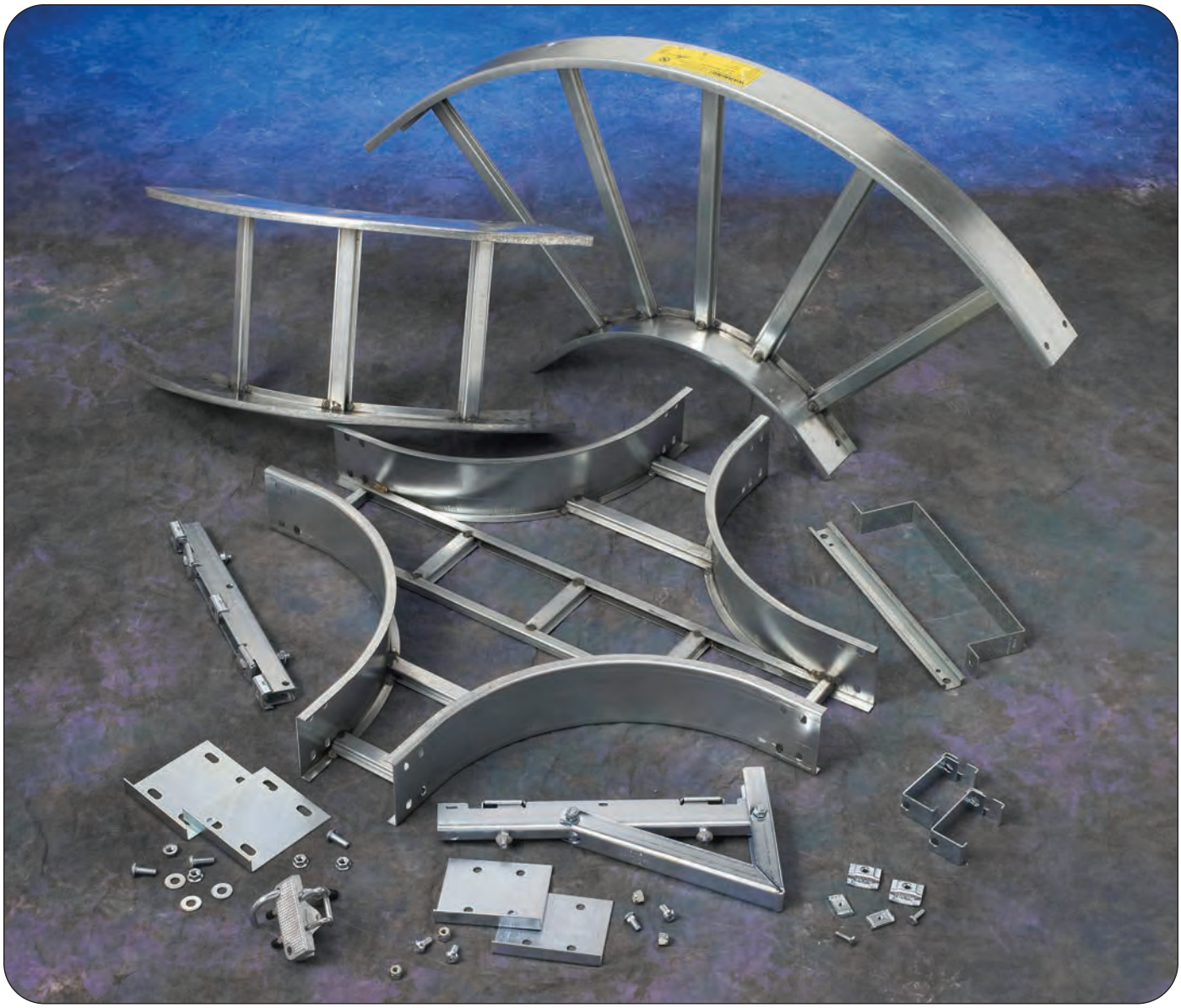


How The Service Advisor Works

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: **156G 09 - 24 - 144**

Part will have a long lead time because of the 156G material.

Changing the part number from 156G to 156P will change the coding to black for all sections and reduce lead time.

3" NEMA VE 1 Loading Depth

Actual Loading Depth = 3.077"

Straight Section Part Numbering

Prefix

Example: **148 P 09 - 24 - 144**

Series
148

Material
- **P** = Pre-Galvanized Steel
- **G** = Hot Dip Galvanized After Fabrication Steel

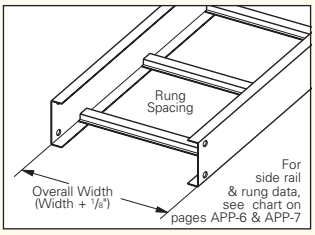
Type
- **SB** = Solid Bottom*
- **06** = 6" rung spacing**
- **09** = 9" rung spacing
- **12** = 12" rung spacing

Width
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

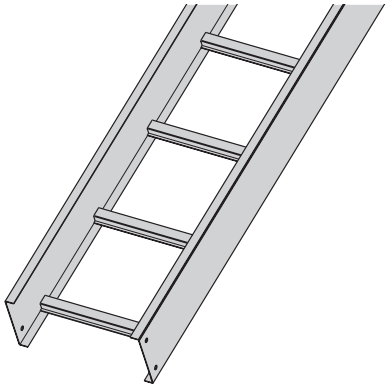
Length
- ① **144** = 12 ft.
- ② 120 = 10 ft.

① Primary Length.
② Secondary Length.

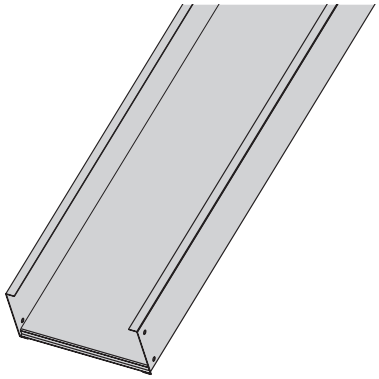
See page C-23 for explanation of lengths.



See page APP-1 for additional rung options.
*SB available for all widths.
**6" rung spacing is equivalent to vented bottom

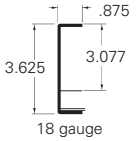


Ladder Type
(Specify Rung Spacing)



Non-Ventilated

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. The published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

B-Line Series Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
148 	NEMA: 12A, 8C	6	204*	0.0011	Area = 0.510 in^2	1.8	304*	0.019	Area = 3.290 cm^2
	CSA: C1-3m	8	115	0.0036	Sx = 0.480 in^3	2.4	171	0.061	Sx = 7.870 cm^3
	UL Cross-Sectional	10	73	0.0087	Ix = 0.890 in^4	3.0	109	0.149	Ix = 37.04 cm^4
	Area: 0.40 in^2	12	51	0.0181		3.7	76	0.309	

*When using 12" rung spacing load capacity is limited to 195 lbs/ft (290.16 kg/m) for 36" tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%.
Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

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

4" NEMA VE 1 Loading Depth

Actual Loading Depth = 3.628"

Straight Section Part Numbering

Prefix

Example: **156 P 09 - 24 - 144**

Series
156

Material
- **P** = Pre-Galvanized Steel
- **G** = Hot Dip Galvanized After Fabrication Steel

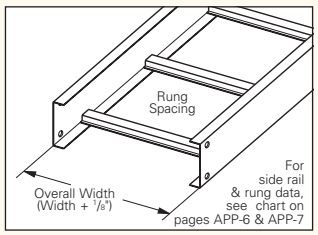
Type
- **SB** = Solid Bottom*
- **06** = 6" rung spacing**
- **09** = 9" rung spacing
- **12** = 12" rung spacing

Width
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

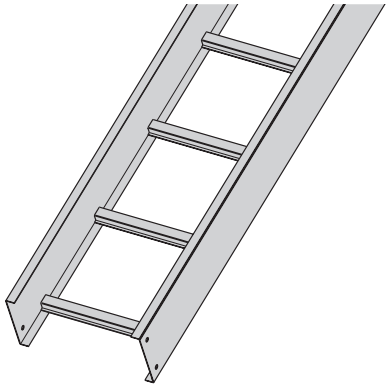
Length
- ① **144** = 12 ft.
- ② 120 = 10 ft.

① Primary Length.
② Secondary Length.

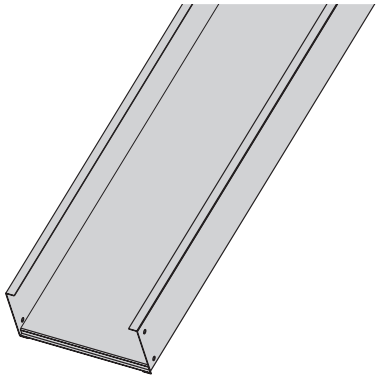
See page C-23 for explanation of lengths.



See page APP-1 for additional rung options.
*SB available for all widths.
**6" rung spacing is equivalent to vented bottom.



Ladder Type
(Specify Rung Spacing)



Non-Ventilated

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above the published loads. The published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

B-Line Series Side Rail Dimensions		NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
156	.875 / 4.188 / 3.628 / 16 gauge	NEMA: 12B, 8C	6	304*	0.0007	Area = 0.690 in²	1.8	452*	0.011	Area = 4.390 cm²
		CSA: C1-3m	8	171	0.0021	Sx = 0.724 in³	2.4	254	0.036	Sx = 11.860 cm³
		UL Cross-Sectional	10	109	0.0051	Ix = 1.517 in⁴	3.0	163	0.087	Ix = 63.140 cm⁴
		Area: 0.40 in²	12	76	0.0011		3.7	113	0.181	

*When using 12" rung spacing, load capacity is limited to 234 lbs/ft (348.192 kg/m) for 30" tray width and 195 lbs/ft (290.16 kg/m) for 36" tray width. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

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

All dimensions in parentheses are millimeters unless otherwise specified.

5" NEMA VE 1 Loading Depth

Actual Loading Depth = 4.628"

Straight Section Part Numbering

Prefix

Example: **166 P 09 - 24 - 144**

Series
166

Material
- ● **P** = Pre-Galvanized Steel
- ● **G** = Hot Dip Galvanized After Fabrication Steel

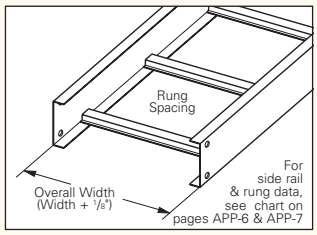
Type
- ● **SB** = Solid Bottom*
- ● **06** = 6" rung spacing**
- ● **09** = 9" rung spacing
- ● **12** = 12" rung spacing

Width
- ● **06** = 6"
- ● **09** = 9"
- ● **12** = 12"
- ● **18** = 18"
- ● **24** = 24"
- ● **30** = 30"
- ● **36** = 36"

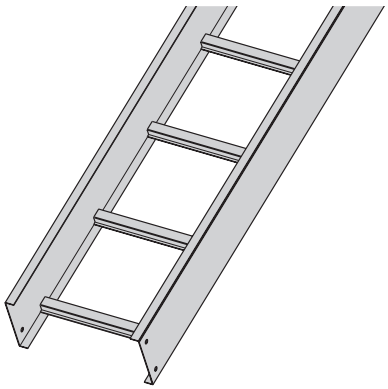
Length
- ● ① **144** = 12 ft.
- ● ② 120 = 10 ft.

