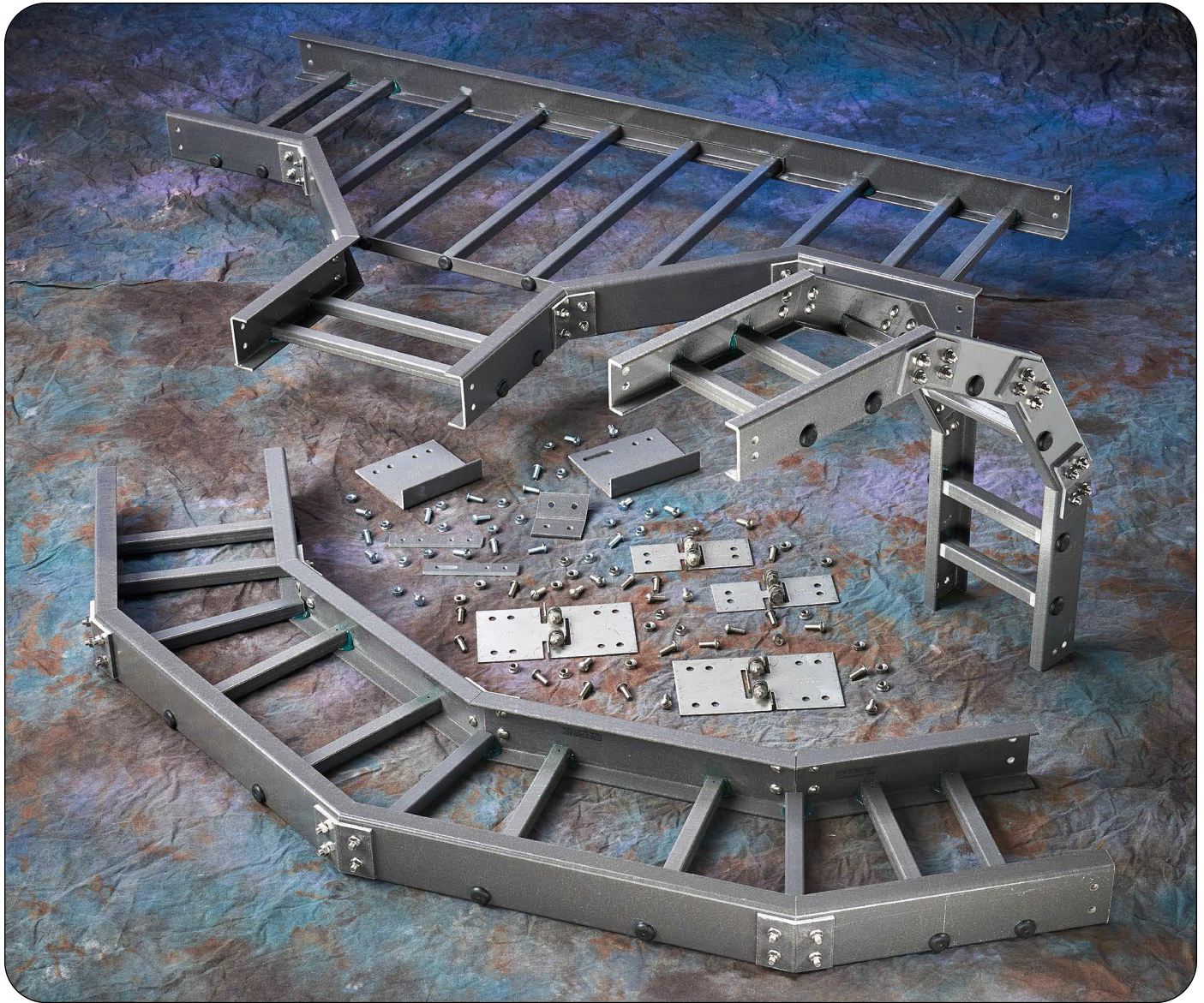




Fiberglass



How The Service Advisor Works

We know that your time is important! That's why the color-coding system in this catalog is designed to help you select products that fit your service needs. Products are marked to indicate the typical lead time for orders of 50 pieces or less.

Customer: How do I select my straight sections, covers, or fittings so that I get the quickest turnaround?

Service Advisor: Each part of our selection chart is shown in colors. If any section of a part number is a different color, the part will typically ship with the longer lead time represented by the colors.

- Green = Fastest shipped items
- Black = Normal lead-time items
- Red = Normally long lead-time items

Example:

24	FV	-	09	-	24	-	120
●	●		●		●		●
3-5	15		3-5		3-5		3-5

Part will have a long lead time because of the FV material.

Changing the part number from 24FV to 24F will change the coding to black for all sections and reduce the lead time.

Corrosion Guide

The information shown in this corrosion guide is based on full immersion laboratory tests and data generated from resin manufacturer's data. It should be noted that in some of the environments listed, splashes and spill situations 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 and combined chemical effects of mixtures of chemicals make it impossible to specify the exact suitability of fiber reinforced plastics in all environments. We will be happy to supply material samples for testing. These recommendations should only be used as a guide and we do not take responsibility for design or suitability of materials for service intended. In no event will we be liable for any consequential or special damages for any defective material or workmanship including without limitation, labor charge, other expense or damage to properties 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 Persulfate	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
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	120
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
Hydrofluoric 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

Corrosion Guide

CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER		CHEMICAL ENVIRONMENT	POLYESTER		VINYL ESTER	
	Max Wt. %	Max Oper. Temp 'F	Max Wt. %	Max Oper. Temp 'F		Max Wt. %	Max Oper. Temp 'F	Max Wt. %	Max Oper. Temp 'F
Hydrogen Bromide, Wet	100	75	100	130	Potassium Hydroxide	N/R	N/R	25	150
Hydrogen Chloride	-	120	-	200	Potassium Nitrate	SAT	170	SAT	200
Hydrogen Peroxide	5	100	30	100	Potassium Permanganate	100	80	100	210
Hydrogen Sulfide, Dry	100	170	100	210	Potassium Sulfate	SAT	170	SAT	200
Hydrogen Sulfide, Wet	100	170	100	210	Propylene Glycol	ALL	170	ALL	200
Hypochlorous Acid	20	80	20	150	Phthalic Acid	-	-	SAT	200
Isopropyl Alcohol	N/R	N/R	15	80	Sodium Acetate	SAT	160	SAT	200
Kerosene	100	140	100	180	Sodium Benzoate	SAT	170	SAT	200
Lactic Acid	SAT	170	SAT	200	Sodium Bicarbonate	SAT	160	SAT	175
Lead Acetate	SAT	170	SAT	200	Sodium Bisulfate	ALL	170	ALL	200
Lead Chloride	SAT	140	SAT	200	Sodium Bromide	ALL	170	ALL	200
Lead Nitrate	SAT	-	SAT	200	Sodium Carbonate	10	80	35	160
Linseed Oil	100	150	100	190	Sodium Chloride	SAT	170	SAT	200
Lithium Chloride	SAT	150	SAT	190	Sodium Cyanide	SAT	170	SAT	200
Magnesium Carbonate	SAT	140	SAT	170	Sodium Hydroxide	N/R	N/R	50	150
Magnesium Chloride	SAT	170	SAT	200	Sodium Hydroxide	N/R	N/R	25	80
Magnesium Hydroxide	SAT	150	SAT	190	Sodium Hypochloride	N/R	N/R	10	150
Magnesium Nitrate	SAT	140	SAT	180	Sodium Monophosphate	SAT	170	SAT	200
Magnesium Sulfate	SAT	170	SAT	190	Sodium Nitrate	SAT	170	SAT	200
Mercuric Chloride	SAT	150	SAT	190	Sodium Sulfate	SAT	170	SAT	200
Mercurous Chloride	SAT	140	SAT	180	Sodium Thiosulfate	ALL	100	ALL	120
Methyl Ethyl Ketone	N/R	N/R	N/R	N/R	Stannic Chloride	SAT	160	SAT	190
Mineral Oils	100	170	100	200	Styrene	N/R	N/R	N/R	N/R
Monochlorobenzene	N/R	N/R	N/R	N/R	Sulfated Detergent	0/50	170	0/50	200
Naphtha	100	140	100	170	Sulfur Dioxide	100	80	100	200
Nickel Chloride	SAT	170	SAT	200	Sulfur Trioxide	100	80	100	200
Nickel Nitrate	SAT	170	SAT	200	Sulfuric Acid	93	N/R	93	N/R
Nickel Sulfate	SAT	170	SAT	200	Sulfuric Acid	50	N/R	50	180
Nitric Acid	5	140	5	150	Sulfuric Acid	25	75	25	190
Nitric Acid	20	70	20	100	Sulfurous Acid	SAT	80	N/R	N/R
Oleic Acid	100	170	100	190	Tartaric Acid	SAT	170	SAT	200
Oxalic Acid	ALL	75	ALL	120	Tetrachloroethylene	N/R	N/R	FUM	75
Paper Mill Liquors	-	100	-	120	Toluene	N/R	N/R	N/R	N/R
Perchlorethylene	100	N/R	100	N/R	Trisodium Phosphate	N/R	N/R	SAT	175
Perchloric Acid	N/R	N/R	10	150	Urea	SAT	130	SAT	140
Perchloric Acid	N/R	N/R	30	80	Vinegar	100	170	100	200
Phosphoric Acid	10	160	10	200	Water, Distilled	100	170	100	190
Phosphoric Acid	100	120	100	200	Water, Tap	100	170	100	190
Potassium Aluminum Sulfate	SAT	170	SAT	200	Water, Sea	SAT	170	SAT	190
Potassium Bicarbonate	50	80	50	140	Xylene	N/R	N/R	N/R	N/R
Potassium Carbonate	10	N/R	10	120	Zinc Chloride	SAT	170	SAT	200
Potassium Chloride	SAT	170	SAT	200	Zinc Nitrate	SAT	170	SAT	200
Potassium Dichromate	SAT	170	SAT	200	Zinc Sulfate	SAT	170	SAT	200

-: No Information Available

N/R: Not Recommended

SAT: Saturated Solution

FUM: Fumes

Load Data

Fiberglass Cable Tray and Cable Channel are offered in two (2) versions for applications as follows:

Standard Series	Resin Type	Color	Meets
13F, 24F, 36F, 46F, 48F FCC-03, FCC-04, FCC-06, FCC-08	Fire Retardant Polyester	Gray	ASTM E-84 Class 1 - UL94 VO Good Corrosion Resistance in most environments
High Performance 13FV, 24FV, 36FV, 46FV, 48FV FCCV-03, FCCV-04, FCCV-06, FCCV-08	Fire Retardant Vinyl Ester	Beige	ASTM E-84 Class 1 - UL94 VO Improved Corrosion Resistance For more severe environments Higher Heat Distortion Temperature



Effect of Temperature

Strength properties of reinforced plastics are reduced when continuously exposed to elevated temperatures. Working loads shall be reduced based on the chart to the right:

NEMA Standard 8-10-1986

If unusual temperature conditions exist, the manufacturer should be consulted. Authorized Engineering information 8-20-1986

Temperature in Degrees F	Approximate Percent of Strength
75	100
100	90
125	78
150	68
175	60
200	52

Typical Properties of Pultruded Components

Eaton B-Line Division Fiberglass Cable Tray systems are manufactured from glass fiber-reinforced plastic shapes that meet ASTM E-84, Smoke Density rating for polyester of 680, for vinyl ester 1025, Class 1 Flame Rating and self-extinguishing requirements of ASTM D-635. A surface veil is applied during pultrusion to insure a resin-rich surface and ultraviolet resistance.

Flame Resistance (FTMS 406-2023) ign/burn, seconds	75/75
Intermittent Flame Test (HLT-15), rating	100
Flammability Test (ASTM D635) Ignition Burning Time	none 0 sec.

Properties	Test Method	Unit/ Value	3" & 4" Cable Tray, Cable Channel		6" Cable Tray	
			Longitudinal	Transverse	Longitudinal	Transverse
Density	ASTM D1505	lbs/in ³	.058-.062	-	.072 - .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	-
Dielectric Strength	ASTM D149	V/mil (vpm)	200	-	200	-
Flammability Classification	UL94	VO	-	-	-	-
Flame Spread	ASTM E-84	20 Max	-	-	-	-

Expansion or Contraction for Various Temperature Differences

Temperature Differential	Cable Tray Length for 1" Expansion	Tray Length for Each Expansion Connector*
25°F (13.9°C)	667 Feet (203.3m)	417 Feet (127.1m)
50°F (27.8°C)	333 Feet (101.5m)	208 Feet (63.4m)
75°F (41.7°C)	222 Feet (67.6m)	139 Feet (42.3m)
100°F (55.6°C)	167 Feet (50.9m)	104 Feet (31.7m)
125°F (69.4°C)	133 Feet (40.5m)	83 Feet (25.3m)
150°F (83.3°C)	111 Feet (33.8m)	69 Feet (21.0m)
175°F (97.2°C)	95 Feet (28.9m)	59 Feet (18.0m)

Note for gap set and hold down/guide location, see installation instruction above.

*1" (25.4mm) slotted holes in each expansion connector allow 5/8" (15.9mm) total expansion or contraction.

Authorized Engineering Information 8-20-1986

Cable Tray Installation Guide

Installation of B-Line series fiberglass cable tray should be made in accordance with the standards set by NEMA Publication VE-2 (NEMA BI 50016), Cable Tray Installation Guide, and National Electrical Code, Article 318.

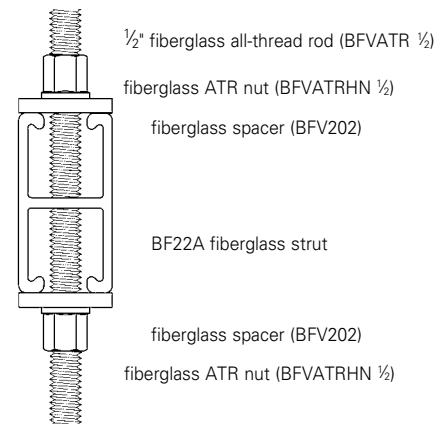
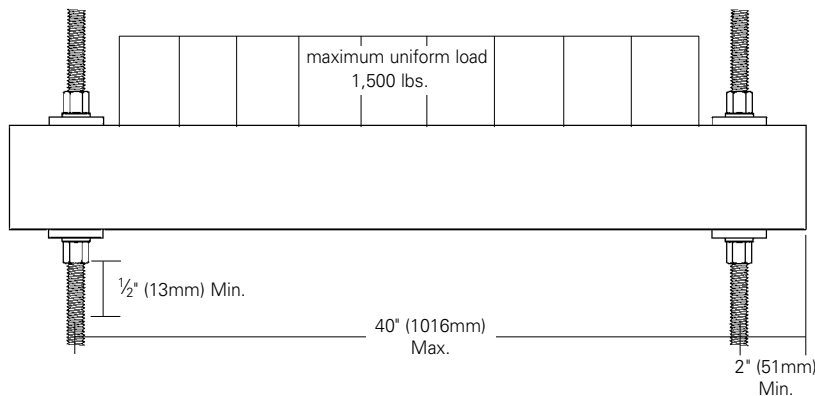
- Always observe common safety practices when assembling tray and fittings. Installations generally require some field cutting. Dust created during fabrication presents no serious health hazard, but skin irritation may be experienced by some workers.
- Operators of saws and drills should wear masks, long sleeve shirts or coveralls.
- Fabrication with fiberglass 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 fiberglass resulting in a ragged edge rather than a clean-cut 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 fiberglass as you would drill hard wood. 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. (see page M-48)
- Carbide tipped saw blades and drill bits are recommended when cutting large quantities.
- Support the fiberglass 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 FG-1.

