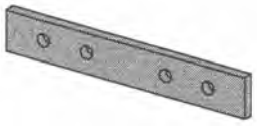
Cat. No.	Width (in.)
NM-FCCNP-03-HX12	3
NM-FCCNP-04-HX12	4
NM-FCCNP-06-HX12	6
NM-FCCNP-08-HX12	8

Covers available. Please contact your Regional Sales Office.

Fittings

Standard Splice Plates

Supplied in pairs



Cat. No.	Material
NM-XSS-1001-SS6	Stainless Steel
NM-XFP-1001-SS6	Polyester Resin
NM-XFV-1001-SS6	Vinyl Ester Resin

Expansion Splice Plates

Supplied in pairs

Cat. No.	Material
NM-XSS-1011-SS6	Stainless Steel
NM-XFP-1011-SS6	Polyester Resin
NM-XFV-1011-SS6	Vinyl Ester Resin

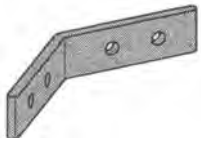
Horizontal 90º Splice Plates

Supplied in pairs

Cat. No.	Material
NM-XSS-1901H-SS6	Stainless Steel
NM-XFP-1901H-SS6	Polyester Resin
NM-XFV-1901H-SS6	Vinyl Ester Resin

Horizontal 45º Splice Plates

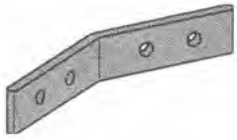
Supplied in pairs



Cat. No.	Material
NM-XSS-1451H-SS6	Stainless Steel
NM-XFP-1451H-SS6	Polyester Resin
NM-XFV-1451H-SS6	Vinyl Ester Resin

Horizontal 30º Splice Plates

Supplied in pairs



Cat. No.	Material
NM-XSS-1301H-SS6	Stainless Steel
NM-XFP-1301H-SS6	Polyester Resin
NM-XFV-1301H-SS6	Vinyl Ester Resin

Vertical 90º Splice Plates

Supplied in pairs

Cat. No.	Material
NM-XSS-1901V-SS6	Stainless Steel
NM-XFP-1901V-SS6	Polyester Resin
NM-XFV-1901V-SS6	Vinyl Ester Resin

Vertical 45º Splice Plates

Supplied in pairs

Cat. No.	Material
NM-XSS-1451V-SS6	Stainless Steel
NM-XFP-1451V-SS6	Polyester Resin
NM-XFV-1451V-SS6	Vinyl Ester Resin

Vertical 30º Splice Plates

Supplied in pairs

Cat. No.	Material
NM-XSS-1301V-SS6	Stainless Steel
NM-XFP-1301V-SS6	Polyester Resin
NM-XFV-1301V-SS6	Vinyl Ester Resin

Supply with standard hardware is 1/4 in. Stainless Steel 316.

Channels

Thomas & Betts is proud to present its new line of Nonmetallic Struts and Accessories. You'll find a complete selection of Nonmetallic accessories, fasteners, hangers, pipe clamps and channels.

Most Thomas & Betts Strut Products are available in a choice of resins – either vinyl ester or polyester. Our design and engineering staff is ready to help you select the material that best suits your needs.

STRAIGHT SECTION CATALOGUE SELECTOR

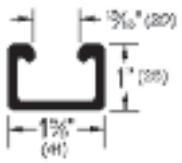
NM	-SS	100	( )	( )	- 20
STRUT SYSTEM	**TYPE OF SYSTEM**	**SIZE**	**DOUBLE**	**HOLES/SLOTS/ INSERT**	**LENGTH**
Nonmetallic	SS = Strut system	100 = 1 in. 158 = 1-5/8 in.	D = double Blank = single	H = holes I = insert S = slots	120 = 10 ft. 240 = 20 ft.

Example: NM-SS100-120, 1 in. single strut, 120 in. (10 ft.)
Note: Stocked in 120 in. (10 ft.) and 240 in. (20 ft.)
Custom colour available upon request. Minimum quantity required.