Note
① Primary Length.
② Secondary Length.

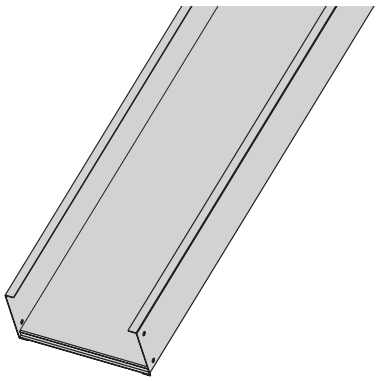
See page C-23 for explanation of lengths.



See page APP-1 for additional rung options.
*SB available for all widths.
**6" rung spacing is equivalent to vented bottom.

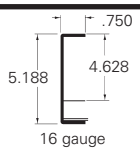


Ladder Type
(Specify Rung Spacing)



Non-Ventilated

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. The published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

B-Line Series Slde Rail Dimensions		NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
166		NEMA: 12B, 8C	6	308*	0.0004	Area = 0.770 in²	1.8	458*	0.007	Area = 4.970 cm²
		CSA: C1-3m	8	173	0.0013	Sx = 0.930 in³	2.4	258	0.023	Sx = 15.240 cm³
		UL Cross-Sectional	10	111	0.0032	Ix = 2.400 in⁴	3.0	165	0.055	Ix = 99.900 cm⁴
		Area: 0.70 in²	12	77	0.0067		3.7	115	0.114	

*When using 12" rung spacing, the load capacity is limited to 234 lbs/ft (348.192 kg/m) for 30" tray width and 195 lbs/ft (290.16 kg/m) for 36" tray width. When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.
Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

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

All dimensions in parentheses are millimeters unless otherwise specified.

6" NEMA VE 1 Loading Depth

Actual Loading Depth = 5.628"

Straight Section Part Numbering

Prefix

Example: **176 P 09 - 24 - 144**

Series
176

Material
- **P** = Pre-Galvanized Steel
- **G** = Hot Dip Galvanized After Fabrication Steel

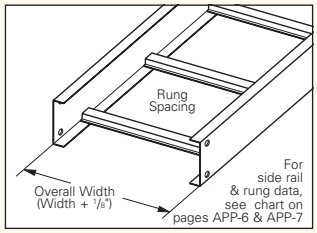
Type
- **SB** = Solid Bottom*
- **06** = 6" rung spacing**
- **09** = 9" rung spacing
- **12** = 12" rung spacing

Width
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

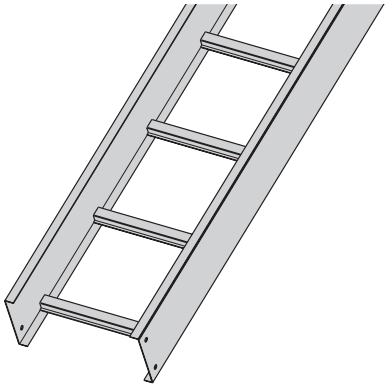
Length
- ① **144** = 12 ft.
- ② 120 = 10 ft.

① Primary Length.
② Secondary Length.

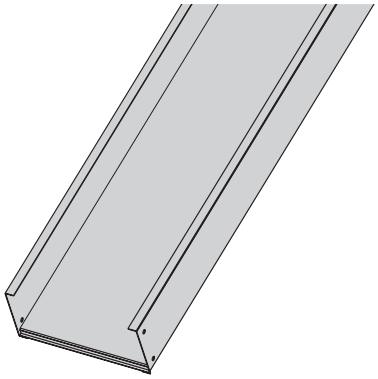
See page C-23 for explanation of lengths.



See page APP-1 for additional rung options.
*SB available for all widths.
**6" rung spacing is equivalent to vented bottom.



Ladder Type
(Specify Rung Spacing)



Non-Ventilated

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. The 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 tray being installed.

B-Line Series Side Rail Dimensions		NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
176	.750 / 6.188 / 5.628 / 16 gauge	NEMA: 12B, 8C	8	194	0.0008	Area = 0.890 in²	2.4	458*	0.014	Area = 5.740 cm²
		CSA: 137 kg/m 3.7m	10	124	0.0020	Sx = 1.230 in³	3.0	258	0.035	Sx = 20.160 cm³
		UL Cross-Sectional	12	86	0.0042	Ix = 3.800 in⁴	3.7	165	0.072	Ix = 158.200 cm⁴
		Area: 0.70 in²								

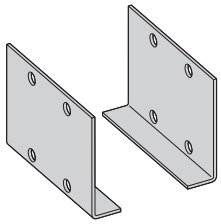
When cable trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.
Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

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

All dimensions in parentheses are millimeters unless otherwise specified.

Standard (L-Shaped) Splice Plates

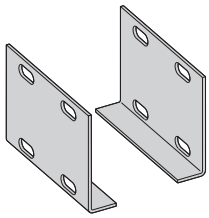
- One pair including hardware provided with each section. (Expansion splice quantity subtracted)
- Furnished in pairs with hardware.
- Prepackaged in pairs in a plastic bag, with hardware.
- 4-hole pattern L-shaped splice plates.
- L-shaped lay-in design.
- (*) Insert ZN or G



Tray Series	Catalog No.
148	9(*)-4004
156	9(*)-4005
166	9(*)-4006
176	9(*)-4007

Expansion (L-Shaped) Splice Plates

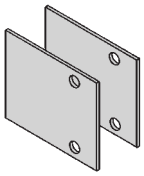
- Expansion plates allow for one inch expansion or contraction of the cable tray, or where expansion joints occur in the supporting structure.
- Bonding Jumpers are required on each side rail. Order Separately.
- L-shaped lay-in design.
- Furnished in pairs with hardware.
- (*) Insert ZN or G



Tray Series	Catalog No.
148	9(*)-4014
156	9(*)-4015
166	9(*)-4016
176	9(*)-4017

Universal Splice Plates

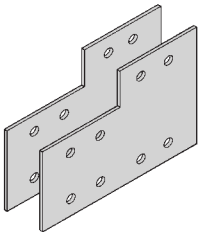
- Used to splice to existing cable tray systems.
- Furnished in pairs with hardware.
- (*) Insert P or G



Tray Series	Catalog No.
148	9(*)-2004-1/2
156	9(*)-2005-1/2
166	9(*)-2006-1/2
176	9(*)-2007-1/2

Step Down Splice Plates

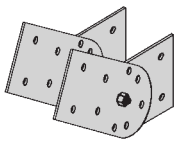
- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.
- (*) Insert ZN or G



Tray Series	Catalog No.
156 to148	9(*)-8044
166 to 156 or 148	9(*)-8045
176 to 156 or 148	9(*)-8046
176 to 166	9(*)-8060

Vertical Adjustable Splice Plates

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Bonding jumpers not required.
- Furnished in pairs with hardware.
- (*) Insert ZN or G
- (**) Insert P or G



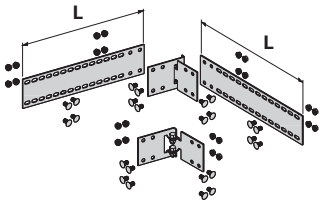
Requires supports within 24" on both sides, per NEMA VE 2.

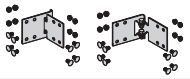
Tray Series	Catalog No.
148	9(**)-7024
156	9(*)-8024
166	9(*)-8025
176	9(*)-8026

Horizontal Adjustable Splice Plates

- Offered to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers not required.
- (*) Insert ZN or G
- (X) Insert 4 for series 148 or 156, 5 for series 166, or 6 for series 176

9(*)-803(X)-12 or 9(*)-803(X)-36
One pair splice plates with extensions.





9(*)-803(X) Splices only

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

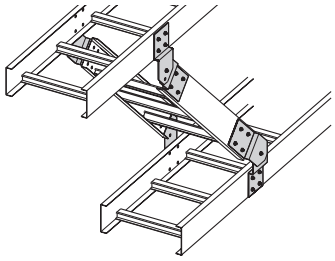
Catalog No.	Cable Tray End Cut	Tray Width	'L'
9(*)-803(X)	Mitered	Thru 36"	N/A
9(*)-803(X)-12	Not mitered	Thru 12"	16"
9(*)-803(X)-36	Not mitered	Thru 36"	41"

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

All dimensions in parentheses are millimeters unless otherwise specified.

Branch Pivot Connectors

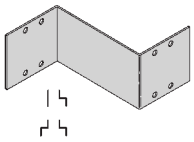
- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers are not required).
- Furnished in pairs with hardware.
- (*) Insert ZN or G



Tray Series	Catalog No.
156 to 148	9(*)-8244
166	9(*)-8245
176	9(*)-8246

Offset Reducing Splice Plate

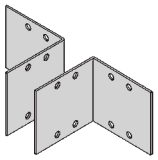
- This plate is used for joining cable trays having different widths. When used in pairs they form a straight reduction; when used singly with a standard splice plate they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction
- (*) Insert P or G



Tray Series	Catalog No.
148	9(*)-8064-(‡)
156	9(*)-8064-(‡)
166	9(*)-8065-(‡)
176	9(*)-8066-(‡)

Tray to Box Splice Plates

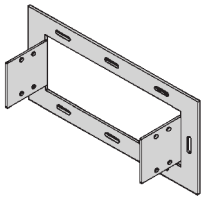
- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware.
- (*) Insert P or G



Tray Series	Catalog No.
148	9(*)-8054
156	9(*)-8054
166	9(*)-8055
176	9(*)-8056

Frame Type Box Connector

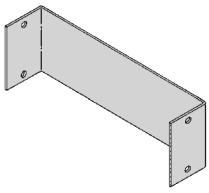
- Designed to attach the end of a cable tray run to a distribution cabinet or control center to help reinforce the box at the point of entry.
- Furnished with tray connection hardware.
- (‡) Insert tray width
- (*) Insert ZN or G



Tray Series	Catalog No.
148	9(*)-8074-(‡)
156	9(*)-8074-(‡)
166	9(*)-8075-(‡)
176	9(*)-8076-(‡)

Blind End

- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (‡) Insert tray width
- (*) Insert P or G



Tray Series	Catalog No.
148	9(*)-8084-(‡)
156	9(*)-8084-(‡)
166	9(*)-8085-(‡)
176	9(*)-8086-(‡)

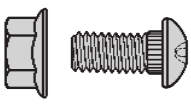
Tray Hardware

Pre-Galvanized Tray Hardware

Catalog No. ● **RNCB ³/₈"-16 x ³/₄" Znplt**
Ribbed Neck Carriage Bolt ASTM A307 Grade A

Catalog No. ● **SFHN ³/₈"-16 Znplt**
Serrated Flange Hex Nut ASTM A563 Grade A

Finish: Zinc Plated ASTM B633, SC1



Hot Dip Galvanized Tray Hardware

Catalog No. ● **RNCB ³/₈"-16 x ³/₄" CZ** Ribbed Neck Carriage Bolt Chromium Zinc ASTM F-1136-88

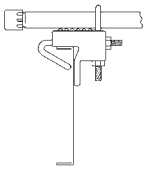
Catalog No. ● **SFHN ³/₈"-16 CZ** Serrated Flange Hex Nut Chromium Zinc ASTM F-1136-88

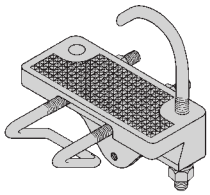
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Conduit to Tray Adaptor

- For easy attachment of conduit terminating at a cable tray.
- Use on aluminum or steel cable trays.