Recommended Fiberglass Trapeze Hanging Systems

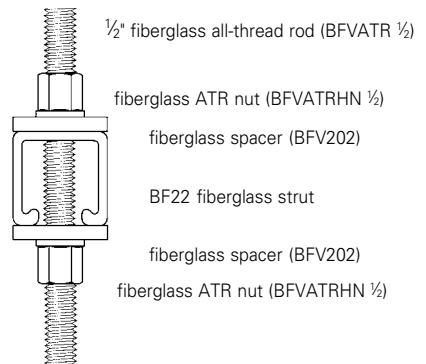
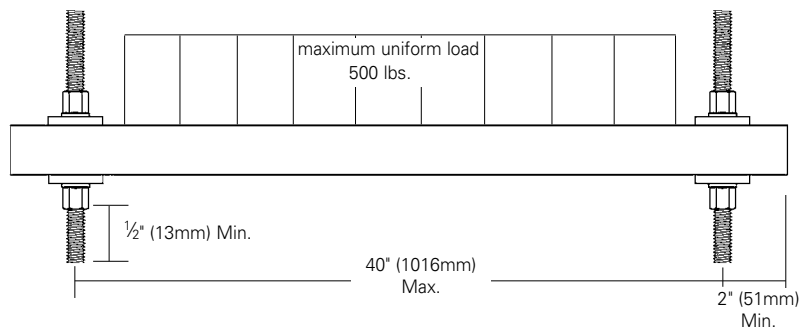
Notes:

- 1) A snug three to four ft.-lbs. torque is sufficient for all thread rod nuts.
- 2) When supporting cable tray, the spacing between each trapeze should not exceed the distance between splice plates.
- 3) When hanging from beam, B-Line series BFV751 series clamps provide extra thread engagement necessary for load ratings. All thread rod must be fully engaged in the clamp.
- 4) Design load safety factor is 3:1

BF22A Strut: 2" max between material being supported and rod



BF22 Strut: 2" max between material being supported and rod



For vinyl ester resin, "V" must be added appropriately to part number. Example: BFV22A.



APPROPRIATE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION DEVICE SHOULD BE WORN WHEN FIELD CUTTING OR GRINDING FIBERGLASS.

SECTION 161xx

NON-METALLIC CABLE TRAY POLYESTER, VINYL ESTER

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. The work covered under this section consists of the furnishing of all necessary labor, supervision, materials, equipment, tests and services to install complete cable tray systems as shown on the drawings.
- B. Cable tray systems are defined to include, but are not limited to straight sections of [ladder type] [vented bottom type] [solid bottom type] cable trays, bends, tees, elbows, drop-outs, supports and accessories.

1.02 REFERENCES

- A. ANSI/NFPA 70 – National Electrical Code
- B. NEMA FG 1-2002 – Non-Metallic Cable Tray Systems
- C. NEMA VE 2-2002 – Cable Tray Installation Guidelines

1.03 DRAWINGS

- A. The drawings, which constitute a part of these specifications, indicate the general route of the cable tray systems. Data presented on these drawings are as accurate as preliminary surveys and planning can determine until final equipment selection is made. Accuracy is not guaranteed and field verification, of all dimensions, routing, etc., is directed.
- B. Specifications and drawings are for assistance and guidance, but exact routing, locations, distances and levels will be governed by actual field conditions. Contractor is directed to make field surveys as part of his work prior to submitting system layout drawings.

1.04 SUBMITTALS

- A. Submittal Drawings: Submit drawings of cable tray and accessories including clamps, brackets, hanger rods, splice plate connectors, expansion joint assemblies, and fittings, showing accurately scaled components.
- B. Product Data: Submit manufacturer's data on cable tray including, but not limited to, types, materials, finishes, rung spacings, inside depths and fitting radii. For side rails and rungs, submit cross sectional properties including Section Modulus (Sx) and Moment of Inertia (Ix).

1.05 QUALITY ASSURANCE

- A. Manufacturers: Firms regularly engaged in manufacture of cable trays and fittings of types and capacities required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. NEMA Compliance: Comply with NEMA Standards Publication Number FG-1, "Non-Metallic Cable Tray Systems".
- C. NEC Compliance: Comply with NEC, as applicable to construction and installation of cable tray and cable channel systems (Article 318, NEC).

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver cable tray systems and components carefully to avoid breakage, denting and scoring finishes. Do not install damaged equipment.
- B. Store cable trays and accessories in original cartons and in clean dry space; protect from weather and construction traffic. Wet materials should be unpacked and dried before storage.

continued on page M-8

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with these specifications, Eaton's B-Line series cable tray systems shall be as manufactured by Eaton.

2.02 CABLE TRAY SECTIONS AND COMPONENTS

- A. General: Except as otherwise indicated, provide non-metallic cable trays, of types, classes, and sizes indicated; with splice plates, bolts, nuts and washers for connecting units. Construct units with rounded edges and smooth surfaces; in compliance with applicable standards; and with the following additional construction features. Cable tray shall be installed according to the latest revision of NEMA VE 2.
- B. Material and Finish: Straight section structural elements; side rails, rungs and splice plates shall be pultruded from glass fiber reinforced polyester resin or vinyl ester resin.
- C. Pultruded shapes shall be constructed with a surface veil to insure a resin-rich surface and ultraviolet resistance.
- D. Pultruded shapes shall meet ASTM E-84, Class 1 flame rating and self-extinguishing requirements of ASTM D-635.

2.03 TYPE OF TRAY SYSTEM

- A. Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) mechanically fastened and adhesively bonded to the side rails. Rungs shall be spaced [6] [9] [12] inches apart. Rung spacing in radiused fittings shall be industry standard 9" and measured at the center of the tray's width. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable tray with a safety factor of 1.5 (See following rung loading table).
- B. Ventilated Bottom Cable Trays shall consist of two longitudinal members (side rails) with rungs spaced 4" apart.
- C. Solid Bottom Cable Trays shall consist of two longitudinal members (side rails) with a solid sheet over rungs spaced on 12" centers.
- D. Cable tray loading depth shall be [2] [3] [5] inches per NEMA FG 1.
- E. Straight sections shall be supplied in standard [10 foot (3m)] [20 foot (6m)] lengths.
- F. Cable tray inside widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings. Outside width shall not exceed inside by more than a total of 2".
- G. Straight and expansion splice plates will be of "L" shaped lay-in design with an eight-bolt pattern in 5" fill systems and four-bolt pattern in 3" and 2" fill systems. Splice plates shall be furnished with straight sections and fittings.
- H. All fittings must have a minimum radius of [12] [24] [36].
- I. Fittings shall be of mitered construction.
- J. Dimension tolerances will be per NEMA FG 1.

2.04 LOADING CAPACITIES

- A. Cable trays shall meet NEMA class designation: [8C] [12C] [20B] [20C].

Or

- A. Cable tray shall be capable of carrying a uniformly distributed load of _____ lbs./ft on a _____ foot support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 Section 5.2.

continued on page M-9

PART 3 - EXECUTION

3.01 INSTALLATION

- A.** Install cable trays as indicated: Installation shall be in accordance with equipment manufacturer's instructions, and with recognized industry practices to ensure that cable tray equipment comply with requirements of NEC and applicable portions of NFPA 70B. Reference NEMA VE 2 for general cable tray installation guidelines.
- B.** Coordinate cable tray with other electrical work as necessary to properly integrate installation of cable tray work with other work.
- C.** Provide sufficient space encompassing cable trays to permit access for installing and maintaining cables.
- D.** Cable tray fitting supports shall be located such that they meet the strength requirements of straight sections. Install fitting supports per NEMA VE 2 guidelines, or in accordance with manufacturer's instructions.

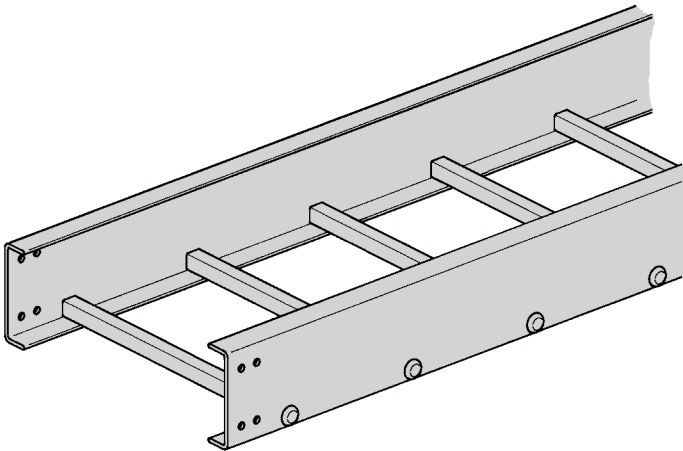
3.02 TESTING

- A.** Upon request manufacturer shall provide test reports witnessed by an independent testing laboratory of the "worst case" loading conditions outlined in this specification and performed in accordance with the latest revision of NEMA FG 1.

To order a Fiberglass 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 catalog number.

Procedure:

1. Select the correct **B-Line series Fiberglass** tray using the Load Data for straight sections shown on page M-16 for 4", page M-17 and M-18 for 6".
2. Select the resin required. Polyester or Vinyl Ester. Refer to Corrosion Guide on pages M-3 and M-4, for the effect of environmental conditions on the desired material and the effective temperature range on page M-5.
3. The tray prefix is completed by inserting the rung spacing.
4. Select the desired width in inches.
5. Finally select the straight section length in inches.
Fiberglass 120 [10'] (3m) or 240 [20'] (6m)



Straight Section Part Numbering

Example: **24 F 09 - 24 - 120**

Prefix

Series	Material	Rung Spacing	Width	Length
24	F - Fiberglass (Gray)	06 = 6" (152)	06 = 6" (152)	120 = 120" (3m)
36	Polyester Resin	09 = 9" (228)	09 = 9" (228)	240 = 240" (6m)
46	FV - Fiberglass (Beige)	12 = 12" (305)	12 = 12" (305)	
	Vinyl Ester Resin		18 = 18" (457)	
		† SB = Solid Bottom	24 = 24" (609)	
		* See page APP-1 for Marine Rung option.	30 = 30" (762)	
			36 = 36" (914)	

Note: One pair of splice plates with SS6 hardware included. † Solid bottom sheets ship separately with connecting hardware and assembled on site.

Fitting Section Part Selector

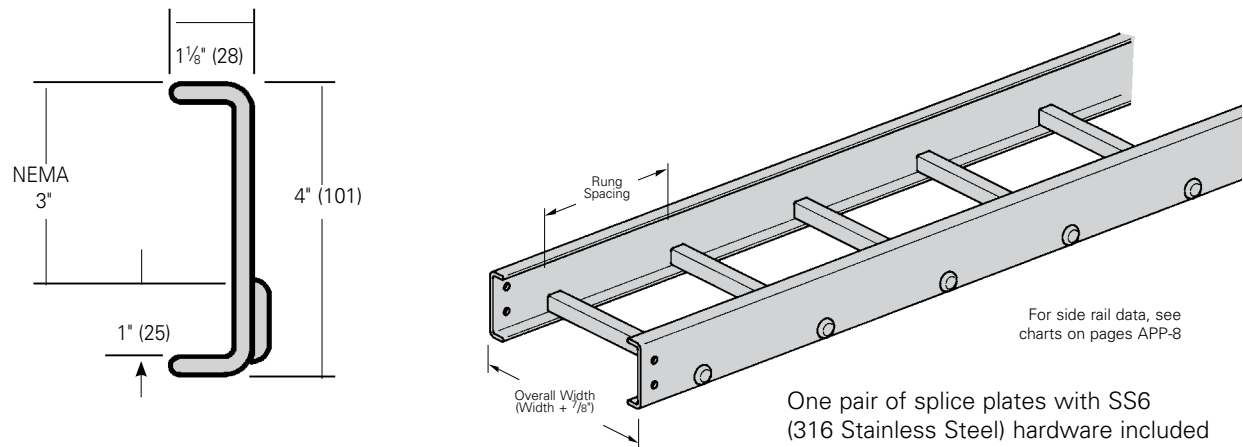
Example: **4 F SB - 24 - 90 HB 24**

Prefix

Height	Material	Bottom	Width	Angle	Type	Radius
4" (101)	F - Fiberglass (Gray)	Blank =	6" (152)	45°	HB - Horizontal Bend	12" (305)
6" (152)	Polyester Resin	Ladder Type	9" (228)	90°	HT - Horizontal Tee	24" (609)
	FV - Fiberglass (Beige)	SB =	12" (305)		HX - Horizontal Cross	36" (914)
	Vinyl Ester Resin	Solid Bottom	18" (457)		VI - Vertical Inside Bend	
			24" (609)		VO - Vertical Outside Bend	
			30" (762)		VT - Vertical Tee	
			36" (914)		VTU - Vertical Tee, Up	
					RR - Right Reducer	
					LR - Left Reducer	
					SR - Straight Reducer	

Notes: Standard rung spacing on fittings is 9" (225).
Splice plates with SS6 hardware included.

Fiberglass



Series 24 Fiberglass Straight Section Part Numbering

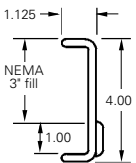
Example: Prefix **24 F 09 - 24 - 120**

Series	Material	Type	Width	Length
24	● F = Polyester ● FV = Vinyl Ester	Ladder - ● 06 = 6" rung spacing ● 09 = 9" rung spacing ● 12 = 12" rung spacing ● SB = Solid bottom †	● 06 = 6" ● 09 = 9" ● 12 = 12" ● 18 = 18" ● 24 = 24" ● 30 = 30" ● 36 = 36"	● ① 120 = 10 ft. ● ② 240 = 20 ft. ①Primary Length. ②Secondary Length. See page C-23 for explanation of lengths.

See page M-38 for additional rung options.

† Solid bottom sheets ship separately with connecting hardware and assembled on site.