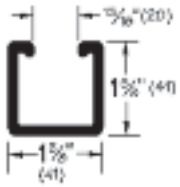
Channels

Combinations and Hole Pattern

Solid – Single Strut



NM-SS(*)-100



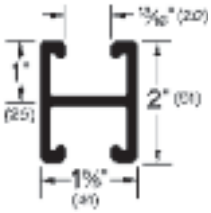
NM-SS(*)-158

*Add P - for polyester or V - for vinyl ester

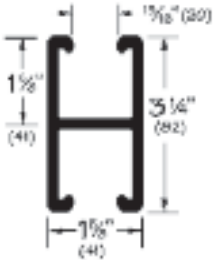
Material/ Resin	Cat. No.	Colour	Weight	
			lb. / ft.	kg / m
Polyester	NM-SSP-100-(L)	Grey	0.47	0.70
	NM-SSP-158-(L)		0.63	0.94
Vinyl Ester	NM-SSV-100-(L)	Beige	0.47	0.70
	NM-SSV-158-(L)		0.63	0.94

(L) Add desired length 120 (10 ft.) or 240 (20 ft.)
Cut-to-length channel also available.
Contact your Regional Sales Office for more information.

Solid – Back to Back



NM-SS(*)-100-D



NM-SS(*)-158-D

*Add P - for polyester or V - for vinyl ester

Material/ Resin	Cat. No.	Colour	Weight	
			lb. / ft.	kg / m
Polyester	NM-SSP-100-D-(L)	Grey	0.86	1.28
	NM-SSP-158-D-(L)		1.17	1.75
Vinyl Ester	NM-SSV-100-D-(L)	Beige	0.86	1.28
	NM-SSV-158-D-(L)		1.17	1.75

(L) Add desired length 120 (10 ft.) or 240 (20 ft.)
Cut-to-length channel also available.
Contact your Regional Sales Office for more information.

Punched

Holes - 9/16 in. holes X 1-7/8 in. on center

Material/ Resin	Cat. No.	Colour	Weight	
			lb. / ft.	kg / m
Polyester	NM-SSP-100-H-(L)	Grey	0.45	0.67
	NM-SSP-158-H-(L)		0.61	0.91
Vinyl Ester	NM-SSV-100-H-(L)	Beige	0.45	0.67
	NM-SSV-158-H-(L)		0.61	0.91

(L) Add desired length 120 (10 ft.) or 240 (20 ft.)
Cut-to-length channel also available.
Contact your Regional Sales Office for more information.

Channels

Combinations and Hole Pattern

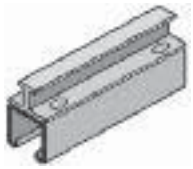
Slotted

Slots - 9/16 in. X 7/8 in. on 2 in. centers

Material/ Resin	Cat. No.	Colour	Weight	
			lb. / ft.	kg / m
Polyester	NM-SSP-100-S-(L)	Grey	0.46	0.69
	NM-SSP-158-S-(L)		0.62	0.93
Vinyl Ester	NM-SSV-100-S-(L)	Beige	0.46	0.69
	NM-SSV-158-S-(L)		0.62	0.93

(L) Add desired length 120 (10 ft.) or 240 (20 ft.)
Cut-to-length channel also available.
Contact your Regional Sales Office for more information.

Concrete Insert



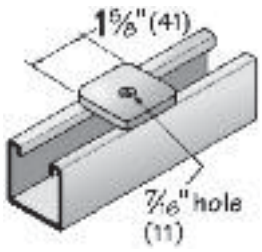
Material/ Resin	Cat. No.	Colour	Weight	
			lb. / ft.	kg / m
Polyester	NM-SSP-158-I-(L)	Grey	1.04	1.55
Vinyl Ester	NM-SSV-158-I-(L)	Beige	1.04	1.55

(L) Add desired length 120 (10 ft.) or 240 (20 ft.)
Cut-to-length channel also available.
Contact your Regional Sales Office for more information.