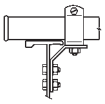




Conduit Size in.	(mm)	Catalog No.
1/2, 3/4	(15, 20)	9G-1159-1/2, 3/4
1, 1 1/4	(25, 32)	9G-1159-1, 1 1/4
1 1/2, 2	(40, 50)	9G-1159-1 1/2, 2
2 1/2, 3	(65, 80)	9G-1159-2 1/2, 3
3 1/2, 4	(90, 100)	9G-1159-3 1/2, 4

Conduit to Tray Adaptor

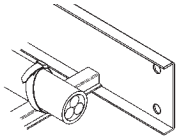
- Assembly required.
- Mounting hardware included.
- Conduit clamp included
- (‡) = Conduit size (1/2" thru 4").



Catalog No.
9ZN-1150-(‡)

Cable Tie (Ladder Tray)

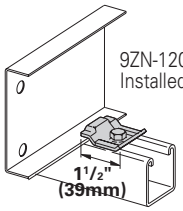
- Nylon ties provide easy attachment of cable to ladder rungs; maximum cable O.D. of 3" (76 mm).

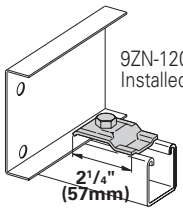


Catalog No.
99-2125-15

Cable Tie Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs, with or without hardware.





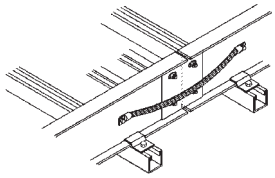
Catalog No. Without Hardware	Catalog No. With Hardware	Overall Length in.	Overall Length (mm)	Hardware Size	Finish
9ZN-1204	9ZN-1204NB	1 1/2	38	1/4"	G90
9ZN-1208	9ZN-1208NB	2 1/4	57	3/8"	G90

Patent # RE35479

Bonding Jumper

Use at each expansion splice and where the cable tray is not mechanically/electrically continuous to ground. Sold individually.

- Hardware included.
- See table 392.7(B)(2) on page C-9 for amperage ratings required to match the UL cross-sectional area of the tray.
- 600 amp rating.
- Bonding jumper is 14 1/2" (368mm) long.

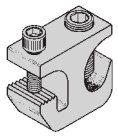


Catalog No.	Copper Wire Size
99-N1	#1

Grounding Clamp

Eaton's B-Line series cable tray is UL® classified as to its suitability as an equipment grounding conductor. If a separate conductor for additional grounding capability is desired, we offer this clamp for bolting the conductor at least once to each tray section.

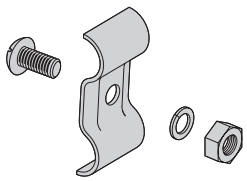
- Tin plated Aluminum clamp accepts #6 AWG to 250 MCM.



Catalog No.
9A-2130

Ground Wire Clamp

- Mechanically attaches grounding cables to cable tray.
- Hardware included.
- (*) Insert ZN or SS4



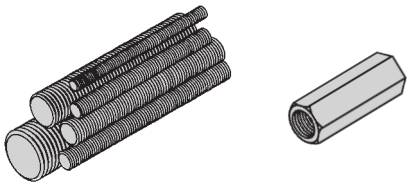
Catalog No.	Cable Size
9(*)-2351	#1 thru 2/0
9(*)-2352	3/0 thru 250 MCM

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

All dimensions in parentheses are millimeters unless otherwise specified.

Threaded Rod (ATR) & Rod Coupling

- Loading based on safety factor 5.
- Standard Finish: Zinc plated

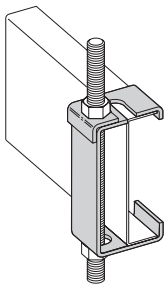


Size	Loading lbs. (kN)	Threaded Rod Catalog No.	Available Lengths in. (mm)	Coupling Cat. No.
3/8-16	730 (3.25)	● ATR 3/8 x Length	36, 72, 120, 144 (914, 1829, 3048, 3657)	● B655-3/8
1/2-13	1350 (6.00)	● ATR 3/8 x Length	36, 72, 120, 144 (914, 1829, 3048, 3657)	● B655-1/2

See B-Line series Strut Systems Catalog for other sizes and finishes.

Hanger Rod Clamp

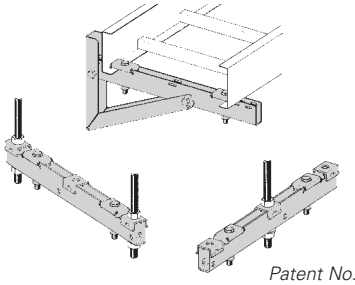
- For 1/2" ATR.
- Furnished in pairs.
- Order ATR and hex nuts separately.
- Two piece "J"-hanger design.
- 9ZN-1113 has 275 lbs./pair safety factor 3.
- 9ZN-532(X) has 1500 lbs./pair safety factor 3.



Tray Series	Catalog No.
148	● 9ZN-1113
156	● 9ZN-5324
166	● 9ZN-5325
176	● 9ZN-5326

Support Bracket

- Designed for center hung or trapeze supports.
- Used with ladder or vented bottom tray only.
- Can be purchased as a wall mounted bracket.
- Load capacity is 600 lbs. (272.1 kg), safety factor 3.
- All components are zinc plated.
- 1/2" threaded rod and 1/2" hex nuts not included.

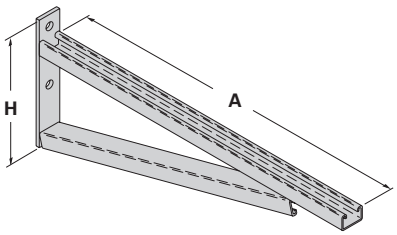


Patent No. 5,100,086

Catalog No.		For Cable Tray Width in. (mm)
Center Hung or Trapeze	Wall Mount	
● 9ZN-5106	● 9ZN-5106-WB	6 (152)
● 9ZN-5109	● 9ZN-5109-WB	9 (226)
● 9ZN-5112	● 9ZN-5112-WB	12 (305)
● 9ZN-5118	● 9ZN-5118-WB	18 (452)
● 9ZN-5124	● 9ZN-5124-WB	24 (609)

Cantilever Bracket (12" - 42")

- Finishes available: ZN GRN or HDG
- Safety Load Factor 2.5



Bottom brace is B42 channel on B494-24 and smaller and B22 channel on B494-30 and larger

Catalog No.	Uniform Load lbs (kN)	Tray Width in. (mm)	'A' in. (mm)	'H' in. (mm)
● B494-12	2500 (11.12)	6 & 9 (152 & 229)	12 (305)	8 3/4 (222)
● B494-18	1700 (7.56)	12 (305)	18 (457)	8 3/4 (222)
● B494-24	1300 (5.78)	18 (457)	24 (610)	8 3/4 (222)
B494-30	1600 (7.11)	24 (610)	30 (762)	11 1/4 (286)
B494-36	1100 (4.89)	30 (762)	36 (914)	11 1/4 (286)
B494-42	980 (4.36)	36 (914)	42 (1067)	16 (406)

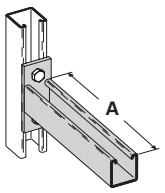
For more dimensional data see Strut Systems catalog

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cantilever Bracket

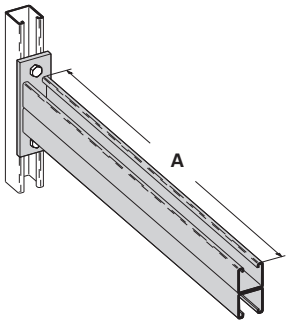
- Finishes available: ZN GRN HDG SS4 or SS6
- Safety Load Factor 2.5



Catalog No.	Uniform Load lbs	(kN)	Tray Width in.	(mm)	'A' in.	(mm)
B409-12	960	(4.27)	6 & 9	(152 & 229)	12	(304.8)
B409-18	640	(2.84)	12	(305)	18	(457.2)
B409-24	480	(2.13)	18	(457)	24	(609.6)

Cantilever Bracket

- Finishes available: ZN GRN HDG or SS4
- Safety Load Factor 2.5

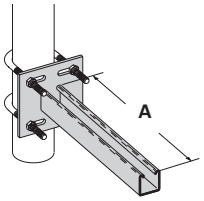


Catalog No.	Uniform Load lbs	(kN)	Tray Width in.	(mm)	'A' in.	(mm)
B297-30	665	(2.95)	24	(609.6)	30	(762.0)
B297-36	550	(2.44)	30	(762.0)	36	(914.4)
B297-42	465	(2.06)	36	(914.4)	42	(1066.8)

Underfloor Support (U-Bolts not included)

- Finishes available: ZN
- Safety Load Factor 2.5
- Order properly sized U-Bolts separately.

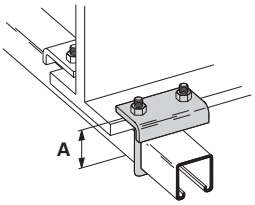
U-Bolt Size	Fits Pipe O.D.
B501-3/4	.841 - 1.050
B501-1	1.051 - 1.315
B501-1 1/4	1.316 - 1.660
B501-1 1/2	1.661 - 1.900
B501-2	1.901 - 2.375
B501-2 1/2	2.376 - 2.875



Catalog No.	Uniform Load lbs	(kN)	Tray Width in.	(mm)	'A' in.	(mm)
B409UF-12	800	(3.55)	6 & 9	(152 & 229)	12	(304.8)
B409UF-21	450	(2.00)	12 & 18	(305 & 457)	21	(533.4)

Beam Clamp

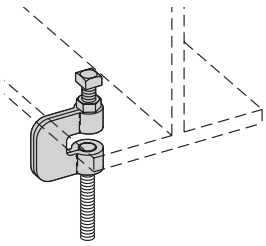
- Finishes available: ZN or HDG
- Sold in pieces with hardware.
- Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	Design Load* lbs	(kN)	'A' in.	(mm)
B441-22	1200	(5.34)	3 3/8	(86)
B441-22A	1200	(5.34)	5	(127)

Steel C-Clamp With Locknut

- Finishes available:
  ZN for 3/8 & 1/2
  ZN for 5/8 & 3/4
  SS4 all sizes
- Safety Load Factor 5.0



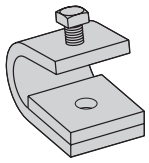
Catalog Number	Rod Size	Design Load lbs	(kN)
B351L-3/8	3/8"-16	300	(0.89)
B351L-1/2	1/2"-13	380	(1.69)
B351L-5/8	5/8"-11	550	(2.44)
B351L-3/4	3/4"-10	630	(2.80)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Beam Clamp

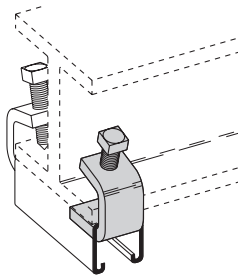
- Finishes available: ZN GRN or HDG
- Setscrew included.
- Sold in pieces.
- Design load when used in pairs. Safety Load Factor 5.0