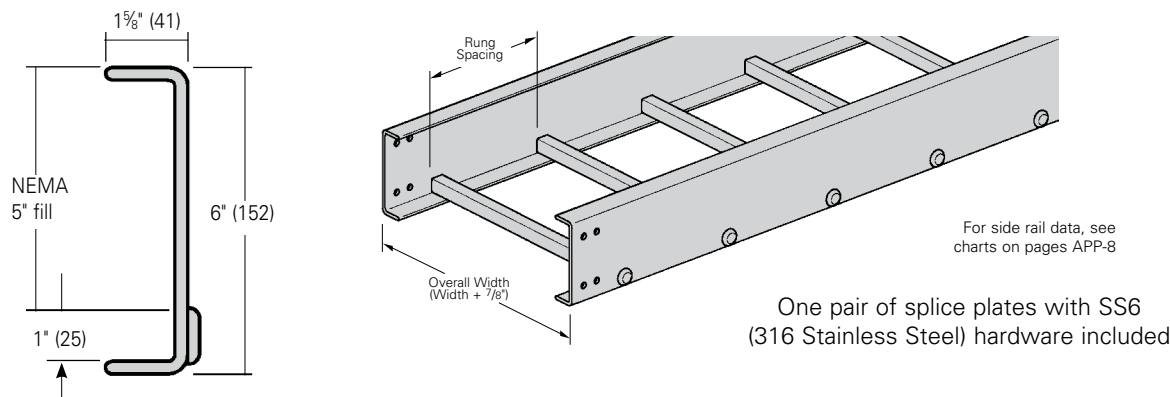


B-Line series	Side Rail Dimensions	NEMA & CSA Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Span meters	Load kg/m	Deflection Multiplier
24F 24FV		NEMA: 12C CSA: E-3m	6	672	0.001	1.8	958	0.023
			8	378	0.004	2.4	539	0.074
			10	242	0.011	3.0	345	0.182
			12	161	0.022	3.7	240	0.378

Values are based on simple beam tests per NEMA FG-1 on 36" wide cable tray rungs spaced on 12" centers. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable being installed. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

Dimensions shown in parentheses are in millimeters, unless otherwise specified.



Series 36 Fiberglass Straight Section Part Numbering

Prefix

Example: **36 F 09 - 24 - 120**

Series

36

Material

● **F** = Polyester

● **FV** = Vinyl Ester

Type

Ladder -

● **06** = 6" rung spacing

● **09** = 9" rung spacing

● **12** = 12" rung spacing

● **SB** = Solid bottom †

Width

● **06** = 6"

● **09** = 9"

● **12** = 12"

● **18** = 18"

● **24** = 24"

● **30** = 30"

● **36** = 36"

Length

● **120** = 10 ft.

● **240** = 20 ft.

Primary Length.

Secondary Length.

See page C-23 for explanation of lengths.

See page M-38 for additional rung options.

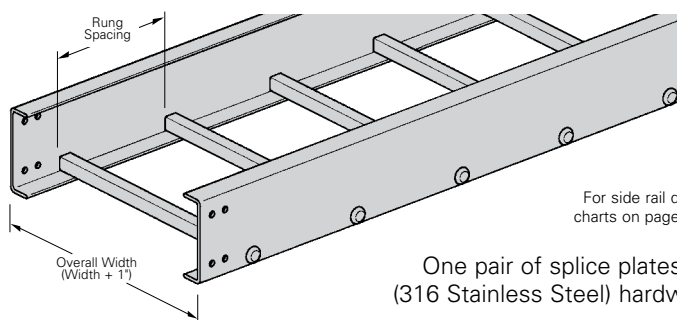
† Solid bottom sheets ship separately with connecting hardware and assembled on site.

B-Line Series	Side Rail Dimensions	NEMA & CSA Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Span meters	Load kg/m	Deflection Multiplier
36F 36FV		NEMA: 20A CSA: E-6m	12	200	0.005	3.7	298	0.081
			14	147	0.009	4.3	219	0.151
			16	113	0.015	4.9	167	0.257
			18	89	0.024	5.5	132	0.411
			20	72	0.037	6.1	107	0.627

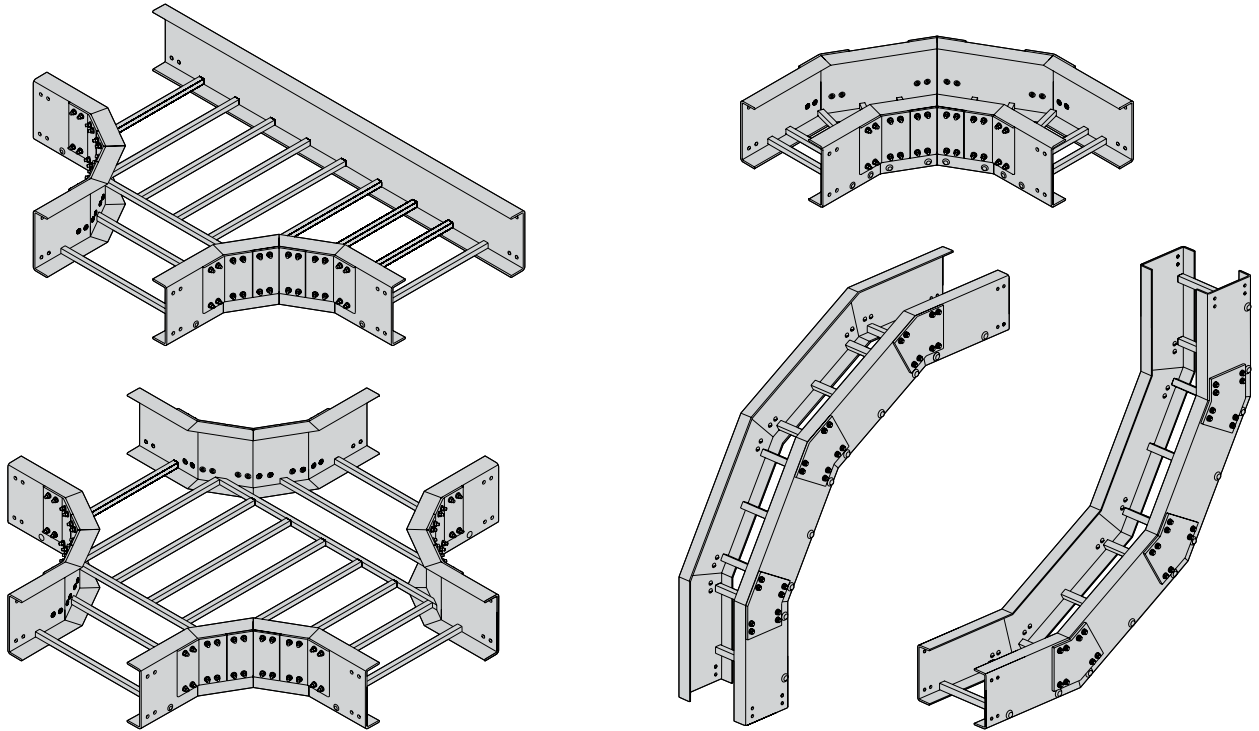
Values are based on simple beam tests per NEMA FG-1 on 36" wide cable tray rungs spaced on 12" centers. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable being installed. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

Dimensions shown in parentheses are in millimeters, unless otherwise specified.



One pair of splice plates with SS6
(316 Stainless Steel) hardware included



Fiberglass Fittings Part Numbering

Example: ^{Prefix} 4 F SB - 12 - 90 HB 12 (9" rung spacing is standard)

Height

- 4 = 4"
- 6 = 6"

Material

- F = Polyester
- FV = Vinyl Ester

Bottom

- Blank = Ladder Type
- SB = Solid Bottom†

Width

- 06 = 6" (152)
- 09 = 9" (228)
- 12 = 12" (305)
- 18 = 18" (457)
- 24 = 24" (609)
- 30 = 30" (762)
- 36 = 36" (914)

Angle*

- 45 = 45°
- 90 = 90°

Type

- *HB = Horizontal Bend
- HT = Horizontal Tee
- HX = Horizontal Cross
- *VI = Vertical Inside Bend
- *VO = Vertical Outside Bend
- LR = Left Reducer
- RR = Right Reducer
- SR = Straight Reducer

Radius

- 12 = 12" (305)
- 24 = 24" (609)
- 36 = 36" (914)

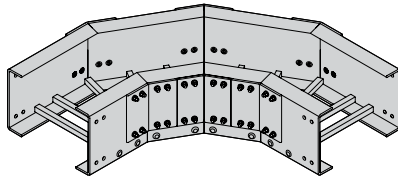
* Angle only required for HB, VI and VO fittings.

† Solid bottom sheets ship separately with connecting hardware and assembled on site.

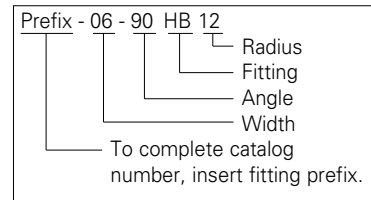
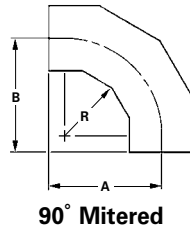
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Horizontal Bend 90° (HB)



One pair of splice plates with SS6 hardware included.



(Prefix) See page M-20 for catalog number prefix.

Dimensions for reference only, when critical contact factory.

- R - Bend Radius in. (mm)	Tray Width in. (mm)	90° Horizontal Bend - Mitered Dimensions		
		Catalog No.	A in. (mm)	B in. (mm)
12 (305)	6 (152)	(Prefix)-06-90HB12	28 ^{11/16} (728)	28 ^{11/16} (728)
	9 (228)	(Prefix)-09-90HB12	30 ^{3/16} (767)	30 ^{3/16} (767)
	12 (305)	(Prefix)-12-90HB12	31 ^{11/16} (805)	31 ^{11/16} (805)
	18 (457)	(Prefix)-18-90HB12	34 ^{11/16} (881)	34 ^{11/16} (881)
	24 (609)	(Prefix)-24-90HB12	37 ^{11/16} (957)	37 ^{11/16} (957)
	30 (762)	(Prefix)-30-90HB12	40 ^{11/16} (1033)	40 ^{11/16} (1033)
	36 (914)	(Prefix)-36-90HB12	43 ^{11/16} (1109)	43 ^{11/16} (1109)
24 (609)	6 (152)	(Prefix)-06-90HB24	41 (1041)	41 (1041)
	9 (228)	(Prefix)-09-90HB24	42 ^{1/2} (1079)	42 ^{1/2} (1079)
	12 (305)	(Prefix)-12-90HB24	44 (1117)	44 (1117)
	18 (457)	(Prefix)-18-90HB24	47 (1193)	47 (1193)
	24 (609)	(Prefix)-24-90HB24	50 (1269)	50 (1269)
	30 (762)	(Prefix)-30-90HB24	53 (1346)	53 (1346)
	36 (914)	(Prefix)-36-90HB24	56 (1422)	56 (1422)
36 (914)	6 (152)	(Prefix)-06-90HB36	53 ^{1/4} (1353)	53 ^{1/4} (1353)
	9 (228)	(Prefix)-09-90HB36	54 ^{3/4} (1391)	54 ^{3/4} (1391)
	12 (305)	(Prefix)-12-90HB36	56 ^{1/4} (1429)	56 ^{1/4} (1429)
	18 (457)	(Prefix)-18-90HB36	59 ^{1/4} (1505)	59 ^{1/4} (1505)
	24 (609)	(Prefix)-24-90HB36	62 ^{1/4} (1582)	62 ^{1/4} (1582)
	30 (762)	(Prefix)-30-90HB36	65 ^{1/4} (1658)	65 ^{1/4} (1658)
	36 (914)	(Prefix)-36-90HB36	68 ^{1/4} (1734)	68 ^{1/4} (1734)

For 4" Fittings

(Tray Widths - 6" thru 36" • Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

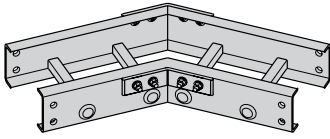
For 6" Fittings

(Tray Widths - 6" thru 36" • Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

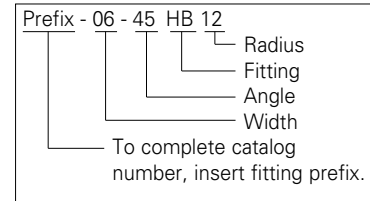
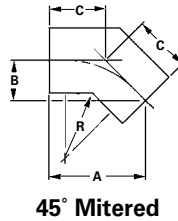
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Horizontal Bend 45° (HB)



One pair of splice plates with SS6 hardware included.



(Prefix) See page M-20 for catalog number prefix.

Dimensions for reference only, when critical contact factory.

- R - Bend Radius in. (mm)	Tray Width in. (mm)	45° Horizontal Bend - Mitered Dimensions			
		Catalog No.	A in. (mm)	B in. (mm)	C in. (mm)
12 (305)	6 (152)	(Prefix)-06-45HB12	24 ²¹ / ₃₂ (626)	10 ⁷ / ₃₂ (259)	14 ⁷ / ₁₆ (367)
	9 (228)	(Prefix)-09-45HB12	25 ²³ / ₃₂ (653)	10 ²¹ / ₃₂ (271)	15 ¹ / ₁₆ (383)
	12 (305)	(Prefix)-12-45HB12	26 ²⁵ / ₃₂ (680)	11 ³ / ₃₂ (282)	15 ¹¹ / ₁₆ (398)
	18 (457)	(Prefix)-18-45HB12	28 ²⁹ / ₃₂ (734)	11 ³¹ / ₃₂ (304)	16 ¹⁵ / ₁₆ (430)
	24 (609)	(Prefix)-24-45HB12	31 ¹ / ₃₂ (788)	12 ²⁷ / ₃₂ (326)	18 ⁵ / ₃₂ (462)
	30 (762)	(Prefix)-30-45HB12	33 ⁵ / ₃₂ (842)	13 ³ / ₄ (349)	19 ¹³ / ₃₂ (493)
	36 (914)	(Prefix)-36-45HB12	35 ¹ / ₄ (896)	14 ⁵ / ₈ (371)	20 ²¹ / ₃₂ (525)
24 (609)	6 (152)	(Prefix)-06-45HB12	24 ²¹ / ₃₂ (626)	10 ⁷ / ₃₂ (259)	14 ⁷ / ₁₆ (367)
	9 (228)	(Prefix)-09-45HB12	25 ²³ / ₃₂ (653)	10 ²¹ / ₃₂ (271)	15 ¹ / ₁₆ (383)
	12 (305)	(Prefix)-12-45HB12	26 ²⁵ / ₃₂ (680)	11 ³ / ₃₂ (282)	15 ¹¹ / ₁₆ (398)
	18 (457)	(Prefix)-18-45HB12	28 ²⁹ / ₃₂ (734)	11 ³¹ / ₃₂ (304)	16 ¹⁵ / ₁₆ (430)
	24 (609)	(Prefix)-24-45HB12	31 ¹ / ₃₂ (788)	12 ²⁷ / ₃₂ (326)	18 ⁵ / ₃₂ (462)
	30 (762)	(Prefix)-30-45HB12	33 ⁵ / ₃₂ (842)	13 ³ / ₄ (349)	19 ¹³ / ₃₂ (493)
	36 (914)	(Prefix)-36-45HB12	35 ¹ / ₄ (896)	14 ⁵ / ₈ (371)	20 ²¹ / ₃₂ (525)
36 (914)	6 (152)	(Prefix)-06-45HB12	24 ²¹ / ₃₂ (626)	10 ⁷ / ₃₂ (259)	14 ⁷ / ₁₆ (367)
	9 (228)	(Prefix)-09-45HB12	25 ²³ / ₃₂ (653)	10 ²¹ / ₃₂ (271)	15 ¹ / ₁₆ (383)
	12 (305)	(Prefix)-12-45HB12	26 ²⁵ / ₃₂ (680)	11 ³ / ₃₂ (282)	15 ¹¹ / ₁₆ (398)
	18 (457)	(Prefix)-18-45HB12	28 ²⁹ / ₃₂ (734)	11 ³¹ / ₃₂ (304)	16 ¹⁵ / ₁₆ (430)
	24 (609)	(Prefix)-24-45HB12	31 ¹ / ₃₂ (788)	12 ²⁷ / ₃₂ (326)	18 ⁵ / ₃₂ (462)
	30 (762)	(Prefix)-30-45HB12	33 ⁵ / ₃₂ (842)	13 ³ / ₄ (349)	19 ¹³ / ₃₂ (493)
	36 (914)	(Prefix)-36-45HB12	35 ¹ / ₄ (896)	14 ⁵ / ₈ (371)	20 ²¹ / ₃₂ (525)