Fittings and Brackets

Nonmetallic Strut Fittings and Brackets

NM-SFP-1S7



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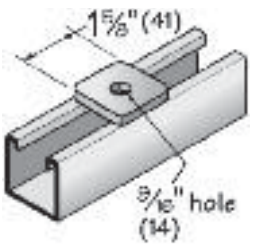

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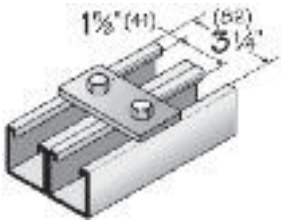

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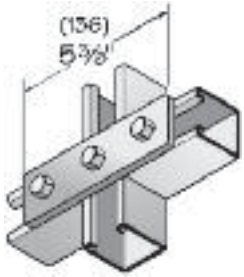

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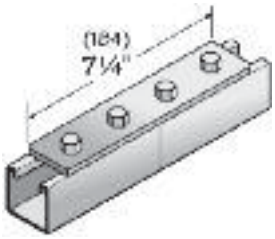
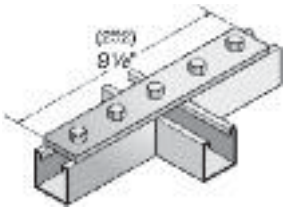


NM-SFP-5S



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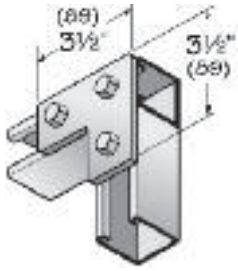

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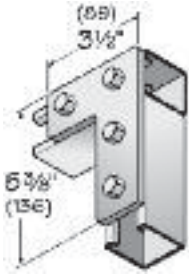

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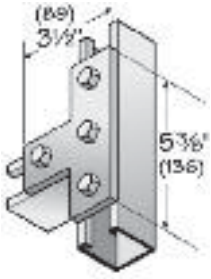
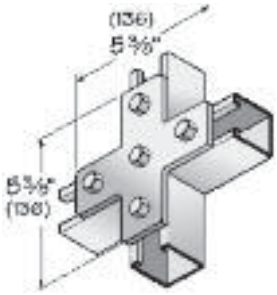
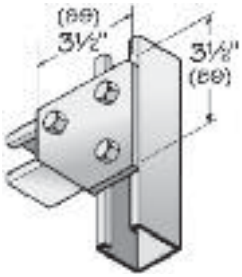


NM-SFP-5HX



NM-SFP-3HCG



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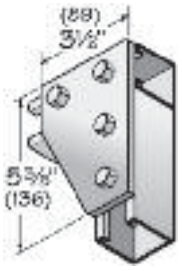

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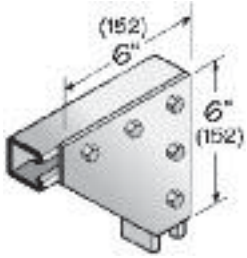

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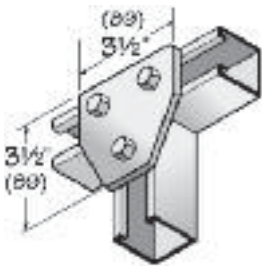

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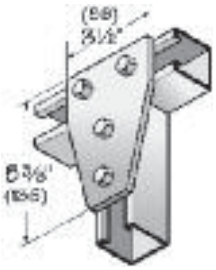

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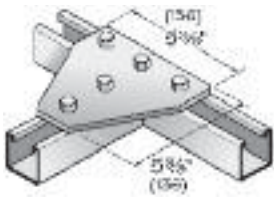
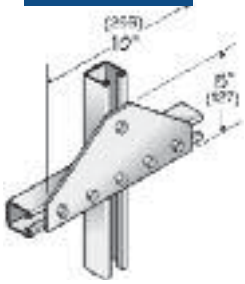


All fittings are 1-5/8 in. (41 mm) wide and 1/4 in. (6 mm) thick unless specified otherwise. All holes are 13/32 in. (10 mm) diameter unless specified otherwise. Not supplied with hardware.