Cat. No.	B210	B210A
Design Load	800 lbs. (3.56kN)	300 lbs. (1.33kN)
Tap Size	1/2"-13	3/8"-16
Mat'l. Thickness	3/8" (9.5mm)	1/4" (6.4mm)

Beam Clamp

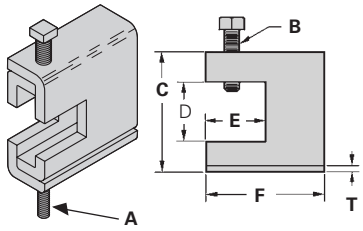
- Finishes available: ZN GRN or HDG
- Setscrew included.
- Sold in pieces.
- Design load when used in pairs. Safety Load Factor 5.0



Cat. No.	B212-1/4	B212-3/8
Design Load	800 lbs. (3.56kN)	1000 lbs. (4.45kN)
Max. Flange Thick.	3/4" (19.0mm)	1 1/8" (28.6mm
Mat'l. Thickness	1/4" (6.4mm)	3/8" (9.5mm)

B305 Thru B308 & B321 Series Beam Clamps

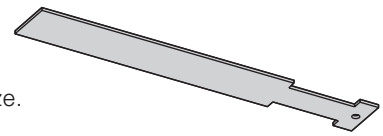
- Finishes available: ZN or HDG
- Setscrew included.
- Safety Load Factor 5.0



Cat. No.	A	B	C in.	C (mm)	D in.	D (mm)	E in.	E (mm)	F in.	F (mm)	T in.	T (mm)	Design Load lbs	Design Load (kN)
B305	3/8"-16	3/8"-16	2 5/16	(58.7)	7/8	(22.2)	1 1/8	(28.6)	2 1/2	(63.5)	11 Ga.	(3.0)	600	(2.67)
B306	3/8"-16	1/2"-13	2 7/16	(61.9)	7/8	(22.2)	1 1/8	(28.6)	2 1/2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B307	1/2"-13	1/2"-13	2 7/16	(61.9)	7/8	(22.2)	1 1/8	(28.6)	2 1/2	(63.5)	7 Ga.	(4.5)	1100	(4.90)
B308	1/2"-13	1/2"-13	2 9/16	(65.1)	7/8	(22.2)	1 1/8	(28.6)	2 1/2	(63.5)	1/4	(6.3)	1500	(6.68)
B321-1	3/8"-16	1/2"-13	3 9/16	(90.5)	1 11/16	(42.8)	1 5/8	(41.3)	3 1/4	(82.5)	1/4	(6.3)	1300	(5.79)
B321-2	1/2"-13	1/2"-13	3 9/16	(90.5)	1 11/16	(42.8)	1 5/8	(41.3)	3 1/4	(82.5)	1/4	(6.3)	1400	(6.23)

B312 Anchor Strap

- Finishes available: ZN or HDG
- For a maximum beam thickness of 3/4".
- For thicker beams, step up one flange width size.

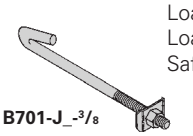


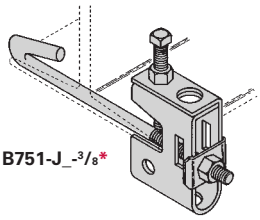
Cat. No.	Flange Width in.	Flange Width (mm)
B312-6	Up to 6	(up to 152.4)
B312-9	6 - 9	(152.4 to 228.6)
B312-12	9 - 12	(228.6 to 304.8)

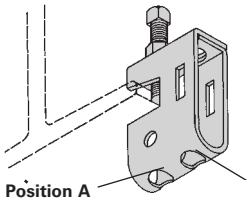
B751 Bottom Beam Clamp and Accessories

- Setscrew included.
- Finish available: ZN

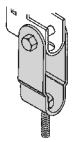
Loading position A - 500 lbs.
Loading position B - 300 lbs.
Safety Load Factor 5.0







Provides a full 15° swivel in any direction. (State the desired rod size.)



Assembly No.	B751	B701J_	B752	B753
Fits Flange Sizes in. (mm)	Clamp,Setscrew & J-Hook	J-Hook,Clip & Square Nut	Swivel & Bolt Only	Swivel Nut Only
4 - 5 7/8 (101 - 149)	● B751-J4-3/8*	● B701-J4-3/8	● B752	● B753-**
6 - 8 7/8 (152 - 225)	● B751-J6-3/8*	● B701-J6-3/8	● B752	● B753-**
9 - 11 7/8 (228 - 301)	● B751-J9-3/8*	● B701-J9-3/8	● B752	● B753-**

* Clamp Assembly complete with J-Hook Assembly. Setscrew included. ** Insert 1/4, 3/8 or 1/2 for the desired rod size.

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

All dimensions in parentheses are millimeters unless otherwise specified.

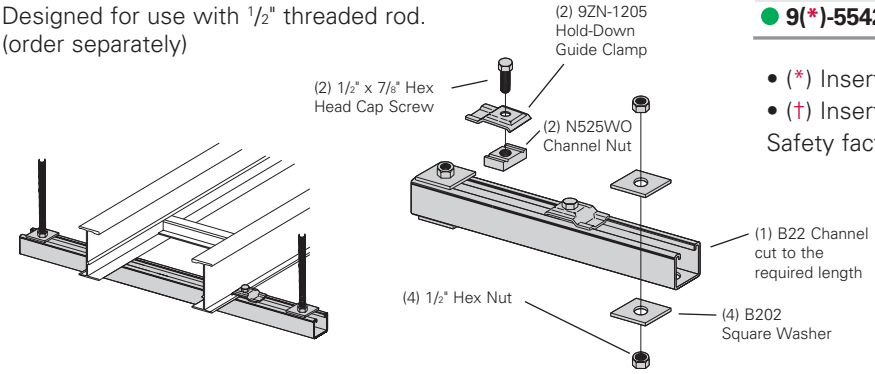
Trapeze Support Kit

Trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware or hot dip galvanized steel with 316 stainless steel hardware.

The SH channel provides the convenience of pre-punched slots, which eliminate the need for field drilling.

The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.

Designed for use with 1/2" threaded rod. (order separately)



Catalog No.	Tray Width in. (mm)	Channel Length in. (mm)	Uniform Load lbs (kN)
● 9(*)-5506-22SH(†)	6 (152)	16 (406)	1600 (7.11)
● 9(*)-5509-22SH(†)	9 (229)	18 (457)	1250 (5.56)
● 9(*)-5512-22SH(†)	12 (305)	22 (559)	1125 (5.00)
● 9(*)-5518-22SH(†)	18 (457)	28 (711)	865 (3.85)
● 9(*)-5524-22SH(†)	24 (610)	34 (864)	700 (3.11)
● 9(*)-5530-22SH(†)	30 (762)	40 (1016)	590 (2.62)
● 9(*)-5536-22SH(†)	36 (914)	46 (1168)	510 (2.27)
● 9(*)-5542-22SH(†)	42 (1067)	52 (1321)	450 (2.00)

- (*) Insert P or G
- (†) Insert 3/8 for 3/8" threaded rod hardware.

Safety factor of 3.0 on all loads.

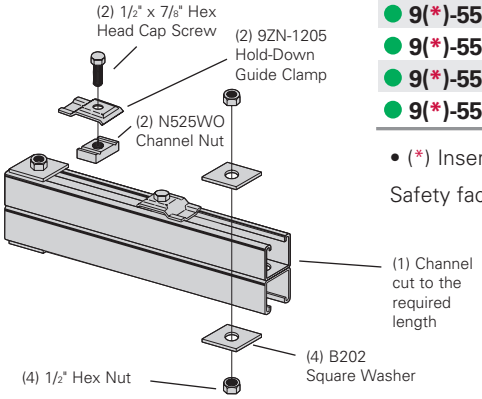
Heavy Duty Trapeze Support Kit

Trapeze kits provide the components required for a single trapeze support in one package. These kits are available in Dura Green™ epoxy coated steel with zinc-plated hardware or hot dip galvanized steel with 316 stainless steel hardware.

The SH channel provides the convenience of pre-punched slots, which eliminates the need for field drilling.

The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.

Designed for use with 1/2" threaded rod. (order rod separately)



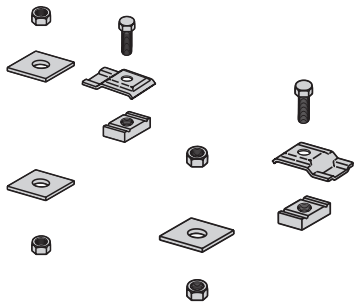
Catalog No.	Tray Width in. (mm)	Channel Length in. (mm)	Uniform Load lbs (kN)
● 9(*)-5506-22SHA	6 (152)	16 (406)	1350 (6.01)
● 9(*)-5509-22SHA	9 (229)	18 (457)	1350 (6.01)
● 9(*)-5512-22SHA	12 (305)	22 (559)	1350 (6.01)
● 9(*)-5518-22SHA	18 (457)	28 (711)	1350 (6.01)
● 9(*)-5524-22SHA	24 (610)	34 (864)	1350 (6.01)
● 9(*)-5530-22SHA	30 (762)	40 (1016)	1350 (6.01)
● 9(*)-5536-22SHA	36 (914)	46 (1168)	1350 (6.01)
● 9(*)-5542-22SHA	42 (1067)	52 (1321)	1350 (6.01)

- (*) Insert G or GRN

Safety factor of 3.0 on all loads.

Trapeze Hardware Kit

- Kit sold in plastic bag.



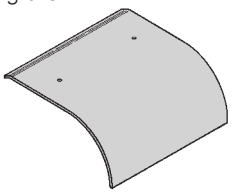
Catalog No.	
● 9ZN-5500-1/2	● 9G-5500-1/2
(1) pr. 9ZN-1205	(1) pr. 9G-1205
(2) HHC Screw 1/2" x 7/8" ZN	(2) HHC Screw 1/2" x 7/8" SS6
(2) N525 WO ZN	(2) N525 WO SS6
(4) B202 ZN 1/2" sq washer	(4) B202 HDG 1/2" sq washer
(4) HN 1/2" ZN	(4) HN 1/2" SS6

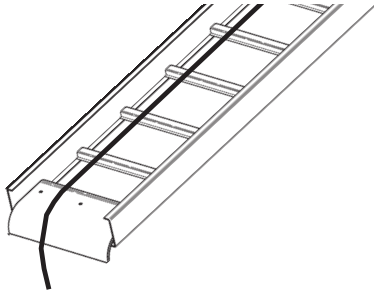
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Ladder Drop-Out

- This special designed, easy to install drop-out provides a 4" (101.6 mm) radius to protect cables exiting the cable tray from damage.
- Attaches to a ladder rung.
- Hardware included.
- (*) Insert P or G
- (‡) Insert tray width

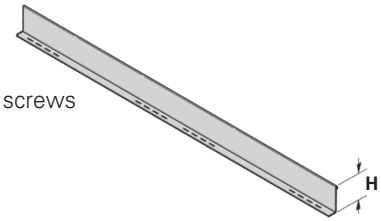




Catalog No.
9(*)-1104T-(‡)

Straight Section

- Standard length: 120" (3 m) 144" (12 ft.).
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 splice.
- (*) Insert P or G