For 4" Fittings

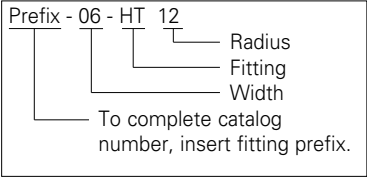
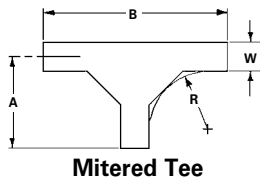
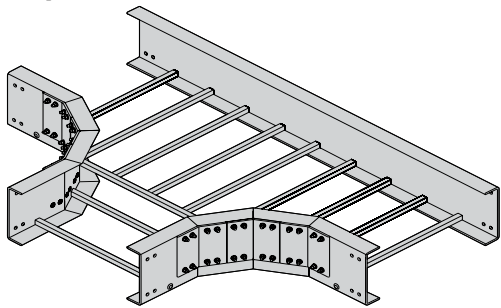
(Tray Widths - 6" thru 36"
Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

For 6" Fittings

(Tray Widths - 6" thru 36"
Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Horizontal Tee
(HT)



(Prefix) See page M-20 for catalog number prefix.
Dimensions for reference only, when critical contact factory.

Two pair of splice plates with SS6 hardware included.

- R - Bend Radius in. (mm)	Tray Width in. (mm)	Horizontal Tee - Mitered Dimensions			
		Catalog No.	A in. (mm)	B in. (mm)	
12 (305)	6 (152)	(Prefix)-06-HT12	28 ⁷ / ₃₂ (716)	56 ¹³ / ₃₂ (1433)	
	9 (228)	(Prefix)-09-HT12	29 ¹¹ / ₁₆ (754)	59 ¹³ / ₃₂ (1509)	
	12 (305)	(Prefix)-12-HT12	31 ⁷ / ₃₂ (792)	62 ¹³ / ₃₂ (1585)	
	18 (457)	(Prefix)-18-HT12	34 ⁷ / ₃₂ (869)	68 ¹³ / ₃₂ (1737)	
	24 (609)	(Prefix)-24-HT12	37 ⁷ / ₃₂ (945)	74 ¹³ / ₃₂ (1890)	
	30 (762)	(Prefix)-30-HT12	40 ⁷ / ₃₂ (1021)	80 ¹³ / ₃₂ (2042)	
	36 (914)	(Prefix)-36-HT12	43 ⁷ / ₃₂ (1097)	86 ¹³ / ₃₂ (2195)	
24 (609)	6 (152)	(Prefix)-06-HT24	40 ⁷ / ₃₂ (1021)	80 ¹³ / ₃₂ (2042)	
	9 (228)	(Prefix)-09-HT24	41 ¹¹ / ₁₆ (1059)	83 ¹³ / ₃₂ (2118)	
	12 (305)	(Prefix)-12-HT24	43 ⁷ / ₃₂ (1097)	86 ¹³ / ₃₂ (2195)	
	18 (457)	(Prefix)-18-HT24	46 ⁷ / ₃₂ (1173)	92 ¹³ / ₃₂ (2347)	
	24 (609)	(Prefix)-24-HT24	49 ⁷ / ₃₂ (1250)	98 ¹³ / ₃₂ (2499)	
	30 (762)	(Prefix)-30-HT24	52 ⁷ / ₃₂ (1326)	104 ¹³ / ₃₂ (2652)	
	36 (914)	(Prefix)-36-HT24	55 ⁷ / ₃₂ (1402)	110 ¹³ / ₃₂ (2804)	
36 (914)	6 (152)	(Prefix)-06-HT36	52 ⁷ / ₃₂ (1326)	104 ¹³ / ₃₂ (2652)	
	9 (228)	(Prefix)-09-HT36	53 ¹¹ / ₁₆ (1364)	107 ¹³ / ₃₂ (2728)	
	12 (305)	(Prefix)-12-HT36	55 ⁷ / ₃₂ (1402)	110 ¹³ / ₃₂ (2804)	
	18 (457)	(Prefix)-18-HT36	58 ⁷ / ₃₂ (1478)	116 ¹³ / ₃₂ (2957)	
	24 (609)	(Prefix)-24-HT36	61 ⁷ / ₃₂ (1554)	122 ¹³ / ₃₂ (3109)	
	30 (762)	(Prefix)-30-HT36	64 ⁷ / ₃₂ (1631)	128 ¹³ / ₃₂ (3261)	
	36 (914)	(Prefix)-36-HT36	67 ⁷ / ₃₂ (1707)	134 ¹³ / ₃₂ (3414)	

For 4" Fittings

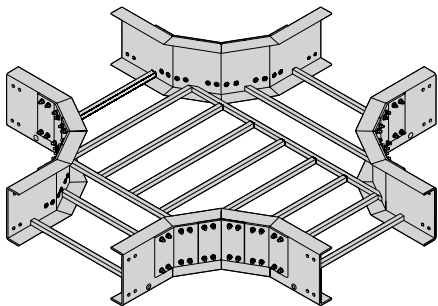
(Tray Widths - 6" thru 36" • Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

For 6" Fittings

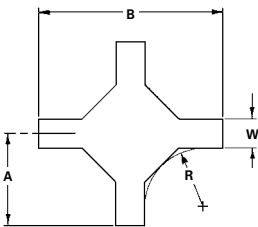
(Tray Widths - 6" thru 36" • Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

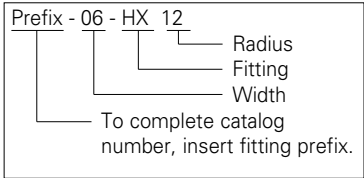
Horizontal Cross (HX)



Three pair of splice plates with SS6 hardware included.



Mitered Cross



(Prefix) See page M-20 for catalog number prefix.
Dimensions for reference only, when critical contact factory.

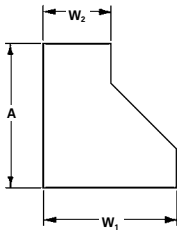
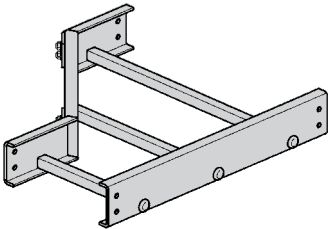
- R - Bend Radius in. (mm)	Tray Width in. (mm)	Horizontal Cross - Mitered Dimensions		
		Catalog No.	A in. (mm)	B in. (mm)
12 (305)	6 (152)	(Prefix)-06-HX12	28 ³ / ₁₆ (716)	56 ¹³ / ₃₂ (1433)
	9 (228)	(Prefix)-09-HX12	29 ¹¹ / ₁₆ (754)	59 ¹³ / ₃₂ (1509)
	12 (305)	(Prefix)-12-HX12	31 ³ / ₁₆ (792)	62 ¹³ / ₃₂ (1585)
	18 (457)	(Prefix)-18-HX12	34 ³ / ₁₆ (869)	68 ¹³ / ₃₂ (1737)
	24 (609)	(Prefix)-24-HX12	37 ³ / ₁₆ (945)	74 ¹³ / ₃₂ (1890)
	30 (762)	(Prefix)-30-HX12	40 ³ / ₁₆ (1021)	80 ¹³ / ₃₂ (2042)
	36 (914)	(Prefix)-36-HX12	43 ³ / ₁₆ (1097)	86 ¹³ / ₃₂ (2195)
24 (609)	6 (152)	(Prefix)-06-HX24	40 ³ / ₁₆ (1021)	80 ¹³ / ₃₂ (2042)
	9 (228)	(Prefix)-09-HX24	41 ¹¹ / ₁₆ (1059)	83 ¹³ / ₃₂ (2118)
	12 (305)	(Prefix)-12-HX24	43 ³ / ₁₆ (1097)	86 ¹³ / ₃₂ (2195)
	18 (457)	(Prefix)-18-HX24	46 ³ / ₁₆ (1173)	92 ¹³ / ₃₂ (2347)
	24 (609)	(Prefix)-24-HX24	49 ³ / ₁₆ (1250)	98 ¹³ / ₃₂ (2499)
	30 (762)	(Prefix)-30-HX24	52 ³ / ₁₆ (1326)	104 ¹³ / ₃₂ (2652)
	36 (914)	(Prefix)-36-HX24	55 ³ / ₁₆ (1402)	110 ¹³ / ₃₂ (2804)
36 (914)	6 (152)	(Prefix)-06-HX36	52 ³ / ₁₆ (1326)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-09-HX36	53 ¹¹ / ₁₆ (1364)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-12-HX36	55 ³ / ₁₆ (1402)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-18-HX36	58 ³ / ₁₆ (1478)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-24-HX36	61 ³ / ₁₆ (1554)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-30-HX36	64 ³ / ₁₆ (1631)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-36-HX36	67 ³ / ₁₆ (1707)	134 ¹³ / ₃₂ (3414)

For 4" Fittings
(Tray Widths - 6" thru 36"
Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

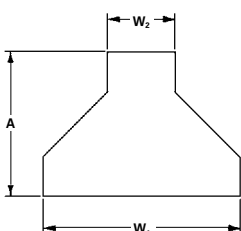
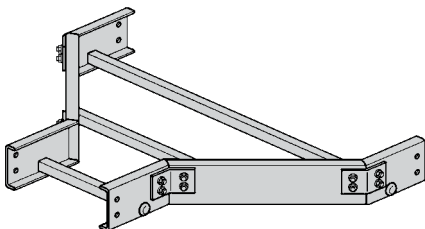
For 6" Fittings
(Tray Widths - 6" thru 36"
Radius 12", 24" & 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

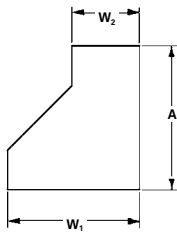
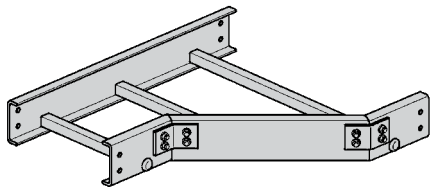
Reducers
(LR) (SR) (RR)



Left Reducer



Straight Reducer

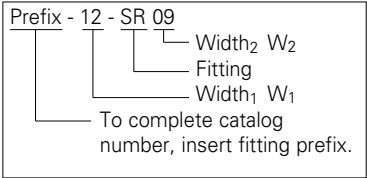


Right Reducer

One pair of splice plates with SS6 hardware included.

4" & 6" Fittings

(Available in all W1 widths shown in chart)
Reducers are all of mitered construction.

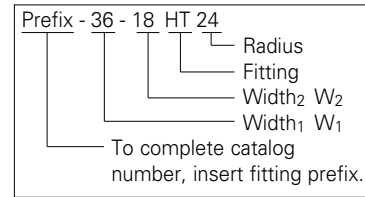
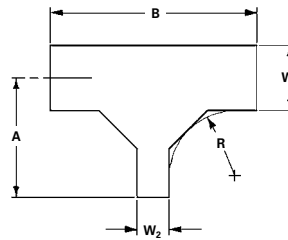
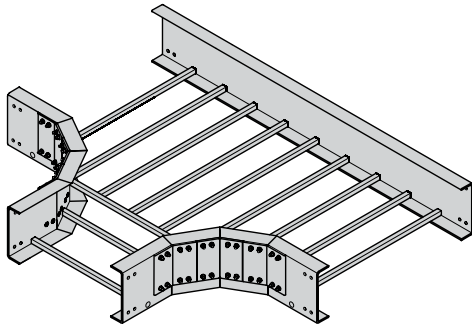


(Prefix) See page M-20 for catalog number prefix.
Dimensions for reference only, when critical contact factory.

Tray Width		Left Hand Reducer		Straight Reducer		Right Hand Reducer	
W ₁ in. (mm)	W ₂ in. (mm)	Catalog No.	A in. (mm)	Catalog No.	A in. (mm)	Catalog No.	A in. (mm)
9 (228)	6 (152)	(Prefix)-09-LR06	21 (533)	(Prefix)-09-SR06	19 1/2 (495)	(Prefix)-09-RR06	21 (533)
12 (305)	6 (152)	(Prefix)-12-LR06	24 (609)	(Prefix)-12-SR06	21 (533)	(Prefix)-12-RR06	24 (609)
	9 (228)	(Prefix)-12-LR09	21 (533)	(Prefix)-12-SR09	19 1/2 (495)	(Prefix)-12-RR09	21 (533)
18 (457)	6 (152)	(Prefix)-18-LR06	30 (762)	(Prefix)-18-SR06	24 (609)	(Prefix)-18-RR06	30 (762)
	9 (228)	(Prefix)-18-LR09	27 (686)	(Prefix)-18-SR09	22 1/2 (571)	(Prefix)-18-RR09	27 (686)
	12 (305)	(Prefix)-18-LR12	24 (609)	(Prefix)-18-SR12	21 (533)	(Prefix)-18-RR12	24 (609)
24 (609)	6 (152)	(Prefix)-24-LR06	36 (914)	(Prefix)-24-SR06	27 (686)	(Prefix)-24-RR06	36 (914)
	9 (228)	(Prefix)-24-LR09	33 (838)	(Prefix)-24-SR09	25 1/2 (648)	(Prefix)-24-RR09	33 (838)
	12 (305)	(Prefix)-24-LR12	30 (762)	(Prefix)-24-SR12	24 (609)	(Prefix)-24-RR12	30 (762)
	18 (457)	(Prefix)-24-LR18	24 (609)	(Prefix)-24-SR18	21 (533)	(Prefix)-24-RR18	24 (609)
30 (762)	6 (152)	(Prefix)-30-LR06	42 (1067)	(Prefix)-30-SR06	30 (762)	(Prefix)-30-RR06	42 (1067)
	9 (228)	(Prefix)-30-LR09	39 (990)	(Prefix)-30-SR09	28 1/2 (724)	(Prefix)-30-RR09	39 (990)
	12 (305)	(Prefix)-30-LR12	36 (914)	(Prefix)-30-SR12	27 (686)	(Prefix)-30-RR12	36 (914)
	18 (457)	(Prefix)-30-LR18	30 (762)	(Prefix)-30-SR18	24 (609)	(Prefix)-30-RR18	30 (762)
	24 (609)	(Prefix)-30-LR24	24 (609)	(Prefix)-30-SR24	21 (533)	(Prefix)-30-RR24	24 (609)
36 (914)	6 (152)	(Prefix)-36-LR06	48 (1219)	(Prefix)-36-SR06	33 (838)	(Prefix)-36-RR06	48 (1219)
	9 (228)	(Prefix)-36-LR09	45 (1143)	(Prefix)-36-SR09	31 1/2 (800)	(Prefix)-36-RR09	45 (1143)
	12 (305)	(Prefix)-36-LR12	42 (1067)	(Prefix)-36-SR12	30 (762)	(Prefix)-36-RR12	42 (1067)
	18 (457)	(Prefix)-36-LR18	36 (914)	(Prefix)-36-SR18	27 (686)	(Prefix)-36-RR18	36 (914)
	24 (609)	(Prefix)-36-LR24	30 (762)	(Prefix)-36-SR24	24 (609)	(Prefix)-36-RR24	30 (762)
	30 (762)	(Prefix)-36-LR30	24 (609)	(Prefix)-36-SR30	21 (533)	(Prefix)-36-RR30	24 (609)

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Horizontal Reducing Tee (HT)



(Prefix) See page M-20 for catalog number prefix.