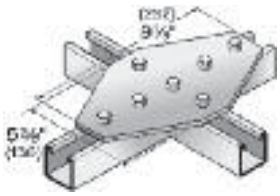
Fittings and Brackets

Nonmetallic Strut Fittings and Brackets

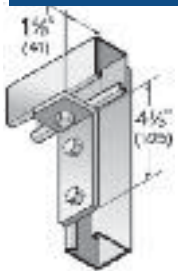
NM-SFP-6HTG



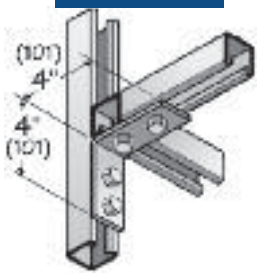
NM-SFP-7HXG



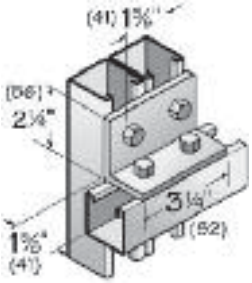
NM-SFP-3VL



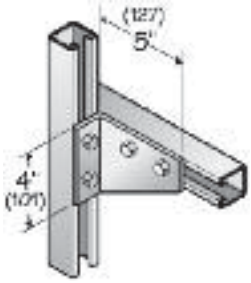
NM-SFP-4VL



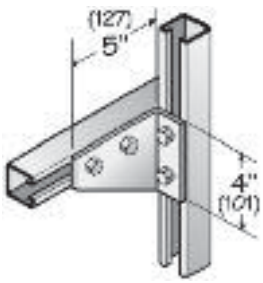
NM-SFP-4VLD



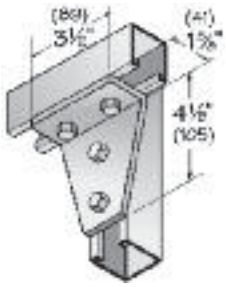
NM-SFP-4VGL



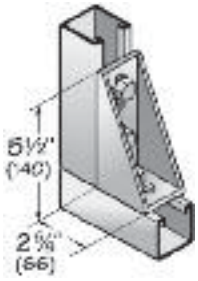
NM-SFP-4VGR



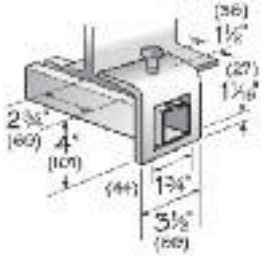
NM-SFP-4VTG



NM-SFP-3CB



NM-SWC-158

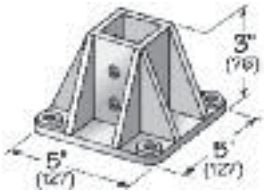


Window Clamp

NM-SSV-DBASE

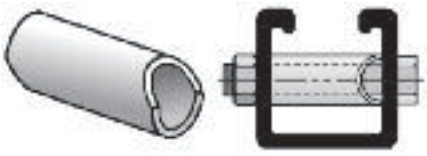
Double Base

NM-SSV-SBASE



Single Base

NM-SCSP-158



Channel Spacer (for 3/8" rod)

All fittings are 1-5/8 in. (41 mm) wide and 1/4 in. (6 mm) thick unless specified otherwise. All holes are 13/32 in. (10 mm) diameter unless specified otherwise. Hardware not included.

Hardware

Nonmetallic Threaded Hardware

Hex Head Bolt

Thread Size	Cat. No.	Bolt Length (in.)	Design Load		Max Torque		Weight / C	
			lb.	N	in.-lb.	N-m	lb.	g
5/16 in. - 18	NM-F516100	5/16 x 1	190	845	30	3.4	0.4	181
5/16 in. - 18	NM-F516114	5/16 x 1-1/4	190	845	30	3.4	0.4	181
3/8 in. - 16	NM-F38100	3/8 x 1	300	1334	45	5.1	0.9	408
3/8 in. - 16	NM-F38114	3/8 x 1-1/4	300	1334	45	5.1	1.1	499
3/8 in. - 16	NM-F38212	3/8 x 2-1/2	300	1334	45	5.1	1.5	680
1/2 in. - 13	NM-F12100	1/2 x 1	490	2180	110	12.4	1.4	635
1/2 in. - 13	NM-F12114	1/2 x 1-1/4	490	2180	110	12.4	1.8	816
1/2 in. - 13	NM-F12212	1/2 x 2-1/2	490	2180	110	12.4	3.7	1678

Safety Factor of 3 on Design Load.

Hex Nut

Thread Size	Cat. No.	Height		Weight / C	
		(in.)	(mm)	lb.	g
3/8 in. - 16	NM-F38HN	21/64	8	0.3	136
1/2 in. - 13	NM-F12HN	7/16	11	0.7	318
5/8 in. - 11	NM-F58HN	35/64	14	1.4	635

Note: 3/4 in. and 1 in. sizes are available.