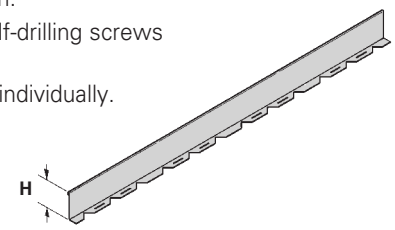


Length =
144 for 12' or 120 for 10'

Tray Series	Catalog No.	H in.	H (mm)
148	72(*)-Length	2.8	(58)
156	737(*)-Length	3.4	(70)
166	747(*)-Length	4.4	(91)
176	757(*)-Length	5.4	(112)

Horizontal Bend

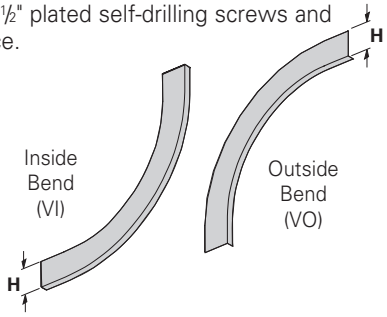
- Horizontal Bend Barriers are flexible in order to conform to any horizontal fitting radius. Cut to length.
- Order catalog number based on loading depth.
- Furnished with three #10 x ½" zinc plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- Standard length is 72" [6 ft.] (1829mm), sold individually.
- (*) Insert P or G



Tray Series	Catalog No.	H in.	H (mm)
148	72(*)-90HBFL	2.8	(58)
156	737(*)-90HBFL	3.4	(70)
166	747(*)-90HBFL	4.4	(91)
176	757(*)-90HBFL	5.4	(112)

Vertical Bend Barriers

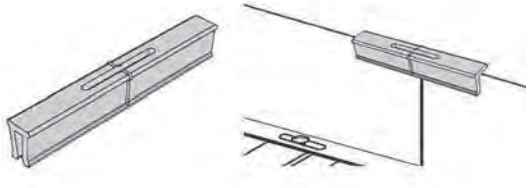
- Vertical Bend Barriers are preformed to conform to a specific vertical fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert P or G
- (**) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, or 36 for radius



Tray Series	Catalog No. Inside Bend	Catalog No. Outside Bend	H in.	H (mm)
148	72(*)-(**)VI(†)	72(*)-(**)VO(†)	2.8	(58)
156	737(*)-(**)VI(†)	737(*)-(**)VO(†)	3.4	(70)
166	747(*)-(**)VI(†)	747(*)-(**)VO(†)	4.4	(91)
176	757(*)-(**)VI(†)	757(*)-(**)VO(†)	5.4	(112)

Barrier Strip Splice

- 2.85" (72.4mm) long
- Ribbed edge for increased rigidity and grip
- Comfort edge for ease of installation
- Slotted top window with center mark for accurate placement and inspection capability
- Patent pending



Catalog No.
99-9982

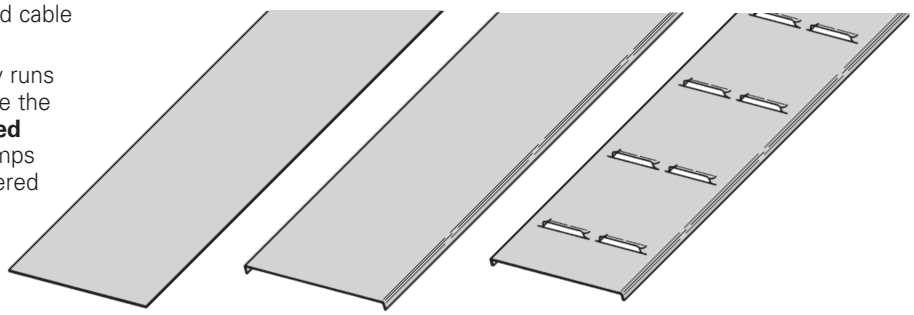
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Covers

Solid covers should be used when maximum enclosure of the cables is desired and no accumulation of heat is expected. **Ventilated covers** provide an overhead cable shield yet allow heat to escape.

We recommend that covers on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a .30 in. (7.6 mm) flange. Cover clamps are not included with the cover and must be ordered separately.



Solid Non-Flanged | Solid Flanged | Ventilated Flanged

Covers Part Numbering

Prefix

Example: **80 1 P - 24 - 144**

Cover Type
- 80 = Solid
- 81 = Ventilated

Detail
- 1 = Flanged
- 9 = Non-Flanged

Material
- P = Pre-Galvanized
- G = HDGAF

Tray Width
- 06 = 6"
- 09 = 9"
- 12 = 12"
- 18 = 18"
- 24 = 24"
- 30 = 30"
- 36 = 36"

Item Description
For Straight Section Cover:

Pre-Galvanized Only:
- 144 = 12 ft. (3.66 m)
- 120 = 10 ft. (3.05 m)

Pre-Galvanized & HDGAF
- 72 = 6 ft. (1.83 m)
- 60 = 5 ft. (1.52 m)

For fitting covers: Insert suffix of fitting to be covered. See example below.

Example of Catalog Number for Fitting Cover:

Vertical Bend Cover

Prefix: 80 1 P - 24 - 90

Suffix: VO 24 - 4*

* Required for VO fittings only.

- 4* = Side Rail* Height
- 24 = Radius
- VO = Fitting
- 90 = Angle
- 24 = Width
- P = Material
- 1 = Detail
- 80 = Cover Type

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.

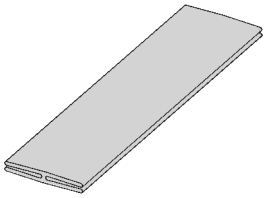
Note: When using the Heavy Duty Cover Clamp, only one-half the number of clamps stated above is required.

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cover Joint Strip

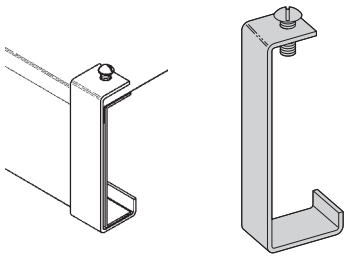
- Used to join covers
- Plastic
- (‡) Insert tray width



Catalog No.
99-9980-(‡)

Standard Cover Clamp

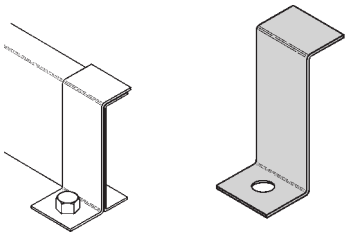
- Sold per piece
- For indoor service only



Tray Series	Catalog No.	
	Znplt	HDGAF
148	9ZN-9019	9G-9019
156	9ZN-9014	9G-9014
166	9ZN-9015	9G-9015
176	9ZN-9016	9G-9016

Combination Hold Down & Cover Clamp

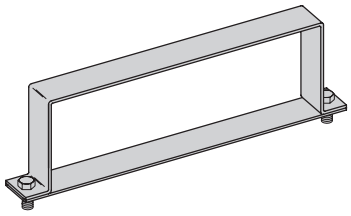
- Sold per piece
- For indoor service only



Tray Series	Catalog No.	
	Znplt/Pre-Galv	HDGAF
148	9ZN-9243	9G-9243
156	9P-9043	9G-9043
166	9P-9053	9G-9053
176	9P-9063	9G-9063

Heavy Duty Cover Clamp

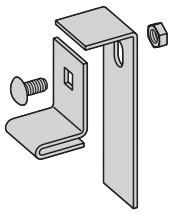
- (‡) Insert tray width



Tray Series	Catalog No.	
	Pre-Galv	HDGAF
148	9P-(‡)-9040	9G-(‡)-9040
156	9P-(‡)-9044	9G-(‡)-9044
166	9P-(‡)-9054	9G-(‡)-9054
176	9P-(‡)-9064	9G-(‡)-9064

Raised Cover Clamp

- For indoor service only.
- Sold per piece
- For use with flanged covers only.



Tray Series	Catalog No.	Gap in.	Gap (mm)
Series 1	9ZN-9101	1	(25.4)
	9ZN-9102	2	(50.8)
	9ZN-9103	3	(76.2)
	9ZN-9104	4	(101.6)

† Specify gap of 1", 2", 3" or 4".

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

All dimensions in parentheses are millimeters unless otherwise specified.

Section 1- Acceptable Manufacturers

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

Section 2- Cable Tray Sections and Components

2.01 General: Except as otherwise indicated, provide metal 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.

2.02 Pre-Galvanized Steel: Straight sections, fitting side rails, rungs, and covers shall be made from structural quality steel meeting the minimum mechanical properties and mill galvanized in accordance with ASTM A653 SS, Grade 33, coating designation G90. Hardware finish shall be electro-galvanized zinc per ASTM B633.

2.03 Hot dip Galvanized Steel: All side rails, covers, splice plates, and rungs shall be made from structural quality steel meeting the minimum mechanical properties of ASTM A1011 SS, Grade 33 for 14 gauge and heavier, ASTM A1008, Grade 33 Type 2 for 16 gauge and lighter, and shall be hot dip galvanized after fabrication in accordance with ASTM A123. Mill galvanized covers are not acceptable for hot dipped galvanized cable tray. Hardware finish shall be chromium zinc per ASTM F-1136-88.

2.04 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded 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. No portion of the rungs shall protrude below the bottom plane of the side rails.

2.06 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.

2.06 Straight sections shall be supplied in standard [12 foot] [10 foot (3 m)] lengths.

2.07 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.

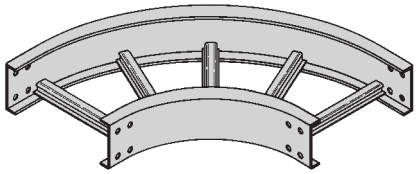
2.08 Splice plates shall be L-shaped with 4 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.

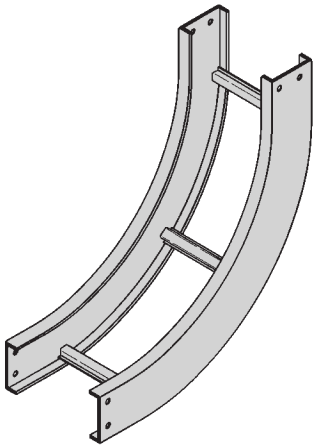
2.09 All fittings must have a minimum radius of [12] [24] inches.

Section 3- Loading Capacities and Testing

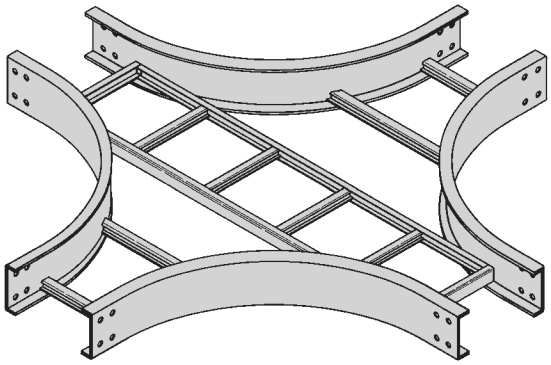
3.01 Cable tray shall be capable of carrying a uniformly distributed load of _____ lbs./ft. on a _____ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. Cable tray shall be made to manufacturing tolerances as specified by NEMA.