Dimensions for reference only, when critical contact factory.

Mitered Reducing Tee

Two pair of splice plates with SS6 hardware included.

Mitered Fittings

Tray Width		Catalog No. * Insert radius (12", 24" or 36")	12" Radius (305)		24" Radius (609)		36" Radius (914)	
W ₁ in. (mm)	W ₂ in. (mm)		A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)
9 (228)	6 (152)	(Prefix)-09-06-HT*	29 ¹¹ / ₁₆ (754)	56 ¹³ / ₃₂ (1433)	41 ¹¹ / ₁₆ (1059)	80 ¹³ / ₃₂ (2042)	53 ¹¹ / ₁₆ (1364)	104 ¹³ / ₃₂ (2652)
12 (305)	6 (152)	(Prefix)-12-06-HT*	31 ³ / ₁₆ (792)	56 ¹³ / ₃₂ (1433)	43 ³ / ₁₆ (1097)	80 ¹³ / ₃₂ (2042)	55 ³ / ₁₆ (1402)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-12-09-HT*	31 ³ / ₁₆ (792)	59 ¹³ / ₃₂ (1509)	43 ³ / ₁₆ (1097)	83 ¹³ / ₃₂ (2118)	55 ³ / ₁₆ (1402)	107 ¹³ / ₃₂ (2728)
18 (457)	6 (152)	(Prefix)-18-06-HT*	34 ³ / ₁₆ (869)	56 ¹³ / ₃₂ (1433)	46 ³ / ₁₆ (1173)	80 ¹³ / ₃₂ (2042)	58 ³ / ₁₆ (1478)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-18-09-HT*	34 ³ / ₁₆ (869)	59 ¹³ / ₃₂ (1509)	46 ³ / ₁₆ (1173)	83 ¹³ / ₃₂ (2118)	58 ³ / ₁₆ (1478)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-18-12-HT*	34 ³ / ₁₆ (869)	62 ¹³ / ₃₂ (1585)	46 ³ / ₁₆ (1173)	86 ¹³ / ₃₂ (2195)	58 ³ / ₁₆ (1478)	110 ¹³ / ₃₂ (2804)
24 (609)	6 (152)	(Prefix)-24-06-HT*	37 ³ / ₁₆ (945)	56 ¹³ / ₃₂ (1433)	49 ³ / ₁₆ (1250)	80 ¹³ / ₃₂ (2042)	61 ³ / ₁₆ (1554)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-24-09-HT*	37 ³ / ₁₆ (945)	59 ¹³ / ₃₂ (1509)	49 ³ / ₁₆ (1250)	83 ¹³ / ₃₂ (2118)	61 ³ / ₁₆ (1554)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-24-12-HT*	37 ³ / ₁₆ (945)	62 ¹³ / ₃₂ (1585)	49 ³ / ₁₆ (1250)	86 ¹³ / ₃₂ (2195)	61 ³ / ₁₆ (1554)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-24-18-HT*	37 ³ / ₁₆ (945)	68 ¹³ / ₃₂ (1737)	49 ³ / ₁₆ (1250)	92 ¹³ / ₃₂ (2347)	61 ³ / ₁₆ (1554)	116 ¹³ / ₃₂ (2957)
30 (762)	6 (152)	(Prefix)-30-06-HT*	40 ³ / ₁₆ (1021)	56 ¹³ / ₃₂ (1433)	52 ³ / ₁₆ (1326)	80 ¹³ / ₃₂ (2042)	64 ³ / ₁₆ (1631)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-30-09-HT*	40 ³ / ₁₆ (1021)	59 ¹³ / ₃₂ (1509)	52 ³ / ₁₆ (1326)	83 ¹³ / ₃₂ (2118)	64 ³ / ₁₆ (1631)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-30-12-HT*	40 ³ / ₁₆ (1021)	62 ¹³ / ₃₂ (1585)	52 ³ / ₁₆ (1326)	86 ¹³ / ₃₂ (2195)	64 ³ / ₁₆ (1631)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-30-18-HT*	40 ³ / ₁₆ (1021)	68 ¹³ / ₃₂ (1737)	52 ³ / ₁₆ (1326)	92 ¹³ / ₃₂ (2347)	64 ³ / ₁₆ (1631)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-30-24-HT*	40 ³ / ₁₆ (1021)	74 ¹³ / ₃₂ (1890)	52 ³ / ₁₆ (1326)	98 ¹³ / ₃₂ (2499)	64 ³ / ₁₆ (1631)	122 ¹³ / ₃₂ (3109)
36 (914)	6 (152)	(Prefix)-36-06-HT*	43 ³ / ₁₆ (1097)	56 ¹³ / ₃₂ (1433)	55 ³ / ₁₆ (1402)	80 ¹³ / ₃₂ (2042)	67 ³ / ₁₆ (1707)	104 ¹³ / ₃₂ (2652)
	9 (228)	(Prefix)-36-09-HT*	43 ³ / ₁₆ (1097)	59 ¹³ / ₃₂ (1509)	55 ³ / ₁₆ (1402)	83 ¹³ / ₃₂ (2118)	67 ³ / ₁₆ (1707)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-36-12-HT*	43 ³ / ₁₆ (1097)	62 ¹³ / ₃₂ (1585)	55 ³ / ₁₆ (1402)	86 ¹³ / ₃₂ (2195)	67 ³ / ₁₆ (1707)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-36-18-HT*	43 ³ / ₁₆ (1097)	68 ¹³ / ₃₂ (1737)	55 ³ / ₁₆ (1402)	92 ¹³ / ₃₂ (2347)	67 ³ / ₁₆ (1707)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-36-24-HT*	43 ³ / ₁₆ (1097)	74 ¹³ / ₃₂ (1890)	55 ³ / ₁₆ (1402)	98 ¹³ / ₃₂ (2499)	67 ³ / ₁₆ (1707)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-36-30-HT*	43 ³ / ₁₆ (1097)	80 ¹³ / ₃₂ (2042)	55 ³ / ₁₆ (1402)	104 ¹³ / ₃₂ (2652)	67 ³ / ₁₆ (1707)	128 ¹³ / ₃₂ (3261)

For 4" Fittings

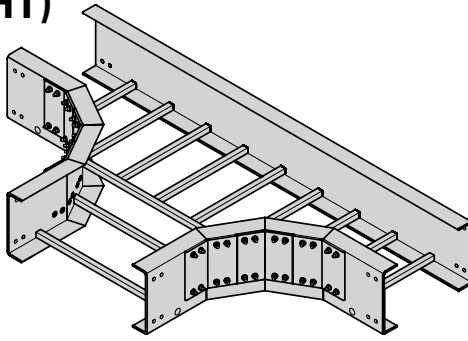
(Radius 12", 24" & 36"
W₁ tray widths - 9" thru 36")
Polyester, Vinyl Ester
All radius are mitered

For 6" Fittings

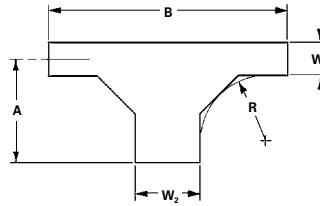
(Radius 12", 24" & 36"
W₁ tray widths - 9" thru 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

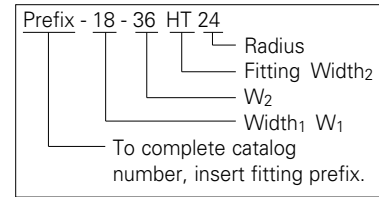
Horizontal Expanding Tee (HT)



Two pair of splice plates with SS6 hardware included.



Mitered



(Prefix) See page M-20 for catalog number prefix.
Dimensions for reference only, when critical contact factory.

Mitered Fittings

Tray Width		Catalog No. * Insert radius (12", 24" or 36")	12" Radius (305)		24" Radius (609)		36" Radius (914)	
W ₁ in. (mm)	W ₂ in. (mm)		A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)
6 (152)	9 (228)	(Prefix)-06-09-HT*	28 ³ / ₁₆ (716)	59 ¹³ / ₃₂ (1509)	40 ³ / ₁₆ (1021)	83 ¹³ / ₃₂ (2118)	52 ³ / ₁₆ (1326)	107 ¹³ / ₃₂ (2728)
	12 (305)	(Prefix)-06-12-HT*	28 ³ / ₁₆ (716)	62 ¹³ / ₃₂ (1585)	40 ³ / ₁₆ (1021)	86 ¹³ / ₃₂ (2195)	52 ³ / ₁₆ (1326)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-06-18-HT*	28 ³ / ₁₆ (716)	68 ¹³ / ₃₂ (1737)	40 ³ / ₁₆ (1021)	92 ¹³ / ₃₂ (2347)	52 ³ / ₁₆ (1326)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-06-24-HT*	28 ³ / ₁₆ (716)	74 ¹³ / ₃₂ (1890)	40 ³ / ₁₆ (1021)	98 ¹³ / ₃₂ (2499)	52 ³ / ₁₆ (1326)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-06-30-HT*	28 ³ / ₁₆ (716)	80 ¹³ / ₃₂ (2042)	40 ³ / ₁₆ (1021)	104 ¹³ / ₃₂ (2652)	52 ³ / ₁₆ (1326)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-06-36-HT*	28 ³ / ₁₆ (716)	86 ¹³ / ₃₂ (2195)	40 ³ / ₁₆ (1021)	110 ¹³ / ₃₂ (2804)	52 ³ / ₁₆ (1326)	134 ¹³ / ₃₂ (3414)
9 (228)	12 (305)	(Prefix)-09-12-HT*	29 ¹¹ / ₁₆ (754)	62 ¹³ / ₃₂ (1585)	41 ¹¹ / ₁₆ (1059)	86 ¹³ / ₃₂ (2195)	53 ¹¹ / ₁₆ (1364)	110 ¹³ / ₃₂ (2804)
	18 (457)	(Prefix)-09-18-HT*	29 ¹¹ / ₁₆ (754)	68 ¹³ / ₃₂ (1737)	41 ¹¹ / ₁₆ (1059)	92 ¹³ / ₃₂ (2347)	53 ¹¹ / ₁₆ (1364)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-09-24-HT*	29 ¹¹ / ₁₆ (754)	74 ¹³ / ₃₂ (1890)	41 ¹¹ / ₁₆ (1059)	98 ¹³ / ₃₂ (2499)	53 ¹¹ / ₁₆ (1364)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-09-30-HT*	29 ¹¹ / ₁₆ (754)	80 ¹³ / ₃₂ (2042)	41 ¹¹ / ₁₆ (1059)	104 ¹³ / ₃₂ (2652)	53 ¹¹ / ₁₆ (1364)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-09-36-HT*	29 ¹¹ / ₁₆ (754)	86 ¹³ / ₃₂ (2195)	41 ¹¹ / ₁₆ (1059)	110 ¹³ / ₃₂ (2804)	53 ¹¹ / ₁₆ (1364)	134 ¹³ / ₃₂ (3414)
12 (305)	18 (457)	(Prefix)-12-18-HT*	31 ³ / ₁₆ (792)	68 ¹³ / ₃₂ (1737)	43 ³ / ₁₆ (1097)	92 ¹³ / ₃₂ (2347)	55 ³ / ₁₆ (1402)	116 ¹³ / ₃₂ (2957)
	24 (609)	(Prefix)-12-24-HT*	31 ³ / ₁₆ (792)	74 ¹³ / ₃₂ (1890)	43 ³ / ₁₆ (1097)	98 ¹³ / ₃₂ (2499)	55 ³ / ₁₆ (1402)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-12-30-HT*	31 ³ / ₁₆ (792)	80 ¹³ / ₃₂ (2042)	43 ³ / ₁₆ (1097)	104 ¹³ / ₃₂ (2652)	55 ³ / ₁₆ (1402)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-12-36-HT*	31 ³ / ₁₆ (792)	86 ¹³ / ₃₂ (2195)	43 ³ / ₁₆ (1097)	110 ¹³ / ₃₂ (2804)	55 ³ / ₁₆ (1402)	134 ¹³ / ₃₂ (3414)
18 (457)	24 (609)	(Prefix)-18-24-HT*	34 ³ / ₁₆ (869)	74 ¹³ / ₃₂ (1890)	46 ³ / ₁₆ (1173)	98 ¹³ / ₃₂ (2499)	58 ³ / ₁₆ (1478)	122 ¹³ / ₃₂ (3109)
	30 (762)	(Prefix)-18-30-HT*	34 ³ / ₁₆ (869)	80 ¹³ / ₃₂ (2042)	46 ³ / ₁₆ (1173)	104 ¹³ / ₃₂ (2652)	58 ³ / ₁₆ (1478)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-18-36-HT*	34 ³ / ₁₆ (869)	86 ¹³ / ₃₂ (2195)	46 ³ / ₁₆ (1173)	110 ¹³ / ₃₂ (2804)	58 ³ / ₁₆ (1478)	134 ¹³ / ₃₂ (3414)
24 (609)	30 (762)	(Prefix)-24-30-HT*	37 ³ / ₁₆ (945)	80 ¹³ / ₃₂ (2042)	49 ³ / ₁₆ (1250)	104 ¹³ / ₃₂ (2652)	61 ³ / ₁₆ (1554)	128 ¹³ / ₃₂ (3261)
	36 (914)	(Prefix)-24-36-HT*	37 ³ / ₁₆ (945)	86 ¹³ / ₃₂ (2195)	49 ³ / ₁₆ (1250)	110 ¹³ / ₃₂ (2804)	61 ³ / ₁₆ (1554)	134 ¹³ / ₃₂ (3414)
30 (762)	36 (914)	(Prefix)-30-36-HT*	40 ³ / ₁₆ (1021)	86 ¹³ / ₃₂ (2195)	52 ³ / ₁₆ (1326)	110 ¹³ / ₃₂ (2804)	64 ³ / ₁₆ (1631)	134 ¹³ / ₃₂ (3414)

For 4" Fittings

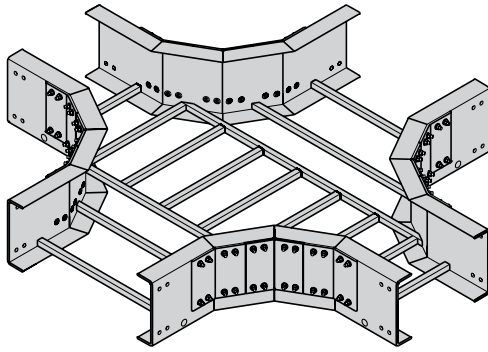
(Radius 12", 24" & 36"
W₁ tray widths - 6" thru 30"
W₂ tray widths - 9" thru 36")
Polyester, Vinyl Ester
All radius are mitered

For 6" Fittings

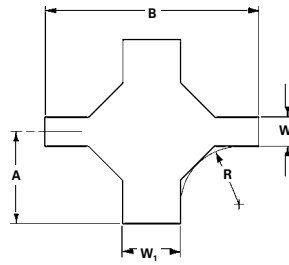
(Radius 12", 24" & 36"
W₁ tray widths - 6" thru 30"
W₂ tray widths - 9" thru 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

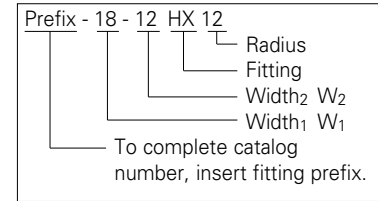
Horizontal Expanding/Reducing Cross (HX)



Three pair of splice plates with SS6 hardware included.