All-Thread Rod

Thread Size	Cat. No.	Design Load		Max Torque		Weight / C	
		lb.	N	in.-lb.	N-m	lb.	g
3/8 in. - 16	NM-F38AT	425	1890	45	5.1	0.08	36
1/2 in. - 13	NM-F12AT	750	3336	110	12.4	0.13	59
5/8 in. - 11	NM-F58AT	950	4226	230	26.0	0.21	95

Safety Factor of 3 on Design Load. Note: 3/4 in. and 1 in. sizes are available.
Standard lengths are 4 ft. and 8 ft. **Example:** NM-F38AT-4.

All-Thread Rod Hex Nut

Thread Size	Cat. No.	Height		Weight / C	
		(in.)	(mm)	lb.	g
3/8 in. - 16	NM-F38ATHN	3/4	19	0.8	376
1/2 in. - 13	NM-F12ATHN	7/8	22	1.7	771

Rod Coupler

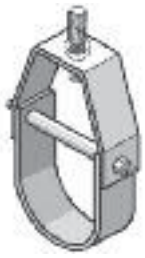
Thread Size	Cat. No.	Weight / C	
		lb.	g
3/8 in. - 16	NM-FRC38	7.4	3357
1/2 in. - 13	NM-FRC12	11.3	5118
5/8 in. - 11	NM-FRC58	16.7	7575

3/4 in. and 1 in. sizes are available.

Brackets, Hangers and Clamps

Nonmetallic Pipe Hangers, Brackets and Beam Clamps

Clevis Hangers

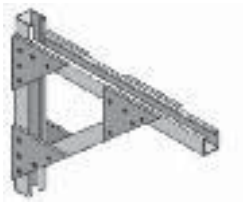


Nominal Pipe Size (in.)	Nominal Pipe Size (mm)	Cat. No.	Maximum O.D. Range (in.)	Maximum O.D. Range mm	Hanger Rod Size	Design Load lb.	Design Load N-m
2	50	NM-SCH200	2-1/2	63	1/2 in. - 13	90	0.40
2-1/2	65	NM-SCH212	3-1/4	82	1/2 in. - 13	120	0.54
3	80	NM-SCH300	3-7/8	98	1/2 in. - 13	160	0.71
4	100	NM-SCH400	5	127	5/8 in. - 11	250	1.12
6	150	NM-SCH600	7	177	5/8 in. - 11	400	1.79
8	200	NM-SCH800	9	228	5/8 in. - 11	450	2.01
10	250	NM-SCH1000	11-3/8	289	5/8 in. - 11	500	2.24
12	300	NM-SCH1200	13-1/2	342	5/8 in. - 11	600	2.69

Safety Factor of 3 on Design Loads at 120°F (49°C).
Insulation may be required at high temperatures.
Order hanger rods and nuts separately.

Support Brackets

SB 1

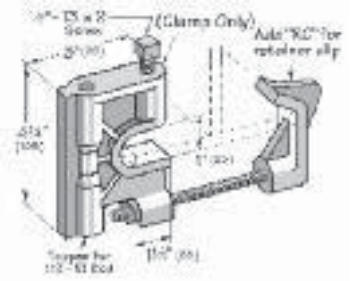


SB 2

Cat. No.	Height (in.)	Height (mm)	Design Load lb.	Design Load N
NM-SB1-06P	10	250	1400	6.22
NM-SB1-09P	13	330	1000	4.45
NM-SB1-12P	16	406	800	3.56
NM-SB1-18P	22	559	675	3.00
NM-SB1-24P	28	711	450	2.00
NM-SB2-24P	28	711	750	3.33
NM-SB2-30P	34	863	750	3.33
NM-SB2-36P	40	1016	750	3.33

Substitute "V" for "P" when Vinyl Ester Resin is needed.
Design loads based on uniform loading with a Safety Factor of 3.

Beam Clamps



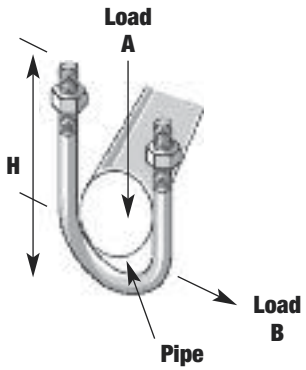
Description	Cat. No.	Design Load lb. / ft.	Design Load kg / m
Beam Clamp	NM-SBC	800	3.56
Beam Clamp w/retainer clip	NM-SBC-RC	800	3.56

Safety Factor of 3 on Design Load.