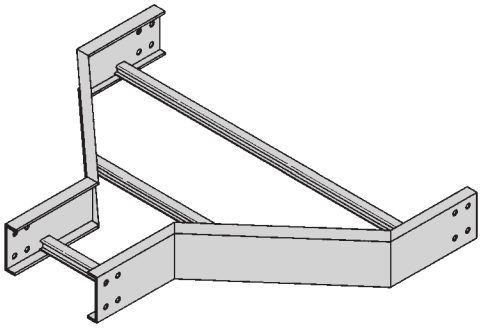
3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.





Fittings engineered with 3" tangents for splicing integrity.





Fittings Part Numbering

Example: **1 4 P - 24 - 90 HB 24** (9" rung spacing is standard)

Prefix

Series	Height	Material	Width	Angle	Type	Radius
1	● 4 = 148 ● 5 = 156 ● 6 = 166 ● 7 = 176	● P = Pre-Galvanized ● G = HDGAF	● 06 = 6" (152) ● 09 = 9" (228) ● 12 = 12" (305) ● 18 = 18" (457) ● 24 = 24" (609) ● 30 = 30" (762) ● 36 = 36" (914)	● 30 = 30° ● 45 = 45° ● 60 = 60° ● 90 = 90°	● 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	● 12 = 12" (305) ● 24 = 24" (609) ● 36 = 36" (914)

For steel 4", 5", 6", 7" vented or non-ventilated add 04 or SB as shown below.

Prefix

15P04 - 24 - 90HB24

Vented Bottom

Prefix

15PSB - 24 - 90HB24

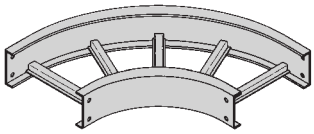
Non-Ventilated

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

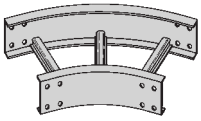
All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Bends 90° 60° 45° 30° (HB)

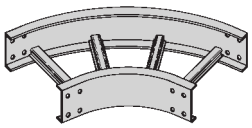
1 pair splice plates with hardware included.



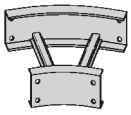
90˚ Horizontal Bend



45˚ Horizontal Bend

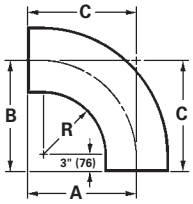


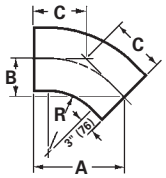
60˚ Horizontal Bend

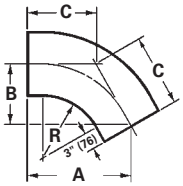


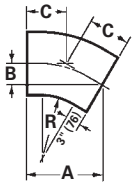
30˚ Horizontal Bend

Bottoms manufactured:
Ladder = 9" Rung Spacing
04 = 4" Rung Spacing
SB = Flat sheet over 12" Rung Spacing









Bend Radius R		Tray Width		90˚ Horizontal Bend Dimensions							60˚ Horizontal Bend Dimensions						
				Catalog No.	A		B		C		Catalog No.	A		B		C	
in.	(mm)	in.	(mm)		in.	(mm)	in.	(mm)	in.	(mm)		in.	(mm)	in.	(mm)	in.	(mm)
		6	(152)	**(Pre)-06-90HB12**	18	(457)	18	(457)	18	(457)	**(Pre)-06-60HB12**	17 1/2	(445)	10 1/8	(257)	11 11/16	(297)
		9	(228)	**(Pre)-09-90HB12**	19 1/2	(495)	19 1/2	(495)	19 1/2	(495)	**(Pre)-09-60HB12**	18 13/16	(478)	10 7/8	(276)	12 1/2	(318)
		12	(305)	**(Pre)-12-90HB12**	21	(533)	21	(533)	21	(533)	**(Pre)-12-60HB12**	20 1/16	(510)	11 5/8	(295)	13 3/8	(340)
12	(305)	18	(457)	**(Pre)-18-90HB12**	24	(610)	24	(610)	24	(610)	**(Pre)-18-60HB12**	22 11/16	(576)	13 1/8	(333)	15 1/8	(384)
		24	(609)	**(Pre)-24-90HB12**	27	(686)	27	(686)	27	(686)	**(Pre)-24-60HB12**	25 5/16	(643)	14 5/8	(372)	16 7/8	(429)
		30	(762)	**(Pre)-30-90HB12**	30	(762)	30	(762)	30	(762)	**(Pre)-30-60HB12**	27 7/8	(708)	16 1/8	(410)	18 9/16	(472)
		36	(914)	**(Pre)-36-90HB12**	33	(838)	33	(838)	33	(838)	**(Pre)-36-60HB12**	30 1/2	(775)	17 5/8	(448)	20 5/16	(516)
		6	(152)	**(Pre)-06-90HB24**	30	(762)	30	(762)	30	(762)	**(Pre)-06-60HB24**	27 7/8	(708)	16 1/8	(410)	18 9/16	(472)
		9	(228)	**(Pre)-09-90HB24**	31 1/2	(800)	31 1/2	(800)	31 1/2	(800)	**(Pre)-09-60HB24**	29 3/16	(741)	16 7/8	(429)	19 7/16	(494)
		12	(305)	**(Pre)-12-90HB24**	33	(838)	33	(838)	33	(838)	**(Pre)-12-60HB24**	30 1/2	(775)	17 5/8	(448)	20 5/16	(516)
24	(609)	18	(457)	**(Pre)-18-90HB24**	36	(914)	36	(914)	36	(914)	**(Pre)-18-60HB24**	33 1/16	(840)	19 1/8	(486)	22 1/16	(560)
		24	(609)	**(Pre)-24-90HB24**	39	(991)	39	(991)	39	(991)	**(Pre)-24-60HB24**	35 11/16	(907)	20 5/8	(524)	23 13/16	(605)
		30	(762)	**(Pre)-30-90HB24**	42	(1067)	42	(1067)	42	(1067)	**(Pre)-30-60HB24**	38 1/4	(972)	22 1/8	(562)	25 1/2	(648)
		36	(914)	**(Pre)-36-90HB24**	45	(1143)	45	(1143)	45	(1143)	**(Pre)-36-60HB24**	40 7/8	(1038)	23 5/8	(600)	27 1/4	(692

				45˚ Horizontal Bend							30˚ Horizontal Bend						
		6	(152)	**(Pre)-06-45HB12**	15 3/4	(400)	6 1/2	(165)	9 3/16	(233)	**(Pre)-06-30HB12**	13 1/8	(333)	3 1/2	(89)	7	(175)
		9	(228)	**(Pre)-09-45HB12**	16 13/16	(427)	6 15/16	(176)	9 13/16	(249)	**(Pre)-09-30HB12**	13 7/8	(352)	3 11/16	(94)	7 7/16	(189)
		12	(305)	**(Pre)-12-45HB12**	17 7/8	(454)	7 3/8	(187)	10 7/16	(265)	**(Pre)-12-30HB12**	14 5/8	(372)	3 15/16	(100)	7 13/16	(198)
12	(305)	18	(457)	**(Pre)-18-45HB12**	20	(500)	8 1/4	(210)	11 11/16	(297)	**(Pre)-18-30HB12**	16 1/8	(410)	4 5/16	(135)	8 5/8	(219)
		24	(609)	**(Pre)-24-45HB12**	22 1/16	(560)	9 1/8	(232)	12 15/16	(329)	**(Pre)-24-30HB12**	17 5/8	(448)	4 11/16	(119)	9 7/16	(240)
		30	(762)	**(Pre)-30-45HB12**	24 3/16	(614)	10	(250)	14 3/16	(360)	**(Pre)-30-30HB12**	19 1/8	(486)	5 1/8	(130)	10 1/4	(260)
		36	(914)	**(Pre)-36-45HB12**	26 5/16	(668)	10 15/16	(278)	15 7/16	(392)	**(Pre)-36-30HB12**	20 5/8	(524)	5 1/2	(140)	11 1/16	(281)
		6	(152)	**(Pre)-06-45HB24**	24 3/16	(614)	10	(250)	14 3/16	(360)	**(Pre)-06-30HB24**	19 1/8	(486)	5 1/8	(130)	10 1/4	(260)
		9	(228)	**(Pre)-09-45HB24**	25 1/4	(641)	10 1/2	(267)	14 13/16	(376)	**(Pre)-09-30HB24**	19 7/8	(505)	5 5/16	(135)	10 5/8	(270)
		12	(305)	**(Pre)-12-45HB24**	26 5/16	(668)	10 15/16	(278)	15 7/16	(392)	**(Pre)-12-30HB24**	20 5/8	(524)	5 1/2	(140)	11 1/16	(281)
24	(609)	18	(457)	**(Pre)-18-45HB24**	28 7/16	(722)	11 13/16	(300)	16 11/16	(424)	**(Pre)-18-30HB24**	22 1/8	(562)	5 15/16	(151)	11 13/16	(300)
		24	(609)	**(Pre)-24-45HB24**	30 9/16	(776)	12 11/16	(322)	17 15/16	(456)	**(Pre)-24-30HB24**	23 5/8	(600)	6 5/16	(160)	12 5/8	(321)
		30	(762)	**(Pre)-30-45HB24**	32 11/16	(830)	13 9/16	(345)	19 1/8	(486)	**(Pre)-30-30HB24**	25 1/8	(638)	6 3/4	(172)	13 7/16	(341)
		36	(914)	**(Pre)-36-45HB24**	34 13/16	(884)	14 7/16	(367)	20 3/8	(518)	**(Pre)-36-30HB24**	26 5/8	(676)	7 1/8	(181)	14 1/4	(362)

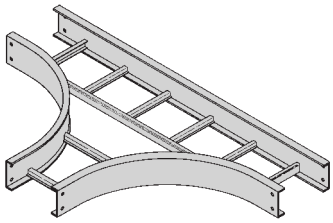
(Pre) See page H-18 for catalog number prefix.
Width dimensions are to inside wall. Manufacturing tolerances apply to all dimensions.

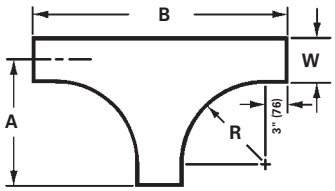
All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Tee (HT)

2 pair splice plates with hardware included.

Bend Radius R in.	(mm)	Tray Width in.	(mm)	Horizontal Tee Dimensions Catalog No.	A in.	(mm)	B in.	(mm)
		6	(152)	**(Prefix)-06-HT12**	18	(457)	36	(914)
		9	(228)	**(Prefix)-09-HT12**	19½	(495)	39	(991)
		12	(305)	**(Prefix)-12-HT12**	21	(533)	42	(1067)
12	(305)	18	(457)	**(Prefix)-18-HT12**	24	(610)	48	(1219)
		24	(609)	**(Prefix)-24-HT12**	27	(686)	54	(1372)
		30	(762)	**(Prefix)-30-HT12**	30	(762)	60	(1524)
		36	(914)	**(Prefix)-36-HT12**	33	(838)	66	(1676)
		6	(152)	**(Prefix)-06-HT24**	30	(762)	60	(1524)
		9	(228)	**(Prefix)-09-HT24**	31½	(800)	63	(1600)
		12	(305)	**(Prefix)-12-HT24**	33	(838)	66	(1676)
24	(609)	18	(457)	**(Prefix)-18-HT24**	36	(914)	72	(1829)
		24	(609)	**(Prefix)-24-HT24**	39	(991)	78	(1981)
		30	(762)	**(Prefix)-30-HT24**	42	(1067)	84	(2134)
		36	(914)	**(Prefix)-36-HT24**	45	(1143)	90	(2286)



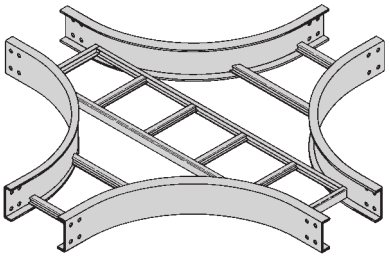


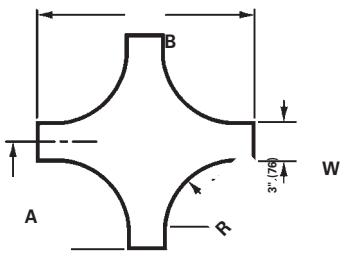
(Prefix) See page H-18 for catalog number prefix.