Mitered



(Prefix) See page M-20 for catalog number prefix.
Dimensions for reference only, when critical contact factory.

Mitered Fittings

Tray Width		Catalog No. * Insert radius (12", 24" or 36")	12" Radius (305)		24" Radius (609)		36" Radius (914)	
W ₁ in. (mm)	W ₂ in. (mm)		A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)	A in. (mm)	B in. (mm)
9 (228)	6 (152)	(Prefix)-09-06-HX*	28 ³ / ₁₆ (716)	59 ¹³ / ₃₂ (1509)	40 ³ / ₁₆ (1021)	83 ¹³ / ₃₂ (2118)	52 ³ / ₁₆ (1326)	107 ¹³ / ₃₂ (2728)
12 (305)	6 (152)	(Prefix)-12-06-HX*	28 ³ / ₁₆ (716)	62 ¹³ / ₃₂ (1585)	40 ³ / ₁₆ (1021)	86 ¹³ / ₃₂ (2195)	52 ³ / ₁₆ (1326)	110 ¹³ / ₃₂ (2804)
	9 (228)	(Prefix)-12-09-HX*	29 ¹¹ / ₁₆ (754)	62 ¹³ / ₃₂ (1585)	41 ¹¹ / ₁₆ (1059)	86 ¹³ / ₃₂ (2195)	53 ¹¹ / ₁₆ (1364)	110 ¹³ / ₃₂ (2804)
18 (457)	6 (152)	(Prefix)-18-06-HX*	28 ³ / ₁₆ (716)	68 ¹³ / ₃₂ (1737)	40 ³ / ₁₆ (1021)	92 ¹³ / ₃₂ (2347)	52 ³ / ₁₆ (1326)	116 ¹³ / ₃₂ (2957)
	9 (228)	(Prefix)-18-09-HX*	29 ¹¹ / ₁₆ (754)	68 ¹³ / ₃₂ (1737)	41 ¹¹ / ₁₆ (1059)	92 ¹³ / ₃₂ (2347)	53 ¹¹ / ₁₆ (1364)	116 ¹³ / ₃₂ (2957)
	12 (305)	(Prefix)-18-12-HX*	31 ³ / ₁₆ (792)	68 ¹³ / ₃₂ (1737)	43 ³ / ₁₆ (1097)	92 ¹³ / ₃₂ (2347)	55 ³ / ₁₆ (1402)	116 ¹³ / ₃₂ (2957)
24 (609)	6 (152)	(Prefix)-24-06-HX*	28 ³ / ₁₆ (716)	74 ¹³ / ₃₂ (1890)	40 ³ / ₁₆ (1021)	98 ¹³ / ₃₂ (2499)	52 ³ / ₁₆ (1326)	122 ¹³ / ₃₂ (3109)
	9 (228)	(Prefix)-24-09-HX*	29 ¹¹ / ₁₆ (754)	74 ¹³ / ₃₂ (1890)	41 ¹¹ / ₁₆ (1059)	98 ¹³ / ₃₂ (2499)	53 ¹¹ / ₁₆ (1364)	122 ¹³ / ₃₂ (3109)
	12 (305)	(Prefix)-24-12-HX*	31 ³ / ₁₆ (792)	74 ¹³ / ₃₂ (1890)	43 ³ / ₁₆ (1097)	98 ¹³ / ₃₂ (2499)	55 ³ / ₁₆ (1402)	122 ¹³ / ₃₂ (3109)
	18 (457)	(Prefix)-24-18-HX*	34 ³ / ₁₆ (869)	74 ¹³ / ₃₂ (1890)	46 ³ / ₁₆ (1173)	98 ¹³ / ₃₂ (2499)	58 ³ / ₁₆ (1478)	122 ¹³ / ₃₂ (3109)
30 (762)	6 (152)	(Prefix)-30-06-HX*	28 ³ / ₁₆ (716)	80 ¹³ / ₃₂ (2042)	40 ³ / ₁₆ (1021)	104 ¹³ / ₃₂ (2652)	52 ³ / ₁₆ (1326)	128 ¹³ / ₃₂ (3261)
	9 (228)	(Prefix)-30-09-HX*	29 ¹¹ / ₁₆ (754)	80 ¹³ / ₃₂ (2042)	41 ¹¹ / ₁₆ (1059)	104 ¹³ / ₃₂ (2652)	53 ¹¹ / ₁₆ (1364)	128 ¹³ / ₃₂ (3261)
	12 (305)	(Prefix)-30-12-HX*	31 ³ / ₁₆ (792)	80 ¹³ / ₃₂ (2042)	43 ³ / ₁₆ (1097)	104 ¹³ / ₃₂ (2652)	55 ³ / ₁₆ (1402)	128 ¹³ / ₃₂ (3261)
	18 (457)	(Prefix)-30-18-HX*	34 ³ / ₁₆ (869)	80 ¹³ / ₃₂ (2042)	46 ³ / ₁₆ (1173)	104 ¹³ / ₃₂ (2652)	58 ³ / ₁₆ (1478)	128 ¹³ / ₃₂ (3261)
	24 (609)	(Prefix)-30-24-HX*	37 ³ / ₁₆ (945)	80 ¹³ / ₃₂ (2042)	49 ³ / ₁₆ (1250)	104 ¹³ / ₃₂ (2652)	61 ³ / ₁₆ (1554)	128 ¹³ / ₃₂ (3261)
36 (914)	6 (152)	(Prefix)-36-06-HX*	28 ³ / ₁₆ (716)	86 ¹³ / ₃₂ (2195)	40 ³ / ₁₆ (1021)	110 ¹³ / ₃₂ (2804)	52 ³ / ₁₆ (1326)	134 ¹³ / ₃₂ (3414)
	9 (228)	(Prefix)-36-09-HX*	29 ¹¹ / ₁₆ (754)	86 ¹³ / ₃₂ (2195)	41 ¹¹ / ₁₆ (1059)	110 ¹³ / ₃₂ (2804)	53 ¹¹ / ₁₆ (1364)	134 ¹³ / ₃₂ (3414)
	12 (305)	(Prefix)-36-12-HX*	31 ³ / ₁₆ (792)	86 ¹³ / ₃₂ (2195)	43 ³ / ₁₆ (1097)	110 ¹³ / ₃₂ (2804)	55 ³ / ₁₆ (1402)	134 ¹³ / ₃₂ (3414)
	18 (457)	(Prefix)-36-18-HX*	34 ³ / ₁₆ (869)	86 ¹³ / ₃₂ (2195)	46 ³ / ₁₆ (1173)	110 ¹³ / ₃₂ (2804)	58 ³ / ₁₆ (1478)	134 ¹³ / ₃₂ (3414)
	24 (609)	(Prefix)-36-24-HX*	37 ³ / ₁₆ (945)	86 ¹³ / ₃₂ (2195)	49 ³ / ₁₆ (1250)	110 ¹³ / ₃₂ (2804)	61 ³ / ₁₆ (1554)	134 ¹³ / ₃₂ (3414)
	30 (762)	(Prefix)-36-30-HX*	40 ³ / ₁₆ (1021)	86 ¹³ / ₃₂ (2195)	52 ³ / ₁₆ (1326)	110 ¹³ / ₃₂ (2804)	64 ³ / ₁₆ (1631)	134 ¹³ / ₃₂ (3414)

For 4" Fittings

(Radius 12", 24" & 36"
W₁ tray widths - 9" thru 36"
W₂ tray widths - 6" thru 30"
Polyester, Vinyl Ester
All radius are mitered

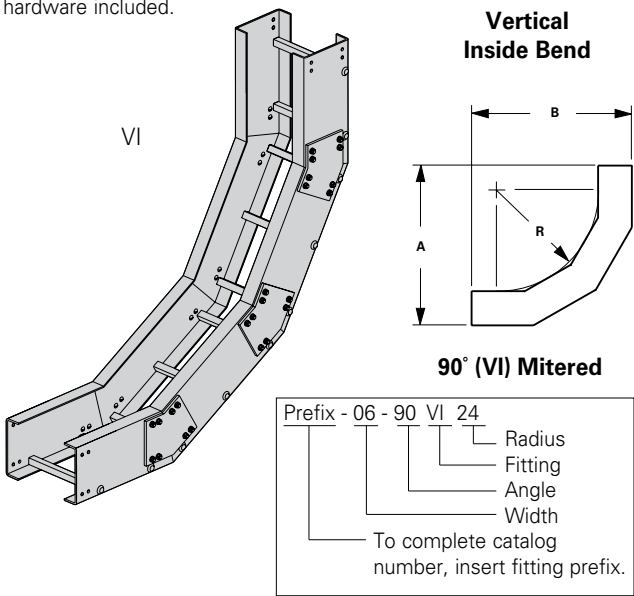
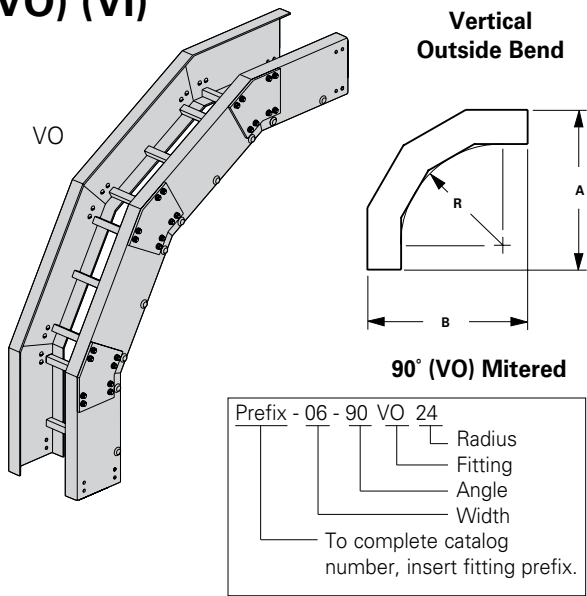
For 6" Fittings

(Radius 12", 24" & 36"
W₁ tray widths - 9" thru 36"
W₂ tray widths - 6" thru 30"
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Vertical Bends 90°
(VO) (VI)

One pair of splice plates with
SS6 hardware included.



(Prefix) See page M-20 for catalog number prefix. Dimensions for reference only, when critical contact factory.

- R - Bend Radius in. (mm)	Tray Width in. (mm)	Catalog No.	90° Mitered VO & VI Bend	
			A in. / (mm)	B in. / (mm)
12 (305)	6 (152)	(Prefix)-06-90(*)12	27 ⁵ / ₃₂ (690)	27 ⁵ / ₃₂ (690)
	9 (228)	(Prefix)-09-90(*)12		
	12 (305)	(Prefix)-12-90(*)12		
	18 (457)	(Prefix)-18-90(*)12		
	24 (609)	(Prefix)-24-90(*)12		
	30 (762)	(Prefix)-30-90(*)12		
24 (609)	36 (914)	(Prefix)-36-90(*)12	36 ²³ / ₃₂ (933)	36 ²³ / ₃₂ (933)
	6 (152)	(Prefix)-06-90(*)24		
	9 (228)	(Prefix)-09-90(*)24		
	12 (305)	(Prefix)-12-90(*)24		
	18 (457)	(Prefix)-18-90(*)24		
	24 (609)	(Prefix)-24-90(*)24		
36 (914)	30 (762)	(Prefix)-30-90(*)24	44 ²⁹ / ₃₂ (1141)	44 ²⁹ / ₃₂ (1141)
	36 (914)	(Prefix)-36-90(*)24		
	6 (152)	(Prefix)-06-90(*)36		
	9 (228)	(Prefix)-09-90(*)36		
	12 (305)	(Prefix)-12-90(*)36		
	18 (457)	(Prefix)-18-90(*)36		
	24 (609)	(Prefix)-24-90(*)36		
	30 (762)	(Prefix)-30-90(*)36		
	36 (914)	(Prefix)-36-90(*)36		

(*) Insert 'VO' for Vertical Outside Bend or 'VI' for Vertical Inside Bend.

For 4" Fittings

(Radius 12", 24" & 36"
Tray widths - 6" thru 36")
Polyester, Vinyl Ester
All radius are mitered

For 6" Fittings

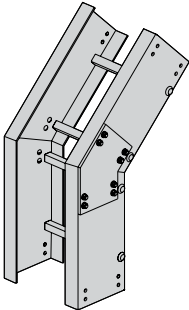
(Radius 12", 24" & 36"
Tray widths - 6" thru 36")
Polyester, Vinyl Ester
All radius are mitered

Fiberglass

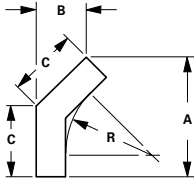
Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Vertical
Outside Bend

VO



One pair of splice plates with
SS6 hardware included.