Brackets, Hangers and Clamps

Nonmetallic Threaded Hardware and Sealant

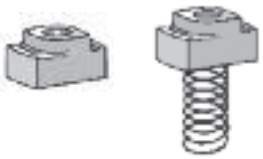
U-Bolt



Nominal Pipe Size (in.)	Nominal Pipe Size (mm)	H Height (in.)	Cat. No.	Design Load A lb.	Design Load A N	Design Load B lb.	Design Load B N	Max. Torque in.-lb.	Max. Torque N-m	Weight / C lb.	Weight / C g
1/2	15	2.41	NM-FUB050	300	1334	150	667	30	3.4	3.5	1588
3/4	20	2.60	NM-FUB075	300	1334	150	667	30	3.4	3.9	1769
1	25	2.85	NM-FUB100	300	1334	150	667	30	3.4	4.4	1996
1-1/4	32	3.16	NM-FUB114	300	1334	150	667	30	3.4	4.8	2177
1-1/2	40	3.47	NM-FUB112	300	1334	150	667	30	3.4	5.2	2359
2	50	4.18	NM-FUB200	600	2669	200	890	60	6.8	7.7	3493
2-1/2	65	4.68	NM-FUB212	600	2669	200	890	60	6.8	10.2	4627
3	80	5.31	NM-FUB300	600	2669	200	890	60	6.8	12.6	5715
3-1/2	90	5.81	NM-FUB312	600	2669	200	890	60	6.8	15.1	6849
4	100	6.31	NM-FUB400	600	2669	200	890	60	6.8	17.6	7983

Safety Factor of 3 on Design Load.

Channel Nut



Thread	Cat. No. w/spring	Cat. No. w/o spring	Pull-Out lb.	Pull-Out N	Slip Resistance lb.	Slip Resistance N	Max. Torque in.-lb.	Max. Torque N-m	Weight / C lb.	Weight / C g
3/8 – 16	NM-FCN38	FCN38WO	300	1334	150	667	200	22.6	2.3	1043
1/2 – 13	NM-FCN12	FCN12WO	300	1334	150	667	200	22.6	2.3	1043

Safety Factor of 3 on Design Load.

Note: 1/4 in. and 5/16 in. sizes are available.

Flat Washer

Hole Size (in.)	Cat. No.	Weight / C lb.	Weight / C g
3/8	NM-F38W	0.5	227
1/2	NM-F12W	0.5	227
5/8	NM-F58W	0.5	227
3/4	NM-F34W	0.5	227
1	NM-F100W	0.5	227

Brush-On Resin Seal Kit

To reseal fiberglass after field modifications. Vinyl Ester Resin

Kit Contents

- Resin
- Catalyst
- Stir stick and applicator

Description	Cat. No.
1/2 pint	NM-RSK-05
1 pint	NM-RSK-10

Spray Sealant

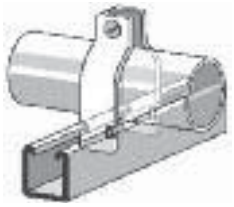
Spray acrylic to reseal fiberglass after field modifications.

Description	Cat. No.
12 fl. oz. can	NM-CLEAR-1215

Brackets, Hangers and Clamps

Pipe Clamps

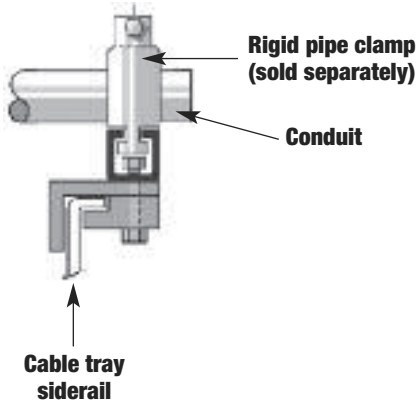
Rigid Pipe Clamp



Nominal Pipe Size		Cat. No.	Design Load		Max. Torque	
(in.)	(mm)		lb.	N	in.-lb.	N-m
1/2	15	NM-SRPC050	300	1.33	10	1.13
3/4	20	NM-SRPC075	300	1.33	10	1.13
1	25	NM-SRPC100	300	1.33	10	1.13
1-1/4	32	NM-SRPC114	300	1.33	10	1.13
1-1/2	40	NM-SRPC112	300	1.33	10	1.13
2	50	NM-SRPC200	300	1.33	10	1.13
2-1/2	65	NM-SRPC212	300	1.33	10	1.13
3	80	NM-SRPC300	300	1.33	10	1.13
3-1/2	90	NM-SRPC312	300	1.33	10	1.13
4	100	NM-SRPC400	300	1.33	10	1.13

Safety Factor of 3 on Design Load.