Horizontal Cross (HX)

3 pair splice plates with hardware included.

Bend Radius R in.	(mm)	Tray Width in.	(mm)	Horizontal Cross Dimensions Catalog No.	A in.	(mm)	B in.	(mm)
		6	(152)	**(Prefix)-06-HX12**	18	(457)	36	(914)
		9	(228)	**(Prefix)-09-HX12**	19½	(495)	39	(991)
		12	(305)	**(Prefix)-12-HX12**	21	(533)	42	(1067)
12	(305)	18	(457)	**(Prefix)-18-HX12**	24	(610)	48	(1219)
		24	(609)	**(Prefix)-24-HX12**	27	(686)	54	(1372)
		30	(762)	**(Prefix)-30-HX12**	30	(762)	60	(1524)
		36	(914)	**(Prefix)-36-HX12**	33	(838)	66	(1676)
		6	(152)	**(Prefix)-06-HX24**	30	(762)	60	(1524)
		9	(228)	**(Prefix)-09-HX24**	31½	(800)	63	(1600)
		12	(305)	**(Prefix)-12-HX24**	33	(838)	66	(1676)
24	(609)	18	(457)	**(Prefix)-18-HX24**	36	(914)	72	(1829)
		24	(609)	**(Prefix)-24-HX24**	39	(991)	78	(1981)
		30	(762)	**(Prefix)-30-HX24**	42	(1067)	84	(2134)
		36	(914)	**(Prefix)-36-HX24**	45	(1143)	90	(2286)





(Prefix) See page H-18 for catalog number prefix.

Width dimensions are to inside wall. Manufacturing tolerances apply to all dimensions.

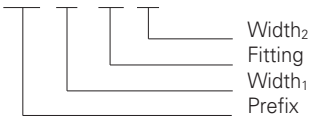
All dimensions in parentheses are millimeters unless otherwise specified.

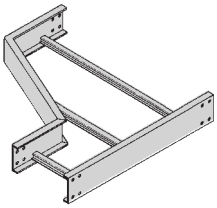
Reducers (LR, SR, RR)

1 pair splice plates with hardware included.

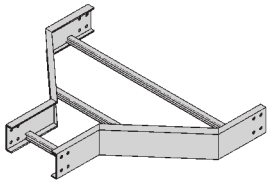
Reducer Part Numbering

14P - 24 - RR 18

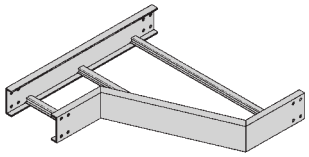




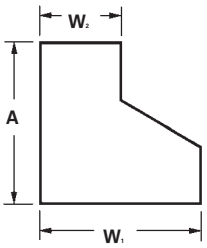
Left Reducer - LR

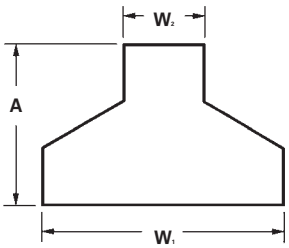


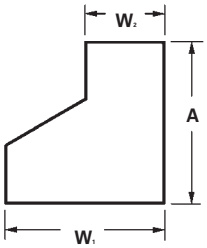
Straight Reducer - SR



Right Reducer - RR







Tray Width				Left Reducer - LR			Straight Reducer - SR			Right Reducer - RR		
W_1		W_2		Catalog No.	A		Catalog No.	A		Catalog No.	A	
in.	(mm)	in.	(mm)		in.	(mm)		in.	(mm)		in.	(mm)
9	(228)	6	(152)	**(Prefix)-09-LR06**	9 3/4	(248)	**(Prefix)-09-SR06**	8 7/8	(225)	**(Prefix)-09-RR06**	9 3/4	(248)
12	(305)	6	(152)	**(Prefix)-12-LR06**	11 1/2	(292)	**(Prefix)-12-SR06**	9 3/4	(248)	**(Prefix)-12-RR06**	11 1/2	(292)
		9	(228)	**(Prefix)-12-LR09**	9 3/4	(248)	**(Prefix)-12-SR09**	8 7/8	(225)	**(Prefix)-12-RR09**	9 3/4	(248)
18	(457)	6	(152)	**(Prefix)-18-LR06**	14 15/16	(379)	**(Prefix)-18-SR06**	11 1/2	(292)	**(Prefix)-18-RR06**	14 15/16	(379)
		9	(228)	**(Prefix)-18-LR09**	13 3/16	(335)	**(Prefix)-18-SR09**	10 5/8	(270)	**(Prefix)-18-RR09**	13 3/16	(335)
		12	(305)	**(Prefix)-18-LR12**	11 1/2	(292)	**(Prefix)-18-SR12**	9 3/4	(248)	**(Prefix)-18-RR12**	11 1/2	(292)
24	(609)	6	(152)	**(Prefix)-24-LR06**	18 3/8	(467)	**(Prefix)-24-SR06**	13 3/16	(335)	**(Prefix)-24-RR06**	18 3/8	(467)
		9	(228)	**(Prefix)-24-LR09**	16 11/16	(424)	**(Prefix)-24-SR09**	12 3/8	(314)	**(Prefix)-24-RR09**	16 11/16	(424)
		12	(305)	**(Prefix)-24-LR12**	14 15/16	(379)	**(Prefix)-24-SR12**	11 1/2	(292)	**(Prefix)-24-RR12**	14 15/16	(379)
		18	(457)	**(Prefix)-24-LR18**	11 1/2	(292)	**(Prefix)-24-SR18**	9 3/4	(248)	**(Prefix)-24-RR18**	11 1/2	(292)
30	(762)	6	(152)	**(Prefix)-30-LR06**	21 7/8	(555)	**(Prefix)-30-SR06**	14 15/16	(379)	**(Prefix)-30-RR06**	21 7/8	(555)
		9	(228)	**(Prefix)-30-LR09**	20 1/8	(511)	**(Prefix)-30-SR09**	14 1/16	(358)	**(Prefix)-30-RR09**	20 1/8	(511)
		12	(305)	**(Prefix)-30-LR12**	18 3/8	(467)	**(Prefix)-30-SR12**	13 3/16	(335)	**(Prefix)-30-RR12**	18 3/8	(467)
		18	(457)	**(Prefix)-30-LR18**	14 15/16	(379)	**(Prefix)-30-SR18**	11 1/2	(292)	**(Prefix)-30-RR18**	14 15/16	(379)
		24	(609)	**(Prefix)-30-LR24**	11 1/2	(292)	**(Prefix)-30-SR24**	9 3/4	(248)	**(Prefix)-30-RR24**	11 1/2	(292)
36	(914)	6	(152)	**(Prefix)-36-LR06**	25 5/16	(643)	**(Prefix)-36-SR06**	16 11/16	(424)	**(Prefix)-36-RR06**	23 5/16	(643)
		9	(228)	**(Prefix)-36-LR09**	23 9/16	(598)	**(Prefix)-36-SR09**	15 13/16	(402)	**(Prefix)-36-RR09**	23 9/16	(598)
		12	(305)	**(Prefix)-36-LR12**	21 7/8	(555)	**(Prefix)-36-SR12**	14 15/16	(379)	**(Prefix)-36-RR12**	21 7/8	(555)
		18	(457)	**(Prefix)-36-LR18**	18 3/8	(467)	**(Prefix)-36-SR18**	13 3/16	(335)	**(Prefix)-36-RR18**	18 3/8	(467)
		24	(609)	**(Prefix)-36-LR24**	14 15/16	(379)	**(Prefix)-36-SR24**	11 1/2	(292)	**(Prefix)-36-RR24**	14 15/16	(379)
		30	(762)	**(Prefix)-36-LR30**	11 1/2	(292)	**(Prefix)-36-SR30**	9 3/4	(248)	**(Prefix)-36-RR30**	11 1/2	(292)

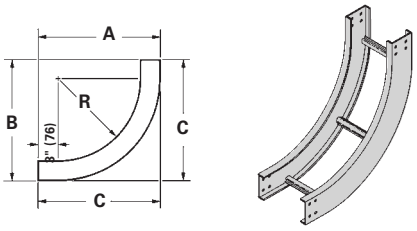
(Prefix) See page H-18 for catalog number prefix.

Width dimensions are to inside wall. Manufacturing tolerances apply to all dimensions.

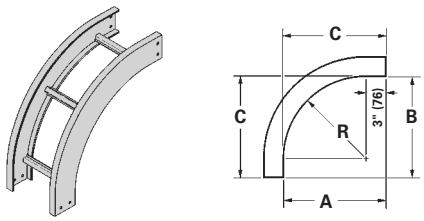
All dimensions in parentheses are millimeters unless otherwise specified.

Vertical Bend 90° (VO, VI)

1 pair splice plates with hardware included.