45° (VO) Mitered

Prefix - 06 - 45 VO 24

Radius

Fitting

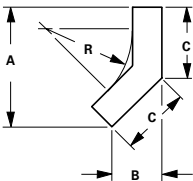
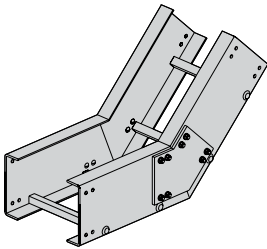
Angle

Width

To complete catalog
number, insert fitting prefix.

Vertical
Inside Bend

VI



45° (VI) Mitered

Prefix - 06 - 45 VI 24

Radius

Fitting

Angle

Width

To complete catalog
number, insert fitting prefix.

(Prefix) See page M-20 for catalog number prefix. Dimensions for reference only, when critical contact factory.

- R - Bend Radius in. mm	Tray Width in. mm	45° Mitered			
		Catalog No.	VO & VI Bend		
			A in. / (mm)	B in. / (mm)	C in. / (mm)
12 (305)	6 (152)	(Prefix)-06-45(*)12	23 ¹ / ₁₆ (585)	9 ⁹ / ₁₆ (242)	13 ¹ / ₂ (343)
	9 (228)	(Prefix)-09-45(*)12			
	12 (305)	(Prefix)-12-45(*)12			
	18 (457)	(Prefix)-18-45(*)12			
	24 (609)	(Prefix)-24-45(*)12			
	30 (762)	(Prefix)-30-45(*)12			
	36 (914)	(Prefix)-36-45(*)12			
24 (609)	6 (152)	(Prefix)-06-45(*)24	23 ¹ / ₁₆ (585)	9 ⁹ / ₁₆ (242)	13 ¹ / ₂ (343)
	9 (228)	(Prefix)-09-45(*)24			
	12 (305)	(Prefix)-12-45(*)24			
	18 (457)	(Prefix)-18-45(*)24			
	24 (609)	(Prefix)-24-45(*)24			
	30 (762)	(Prefix)-30-45(*)24			
	36 (914)	(Prefix)-36-45(*)24			
36 (914)	6 (152)	(Prefix)-06-45(*)36	23 ¹ / ₁₆ (585)	9 ⁹ / ₁₆ (242)	13 ¹ / ₂ (343)
	9 (228)	(Prefix)-09-45(*)36			
	12 (305)	(Prefix)-12-45(*)36			
	18 (457)	(Prefix)-18-45(*)36			
	24 (609)	(Prefix)-24-45(*)36			
	30 (762)	(Prefix)-30-45(*)36			
	36 (914)	(Prefix)-36-45(*)36			

(*) Insert 'VO' for Vertical Outside Bend or 'VI' for Vertical Inside Bend.
60° and 30° vertical bends available in mitered construction.

For 4" Fittings
(Radius 12", 24" & 36"
Tray widths - 6" thru 36")
Polyester, Vinyl Ester
All radius are mitered

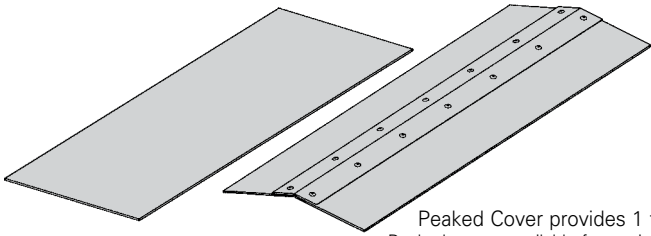
For 6" Fittings
(Radius 12", 24" & 36"
Tray widths - 6" thru 36")
Polyester, Vinyl Ester
All radius are mitered

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Fiberglass

Covers

Material Thickness: .090" (2.3)
Cover Length: 10' (3m)
Standard Mounting Hardware: (10 each) #10 x 3/4" stainless, self drilling screws provided with each section



Peaked Cover provides 1 to 3.7 pitch
Peaked covers available for straight sections only.
No Hardware provided.

Covers

F

C

-

24

-

120

Length or fitting description

Width

Rail design

Material

●

F

C

-

24

-

120

=

Flat polyester

●

FV

C

-

24

-

120

=

Flat vinyl ester

●

FP

C

-

24

-

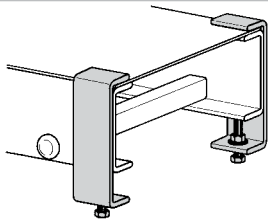
120

=

Peaked polyester

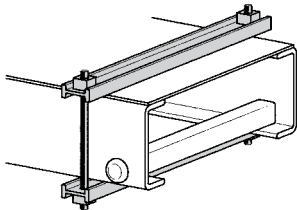
Quantity of Standard Cover Clamps Required	
Straight Section 60" or 72"	4 pcs.
Straight Section 120" or 144"	6 pcs.
Horizontal/Vertical Bends	4 pcs.
Tees	6 pcs.
Crosses	8 pcs.
Reducers	4 pcs.
Note: When using the Heavy Duty Cover Clamp, only one-half the number of clamps stated above is required.	

Standard Cover Clamp
• Furnished in pairs with hardware.



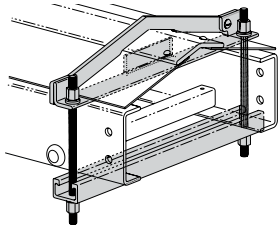
Catalog No.	Side Rail Height	
	in.	(mm)
9(Δ)-9013	3	(76)
9(Δ)-9014	4	(101)
9(Δ)-9016	6	(152)

Heavy Duty Cover Clamp
Recommended for outdoor service.
• W = tray width
• Heavy duty cover clamp available for flat covers only



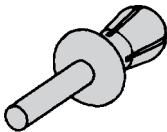
Catalog No.	Side Rail Height	
	in.	(mm)
9F-W-9034	3	(76)
9F-W-9044	4	(101)
9F-W-9064	6	(152)
9F-W-9084	8	(203)

Peaked Cover Clamp
• W = tray width



Catalog No.	Side Rail Height	
	in.	(mm)
9F-W-9034P	3	(76)
9F-W-9044P	4	(101)
9F-W-9064P	6	(152)
9F-W-9084P	8	(203)

Thermo Plastic Drive Rivet
• Sold individually.
• Shipped in packages of 25 pcs.



Catalog No.
● TPDR

Material Designations
(Δ) Insert one of the following material designations when required.
● F = Polyester Resin (Example: 9F-9013)
● FV = Vinyl Ester Resin (Example: 9FV-9013)

Check with B-Line Technical Support (blinetechnicalsupport@eaton.com) if there are questions/concerns about environmental loads for covers (wind, snow, sleet, rain, etc.).

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Fiberglass

Part Number with Hardware Explanation

Note: All hardware is 3/8"

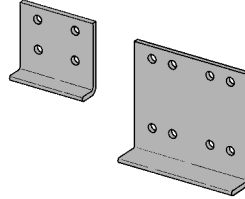
Example: 9F-4004 SS6: pair of 4-hole splice plates for 4" (101) system with stainless steel hardware

9FV-8006 SS6: pair of 8-hole vinyl ester splice plates for 6" (152) system with stainless steel hardware

Hardware Option	316 Stainless Steel
	SS6

Standard Lay-In Splice Plates

- Furnished in pairs with 316 stainless steel hardware
- One pair including hardware provided with straight section. (Expansion splice quantity subtracted)

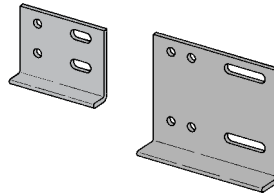


Material	Height in. (mm)	Catalog No.
Fiberglass	3" (76)	9(Δ)-4003SS6
	4" (101)	9(Δ)-4004SS6
	6" (152)	9(Δ)-8006SS6
	8" (203)	9(Δ)-8008SS6

Expansion Lay-In Splice Plates

- Furnished in pairs with 316 stainless steel hardware

Requires supports within 24" on both sides, per NEMA VE 2.

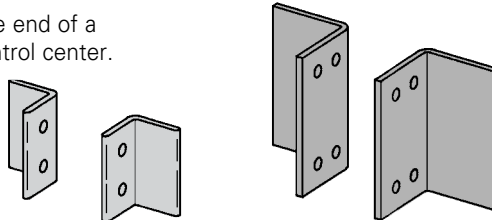


Material	Height in. (mm)	Catalog No.
Fiberglass	3" (76)	9(Δ)-4013SS6
	4" (101)	9(Δ)-4014SS6
	6" (152)	9(Δ)-8016SS6
	8" (203)	9(Δ)-8018SS6

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 with 316 stainless steel hardware

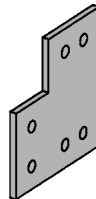


Material	Height in. (mm)	Catalog No.
Fiberglass	3" (76)	9(Δ)-4053SS6
	4" (101)	9(Δ)-4054SS6
	6" (152)	9(Δ)-8056SS6
	8" (203)	9(Δ)-8058SS6

Step Down Splice Plates

These plates are offered for connecting cable tray sections having side rails of different heights.

- Furnished in pairs with 316 stainless steel hardware

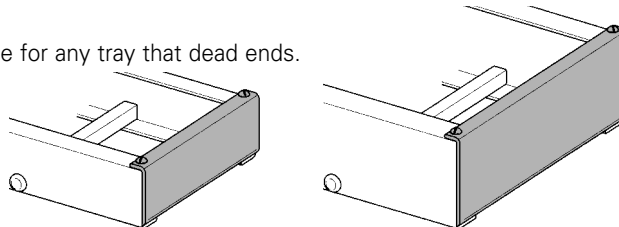


Material	Height in. (mm)	Catalog No.
Fiberglass	8" to 6" (203 to 152)	9(Δ)-8086SS6
	8" to 4" (203 to 101)	9(Δ)-8084SS6
	6" to 3" (152 to 76)	9(Δ)-8063SS6
	6" to 4" (152 to 101)	9(Δ)-8064SS6
	4" to 3" (101 to 76)	9(Δ)-4043SS6

Blind End Plate

This plate forms a closure for any tray that dead ends.

- Furnished as one plate
- W = tray width



Material	Height in. (mm)	Catalog No.
Fiberglass	3" (76)	9(Δ)-1083-WSS6
	4" (101)	9(Δ)-1084-WSS6
	6" (152)	9(Δ)-1086-WSS6
	8" (203)	9(Δ)-1088-WSS6

Resin Seal Kit

To reseal fiberglass after field modifications.

- 1 pint (473ml)

Contents: Sealant and Applicator.

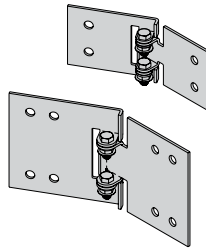


Catalog No.
RSK-010

Horizontal Adjustable Splice Plates

These plates provide for changes in the horizontal direction that do not conform to standard fittings.

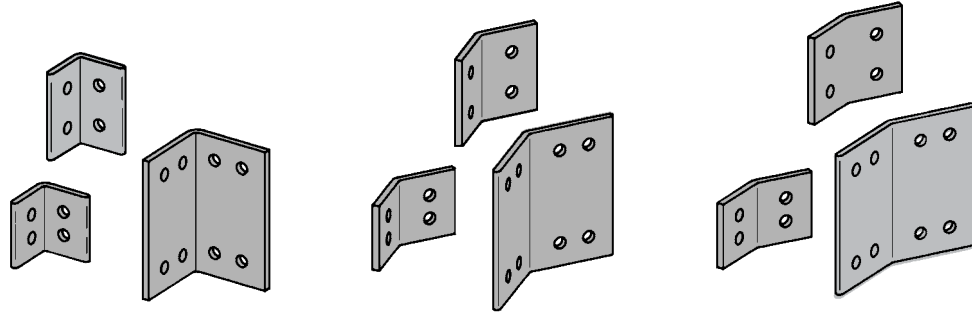
- Furnished in pairs with 316 stainless steel hardware
- Body made from 316 stainless steel
- Used for all material finishes
- Requires supports within 24" on both sides, per NEMA VE 2



Material	Height in. (mm)	Catalog No.
316SS	3" (76)	9F-4033SS6
	4" (101)	9F-4034SS6
	6" (152)	9F-8036SS6
	8" (203)	9F-8038SS6

Horizontal Splice Plates

- Furnished in pairs with 316 stainless steel hardware

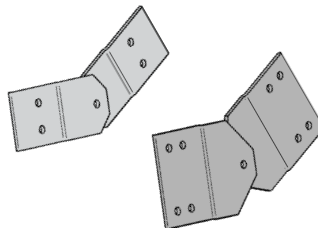


Material	Height in. (mm)	90°	Catalog No. 45°	30°
Fiberglass	3" (76)	9(Δ)-4903HSS6	9(Δ)-4453HSS6	9(Δ)-4303HSS6
	4" (101)	9(Δ)-4904HSS6	9(Δ)-4454HSS6	9(Δ)-4304HSS6
	6" (152)	9(Δ)-8906HSS6	9(Δ)-8456HSS6	9(Δ)-8306HSS6
	8" (203)	9(Δ)-8908HSS6	9(Δ)-8458HSS6	9(Δ)-8308HSS6

Vertical Adjustable Splice Plates

These plates provide for changes in elevation that do not conform to standard vertical fittings.

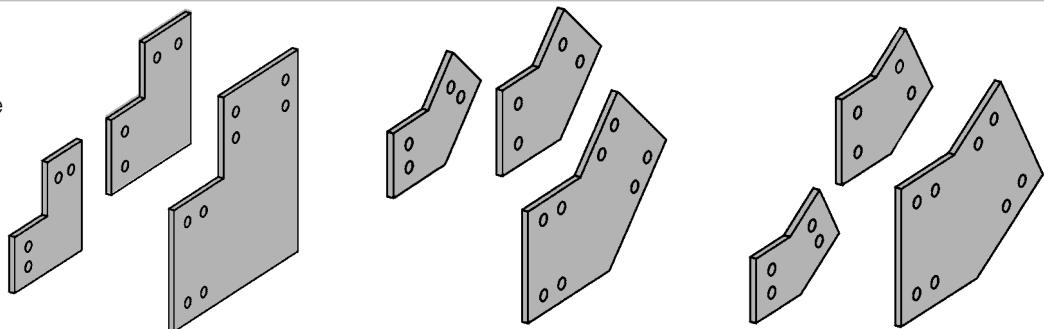
- Furnished in pairs with 316 stainless steel hardware
- Requires supports within 24" on both sides, per NEMA VE 2



Material	Height in. (mm)	Catalog No.
Fiberglass	3" (76)	9(Δ)-4023SS6
	4" (101)	9(Δ)-4024SS6
	6" (152)	9(Δ)-8026SS6
	8" (203)	9(Δ)-8028SS6

Vertical Splice Plates

- Furnished in pairs with 316 stainless steel hardware



Material	Height in. (mm)	90°	Catalog No. 45°	30°
Fiberglass	3" (76)	9(Δ)-4903VSS6	9(Δ)-4453VSS6	9(Δ)-4303VSS6
	4" (101)	9(Δ)-4904VSS6	9(Δ)-4454VSS6	9(Δ)-4304VSS6
	6" (152)	9(Δ)-8906VSS6	9(Δ)-8456VSS6	9(Δ)-8306VSS6
	8" (203)	9(Δ)-8908VSS6	9(Δ)-8458VSS6	9(Δ)-8308VSS6

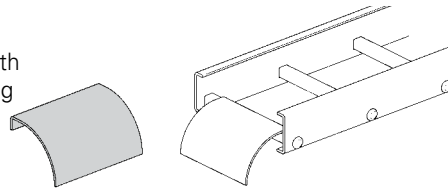
(Δ) See page M-25 for material selection

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

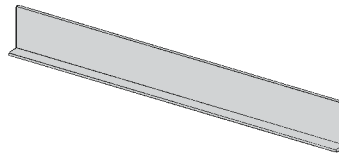
Ladder Drop-Out

Specially-designed Ladder Drop-Outs provide a rounded surface with adequate radius to protect cable as it exits from the tray, preventing damage to insulation.