Conduit Swivel Clamp



Cat. No.
NM-SCSC-(CTD

Cable Tray Designation (CTD) required
(Ex. 6CP Series designates 6 in. deep polyester resin).
Pipe Clamps are a separate order item.

Strut Loading Chart

Nonmetallic Strut Load Charts

Loading Information

Beam Loads: The charts below list the total allowable uniform load for various simple spans based on a minimum safety factor of 2. If the load is concentrated at center span, multiply the load by 0.5 and the corresponding deflection by 0.8.

Beam Loading Data for Glass Reinforced Polyester Resin

Beam Span	Cat. No.	Maximum Allowable Beam Load		Deflection at Maximum Allowable Beam Load		Allowable Load @ Deflection =			
						1/240 Span		1/360 Span	
		lb.	N	(in.)	(mm)	lb.	N	lb.	N
12 in. (305)	NM-SSP-100	793	3527	0.106	2.69	373	1659	249	1107
	NM-SSP-100-D	2301	10235	0.060	1.52	1928	8576	1285	5715
	NM-SSP-158	1783	7931	0.067	1.70	1327	5902	885	3936
	NM-SSP-158-D	5172	23005	0.037	.94	5172	23005	4696	20888
14 in. (305)	NM-SSPP-100	397	1766	0.425	10.79	93	413	62	276
	NM-SSP-100-D	1150	5115	0.239	6.07	482	2144	321	1428
	NM-SSP-158	891	3963	0.269	6.83	332	1477	221	983
	NM-SSP-158-D	2586	11502	0.147	3.73	1761	7833	1174	5222
36 in. (305)	NM-SSP-100	264	1174	0.957	24.31	41	182	28	124
	NM-SSP-100-D	767	3411	0.537	13.64	214	952	143	636
	NM-SSP-158	594	2642	0.604	15.34	147	654	98	436
	NM-SSP-158-D	1724	7668	0.330	8.38	783	3483	522	2322

Beam Loading Data for Glass Reinforced Vinyl Ester Resin

Beam Span	Cat. No.	Maximum Allowable Beam Load		Deflection at Maximum Allowable Beam Load		Allowable Load @ Deflection =			
						1/240 Span		1/360 Span	
		lb.	N	(in.)	(mm)	lb.	N	lb.	N
12 in. (305)	NM-SSV-100	988	4394	0.112	2.84	441	1961	294	1308
	NM-SSV-100-D	2866	12748	0.063	1.60	2279	10137	1519	6756
	NM-SSV-158	2221	9879	0.071	1.80	1569	6979	1046	4652
	NM-SSV-158-D	6443	28658	0.039	.99	6443	28658	5550	24686
14 in. (305)	NM-SSV-100	494	2197	0.448	11.38	110	489	73	325
	NM-SSV-100-D	1433	6374	0.252	6.40	570	2535	380	1690
	NM-SSV-158	1110	4937	0.283	7.19	392	1743	261	1161
	NM-SSV-158-D	3221	14327	0.155	3.94	2081	9256	1387	6169
36 in. (305)	NM-SSV-100	329	1463	1.009	25.63	49	218	33	147
	NM-SSV-100-D	955	4248	0.566	14.37	253	1125	169	752
	NM-SSV-158	740	3291	0.637	16.18	174	774	116	516
	NM-SSV-158-D	2148	9554	0.348	8.84	925	4114	617	2744

Note: Dimensions shown as metric are in millimeters, unless otherwise specified.

Recommended Guideline

Published design loads are based on usage at 70°F (21°C) and must be reduced for continuous exposure to higher temperatures. Refer to the chart at right for high temperature applications.

Temperature	Design Load Multiplier
75°F (24°C)	100%
100°F (38°C)	90%
125°F (52°C)	78%
150°F (66°C)	68%
175°F (79°C)	60%
200°F (93°C)	52%