- 4" (101) radius
- W = tray width
- Furnished with #10 x 3/4" self-drilling stainless steel screws

**Catalog No.****9(Δ)-1104-W****Barriers**

- Furnished with #10 x 3/4" self-drilling stainless steel screws



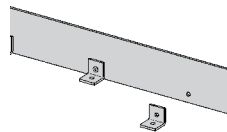
Catalog No.	Side Rail Height in. (mm)
72(Δ)-120	3" (76)
73(Δ)-120	4" (101)
75(Δ)-120	6" (152)
77(Δ)-120	8" (203)

Flexible Horizontal Barrier Kit

One kit allows up to a 36" (914) radius position of the barrier.

Kit Contents:

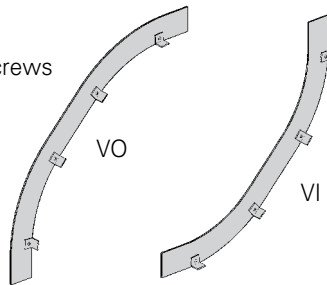
- 1 pc — 72" (1829) Straight Barrier
 - 4 pc — 9F-9002 Barrier Strip Clip
 - 8 pc — Thermo Plastic Drive Rivet
 - 4 pc — #10 x 3/4" Stainless Steel Self-Drilling Screw
- Assembly required — directions included.



Catalog No.	Side Rail Height in. (mm)
72(Δ)-90HBFL	3" (76)
73(Δ)-90HBFL	4" (101)
75(Δ)-90HBFL	6" (152)
77(Δ)-90HBFL	8" (203)

Vertical Bend Barriers

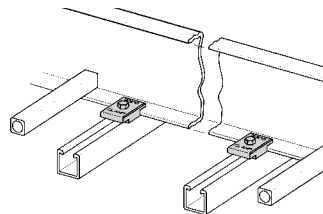
- Furnished with #10 x 3/4" self-drilling stainless steel screws
- * Insert 2 for 3" (76) siderail height
- 3 for 4" (101) siderail height
- 5 for 6" (152) siderail height

**7* (Δ) - 90 VO 24**

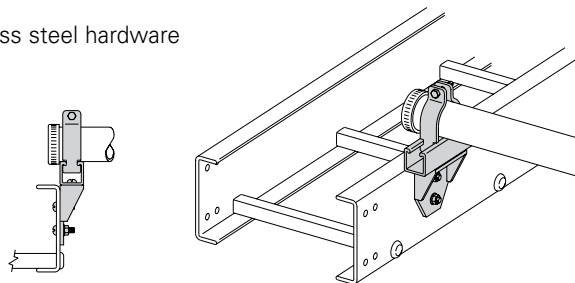
Radius
VI or VO
Angle
Material
Barrier Size

Clamp/Guide - Fiberglass

- Nonmetallic
- Designed for 3/8" hardware - not included
- Combination hold down clamp and guide
- Material: Glass reinforced polyurethane
- Sold in pairs

**Catalog No.****9F-1208****Fiberglass Conduit to Cable Tray Adapter**

- For rigid or PVC conduit
- Furnished in pairs with 316 stainless steel hardware

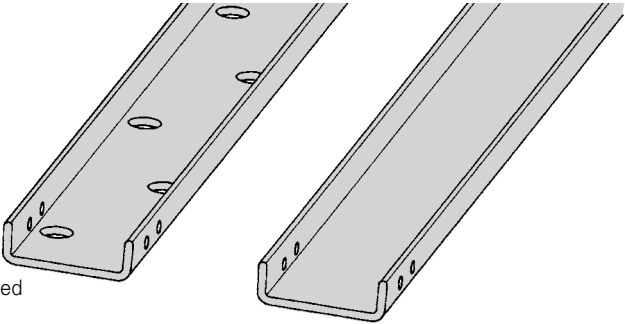


Catalog No.	Conduit Size in. (mm)
9FV-2008	0.50 (15)
9FV-2009	0.75 (20)
9FV-2010	1.00 (25)
9FV-2011	1.25 (32)
9FV-2012	1.50 (40)
9FV-2013	2.00 (50)
9FV-2014	2.50 (65)
9FV-2015	3.00 (80)
9FV-2016	3.50 (90)
9FV-2017	4.00 (100)

Straight Section

- Load data was interpolated from CSA testing.
- Loads shown are for FCCN series.
- Loads shown are for 6 ft. (1.83m) span with deflection of .7 (18.26) inches.
- One pair of splice plates included with each straight section.

FCC Fiberglass
Cable Channel Ventilated



FCCN Fiberglass Cable
Channel Non-Ventilated

Catalog No.		Width in. (mm)	Length ft. (m)	Height in. (mm)	Load Lbs/Ft (kg/m)
Ventilated	Non-Ventilated				
(*)-03-120	(*)N-03-120	3 (76)	10 (3)	1 (25)	8 (12)
(*)-03-240	(*)N-03-240	3 (76)	20 (6)	1 (25)	8 (12)
(*)-04-120	(*)N-04-120	4 (101)	10 (3)	1½ (28)	12 (18)
(*)-04-240	(*)N-04-240	4 (101)	20 (6)	1½ (28)	12 (18)
(*)-06-120	(*)N-06-120	6 (152)	10 (3)	1⅝ (35)	58 (86)
(*)-06-240	(*)N-06-240	6 (152)	20 (6)	1⅝ (35)	58 (86)
(*)-08-120	(*)N-08-120	8 (203)	10 (3)	2⅜ (55)	87 (129)
(*)-08-240	(*)N-08-240	8 (203)	20 (6)	2⅜ (55)	87 (129)

Cable Channel Fittings

All fittings are of mitered construction with 12" (305) radius.



Horizontal	3" series	4" series	6" series	8" series
90°	(*)N-03-90HB12	(*)N-04-90HB12	(*)N-06-90HB12	(*)N-08-90HB12
45°	(*)N-03-45HB12	(*)N-04-45HB12	(*)N-06-45HB12	(*)N-08-45HB12

One pair of splice plates included.

Vertical	3" series	4" series	6" series	8" series
90°	(*)N-03-90V*12	(*)N-04-90V*12	(*)N-06-90V*12	(*)N-08-90V*12
45°	(*)N-03-45V*12	(*)N-04-45V*12	(*)N-06-45V*12	(*)N-08-45V*12

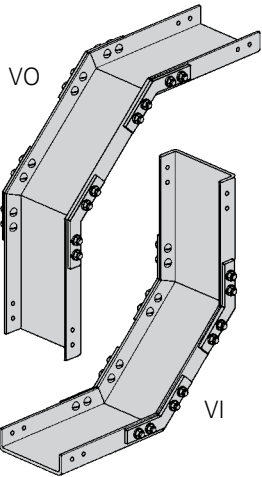
One pair of splice plates included.

- (*) Insert material type
- FCC for Polyester Resin
 - FCCV for Vinyl Ester Resin

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

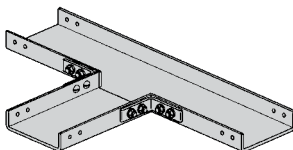
Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Fiberglass



Horizontal Tees

- Two pair of splice plates included.



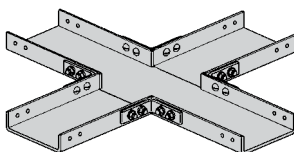
Catalog No.	Width in. (mm)
FCC(*)N-03-HT12	3 (76)
FCC(*)N-04-HT12	4 (101)
FCC(*)N-06-HT12	6 (152)
FCC(*)N-08-HT12	8 (203)

(*) See page fitting material selection bottom of page M-29

All fittings are of mitered construction with 12" (305) radius.

Horizontal Crosses

- Three pair of splice plates included.



Catalog No.	Width in. (mm)
FCC(*)N-03-HX12	3 (76)
FCC(*)N-04-HX12	4 (101)
FCC(*)N-06-HX12	6 (152)
FCC(*)N-08-HX12	8 (203)

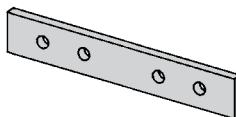
(*) See page fitting material selection bottom of page M-29

All fittings are of mitered construction with 12" (305) radius.

Splice Plates

- Sold in pairs - included with tray sections.

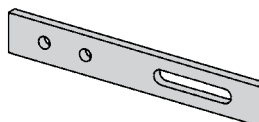
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1001SS6

Expansion Splice Plates

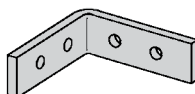
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1013SS6

Horizontal 90° Splice Plates

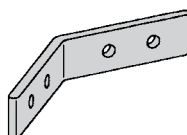
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1901HSS6

Horizontal 45° Splice Plates

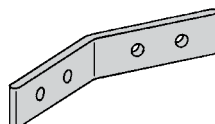
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1451HSS6

Horizontal 30° Splice Plates

- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1301HSS6

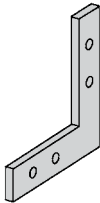
Splice plates included with cable channel sections.
Hardware for splice plates is 1/4"-20 (316SS).

(Δ) See page M-25 for material selection

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Vertical 90° Splice Plates

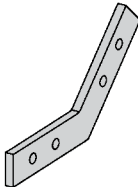
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1901VSS6

Vertical 45° Splice Plates

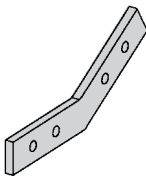
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1451VSS6

Vertical 30° Splice Plates

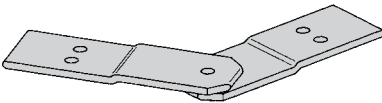
- Sold in pairs
- Uses 1/4"-20 316SS hardware



Catalog No.
9(Δ)-1301VSS6

Horizontal Adjustable Splice Plates

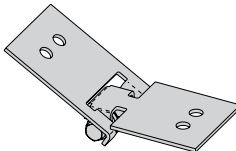
- Sold per piece
- Uses 3/8"-16 316SS hardware



Catalog No.
9(Δ)-1023SS6

Vertical Adjustable Splice Plates

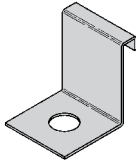
- Sold per piece
- Uses 3/8"-16 316SS hardware
- Boby made from 316 stainless steel
- Used for all material finishes



Catalog No.
9F-1033SS6

Expansion Guide Clamp

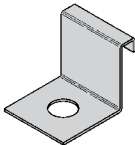
- Sold per clamp
- Order 1/2" hardware separately



Catalog No.	Width in. (mm)
● 9SS6-1248-3	3 (76)
● 9SS6-1248-4	4 (101)
● 9SS6-1248-6	6 (152)
● 9SS6-1248-8	8 (203)

Hold-Down Clamp

- Sold per clamp
- Order 1/2" hardware separately



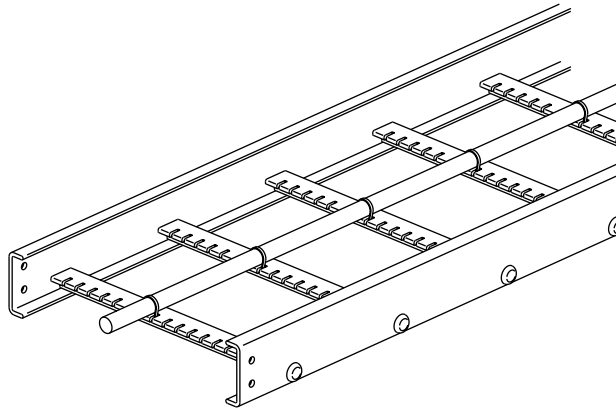
Catalog No.	Width in. (mm)
● 9SS6-1247-3	3 (76)
● 9SS6-1247-4	4 (101)
● 9SS6-1247-6	6 (152)
● 9SS6-1247-8	8 (203)

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

(Δ) See page M-25 for material selection

Dimensions shown in parentheses are in millimeters, unless otherwise specified.

Marine Rung Cable Tray/Fiberglass

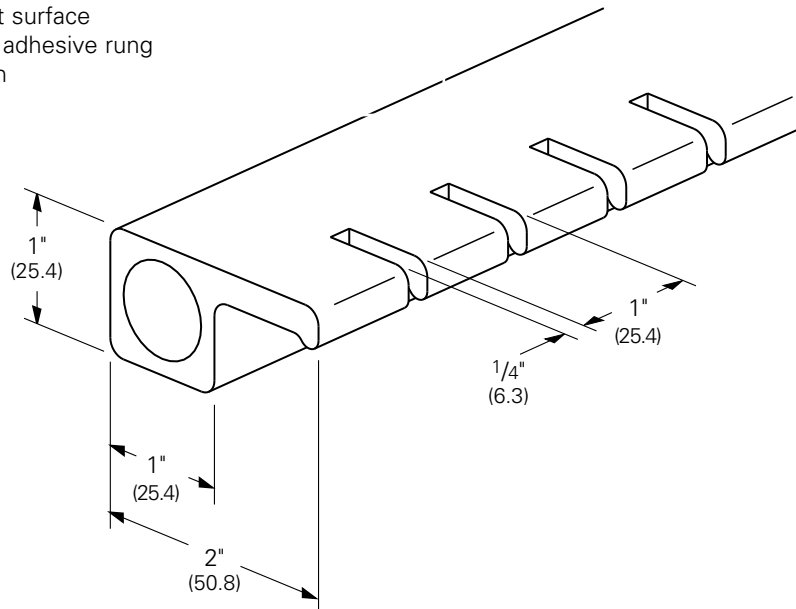


Features:

- For Coast Guard Requirements
 - Allows stainless steel banding of cables
 - $\frac{5}{32}$ " (15.9) slots 1" (25.4) on centers
 - Accommodates up to $\frac{5}{8}$ " (15.9) banding
- Has applications on land
 - Vertical installation
 - Any location where extra cable positioning is required
- Designed for Earton's B-Line series Fiberglass Cable Trays
- Part Number Indication
 - Add MR after rung spacing
 - Example: 46F09MR-36-240

Rung design provides:

- 2" (50.8) cable support surface
- Both mechanical and adhesive rung to side rail connection



Dimensions shown in parentheses are in millimeters, unless otherwise specified.