90° Vertical Inside



90° Vertical Outside

90° Vertical Inside Bend (VI)

Bend Radius R		Width		Catalog No.	VI Dimensions [in. (mm)]											
					Series 14 Steel			Series 15 Steel			Series 16 Steel			Series 17 Steel		
in.	(mm)	in.	(mm)		A	B	C	A	B	C	A	B	C	A	B	C
12	(305)	6	(152)	**(Pre)-06-90VI12**	$18^{7}/_{16}$ (468)	$18^{7}/_{16}$ (468)	$18^{7}/_{16}$ (468)	$19^{3}/_{16}$ (487)	$19^{3}/_{16}$ (487)	$19^{3}/_{16}$ (487)	$20^{3}/_{16}$ (513)	$20^{3}/_{16}$ (513)	$20^{3}/_{16}$ (513)	$21^{3}/_{16}$ (538)	$21^{3}/_{16}$ (538)	$21^{3}/_{16}$ (538)
		9	(228)	**(Pre)-09-90VI12**												
		12	(305)	**(Pre)-12-90VI12**												
		18	(457)	**(Pre)-18-90VI12**												
		24	(609)	**(Pre)-24-90VI12**												
		30	(762)	**(Pre)-30-90VI12**												
		36	(914)	**(Pre)-36-90VI12**												
24	(609)	6	(152)	**(Pre)-06-90VI24**	$30^{7}/_{16}$ (773)	$30^{7}/_{16}$ (773)	$30^{7}/_{16}$ (773)	$31^{3}/_{16}$ (792)	$31^{3}/_{16}$ (792)	$31^{3}/_{16}$ (792)	$32^{3}/_{16}$ (817)	$32^{3}/_{16}$ (817)	$32^{3}/_{16}$ (817)	$33^{3}/_{16}$ (843)	$33^{3}/_{16}$ (843)	$33^{3}/_{16}$ (843)
		9	(228)	**(Pre)-09-90VI24**												
		12	(305)	**(Pre)-12-90VI24**												
		18	(457)	**(Pre)-18-90VI24**												
		24	(609)	**(Pre)-24-90VI24**												
		30	(762)	**(Pre)-30-90VI24**												
		36	(914)	**(Pre)-36-90VI24**												

90° Vertical Outside Bend (VO)

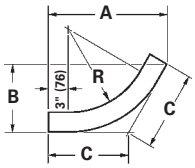
Bend Radius R		Width		Catalog No.	VO Dimensions [in. (mm)]		
					All Series 1		
in.	(mm)	in.	(mm)		A	B	C
12	(305)	6	(152)	**(Pre)-06-90VO12**	15 (381)	15 (381)	15 (381)
		9	(228)	**(Pre)-09-90VO12**			
		12	(305)	**(Pre)-12-90VO12**			
		18	(457)	**(Pre)-18-90VO12**			
		24	(609)	**(Pre)-24-90VO12**			
		30	(762)	**(Pre)-30-90VO12**			
		36	(914)	**(Pre)-36-90VO12**			
24	(609)	6	(152)	**(Pre)-06-90VO24**	27 (686)	27 (686)	27 (686)
		9	(228)	**(Pre)-09-90VO24**			
		12	(305)	**(Pre)-12-90VO24**			
		18	(457)	**(Pre)-18-90VO24**			
		24	(609)	**(Pre)-24-90VO24**			
		30	(762)	**(Pre)-30-90VO24**			
		36	(914)	**(Pre)-36-90VO24**			

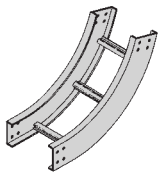
(Pre) See page H-18 for catalog number prefix.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

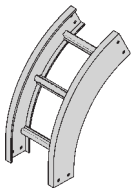
Vertical Bend 60° (VO, VI)

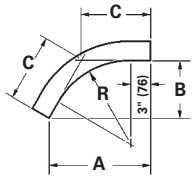
1 pair splice plates with hardware included.





60° Vertical Inside





60° Vertical Outside

60° Vertical Inside Bend (VI)

Bend Radius R		Width		Catalog No.	VI Dimensions [in. (mm)]											
					Series 14 Steel			Series 15 Steel			Series 16 Steel			Series 17 Steel		
in.	(mm)	in.	(mm)		A	B	C	A	B	C	A	B	C	A	B	C
12	(305)	6	(152)	(Pre)-06-60VI12	$18^{1}/_{16}$ (459)	$10^{7}/_{16}$ (265)	12 (305)	$18^{1}/_{2}$ (470)	$10^{11}/_{16}$ (271)	$12^{3}/_{8}$ (314)	$19^{3}/_{8}$ (492)	$11^{3}/_{16}$ (284)	$12^{15}/_{16}$ (328)	$20^{1}/_{4}$ (514)	$11^{11}/_{16}$ (297)	$13^{1}/_{2}$ (343)
		9	(228)	(Pre)-09-60VI12												
		12	(305)	(Pre)-12-60VI12												
		18	(457)	(Pre)-18-60VI12												
		24	(609)	(Pre)-24-60VI12												
		30	(762)	(Pre)-30-60VI12												
		36	(914)	(Pre)-36-60VI12												
24	(609)	6	(152)	(Pre)-06-60VI24	$28^{7}/_{16}$ (722)	$16^{7}/_{16}$ (417)	$18^{15}/_{16}$ (481)	$28^{15}/_{16}$ (735)	$18^{11}/_{16}$ (424)	$19^{1}/_{4}$ (489)	$29^{3}/_{4}$ (755)	$17^{3}/_{16}$ (436)	$19^{7}/_{8}$ (505)	$30^{5}/_{8}$ (778)	$17^{11}/_{16}$ (449)	$20^{7}/_{16}$ (519)
		9	(228)	(Pre)-09-60VI24												
		12	(305)	(Pre)-12-60VI24												
		18	(457)	(Pre)-18-60VI24												
		24	(609)	(Pre)-24-60VI24												
		30	(762)	(Pre)-30-60VI24												
		36	(914)	(Pre)-36-60VI24												

60° Vertical Outside Bend (VO)

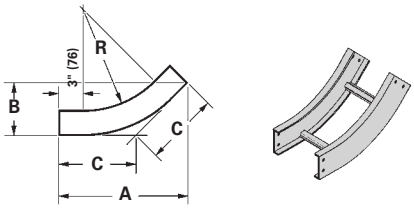
Bend Radius R		Width		Catalog No.	VO Dimensions [in. (mm)]		
					All Series 1		
in.	(mm)	in.	(mm)		A	B	C
12	(305)	6	(152)	(Pre)-06-60VO12	$14^{7}/_{8}$ (378)	$8^{5}/_{8}$ (219)	$9^{15}/_{16}$ (252)
		9	(228)	(Pre)-09-60VO12			
		12	(305)	(Pre)-12-60VO12			
		18	(457)	(Pre)-18-60VO12			
		24	(609)	(Pre)-24-60VO12			
		30	(762)	(Pre)-30-60VO12			
		36	(914)	(Pre)-36-60VO12			
24	(609)	6	(152)	(Pre)-06-60VO24	$25^{5}/_{16}$ (643)	$14^{5}/_{8}$ (371)	$16^{7}/_{8}$ (428)
		9	(228)	(Pre)-09-60VO24			
		12	(305)	(Pre)-12-60VO24			
		18	(457)	(Pre)-18-60VO24			
		24	(609)	(Pre)-24-60VO24			
		30	(762)	(Pre)-30-60VO24			
		36	(914)	(Pre)-36-60VO24			

(Pre) See page H-18 for catalog number prefix.
Manufacturing tolerances apply to all dimensions.

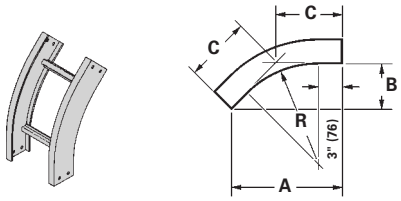
All dimensions in parentheses are millimeters unless otherwise specified.

Vertical Bend 45° (VO, VI)

1 pair splice plates with hardware included.



45° Vertical Inside



45° Vertical Outside

45° Vertical Inside Bend (VI)

Bend Radius R		Width		Catalog No.	VI Dimensions [in. (mm)]											
					Series 14 Steel			Series 15 Steel			Series 16 Steel			Series 17 Steel		
in.	(mm)	in.	(mm)		A	B	C	A	B	C	A	B	C	A	B	C
12	(305)	6	(152)	(Pre)-06-45VI12	$16^{3}/_{16}$ (411)	$6^{11}/_{16}$ (170)	$9^{1}/_{2}$ (241)	$16^{9}/_{16}$ (420)	$6^{7}/_{8}$ (174)	$9^{11}/_{16}$ (246)	$17^{1}/_{4}$ (438)	$7^{3}/_{16}$ (182)	$10^{1}/_{8}$ (257)	18 (457)	$7^{7}/_{16}$ (189)	$10^{9}/_{16}$ (268)
		9	(228)	(Pre)-09-45VI12												
		12	(305)	(Pre)-12-45VI12												
		18	(457)	(Pre)-18-45VI12												
		24	(609)	(Pre)-24-45VI12												
		30	(762)	(Pre)-30-45VI12												
		36	(914)	(Pre)-36-45VI12												
24	(609)	6	(152)	(Pre)-06-45VI24	$24^{11}/_{16}$ (627)	$10^{3}/_{16}$ (259)	$14^{7}/_{16}$ (367)	$25^{1}/_{16}$ (792)	$10^{3}/_{8}$ (792)	$14^{11}/_{16}$ (373)	$25^{3}/_{4}$ (654)	$10^{11}/_{16}$ (271)	$15^{1}/_{16}$ (382)	$26^{1}/_{2}$ (673)	11 (279)	$15^{1}/_{2}$ (394)
		9	(228)	(Pre)-09-45VI24												
		12	(305)	(Pre)-12-45VI24												
		18	(457)	(Pre)-18-45VI24												
		24	(609)	(Pre)-24-45VI24												
		30	(762)	(Pre)-30-45VI24												
		36	(914)	(Pre)-36-45VI24												

45° Vertical Outside Bend (VO)

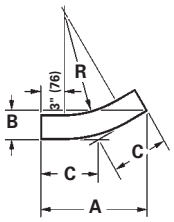
Bend Radius R		Width		Catalog No.	VO Dimensions [in. (mm)]		
					All Series 1		
in.	(mm)	in.	(mm)		A	B	C
12	(305)	6	(152)	(Pre)-06-45VO12	$13^{5}/_{8}$ (346)	$5^{5}/_{8}$ (143)	8 (203)
		9	(228)	(Pre)-09-45VO12			
		12	(305)	(Pre)-12-45VO12			
		18	(457)	(Pre)-18-45VO12			
		24	(609)	(Pre)-24-45VO12			
		30	(762)	(Pre)-30-45VO12			
		36	(914)	(Pre)-36-45VO12			
24	(609)	6	(152)	(Pre)-06-45VO24	$22^{1}/_{16}$ (560)	$9^{1}/_{8}$ (232)	$12^{15}/_{16}$ (328)
		9	(228)	(Pre)-09-45VO24			
		12	(305)	(Pre)-12-45VO24			
		18	(457)	(Pre)-18-45VO24			
		24	(609)	(Pre)-24-45VO24			
		30	(762)	(Pre)-30-45VO24			
		36	(914)	(Pre)-36-45VO24			

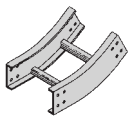
(Pre) See page H-18 for catalog number prefix.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

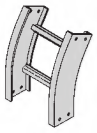
Vertical Bend 30° (VO, VI)

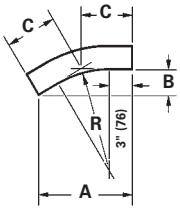
1 pair splice plates with hardware included.





30° Vertical Inside





30° Vertical Outside

30° Vertical Inside Bend (VI)

Bend Radius R		Width		Catalog No.	VI Dimensions [in. (mm)]											
					Series 14 Steel			Series 15 Steel			Series 16 Steel			Series 17 Steel		
in.	(mm)	in.	(mm)		A	B	C	A	B	C	A	B	C	A	B	C
12	(305)	6	(152)	(Pre)-06-30VI12	$13^{7}/_{16}$ (341)	$3^{5}/_{8}$ (92)	$7^{3}/_{16}$ (182)	$13^{11}/_{16}$ (347)	$3^{11}/_{16}$ (93)	$7^{5}/_{16}$ (186)	$14^{3}/_{16}$ (360)	$3^{13}/_{16}$ (97)	$7^{5}/_{8}$ (193)	$14^{11}/_{16}$ (373)	$3^{15}/_{16}$ (100)	$7^{7}/_{8}$ (200)
		9	(228)	(Pre)-09-30VI12												
		12	(305)	(Pre)-12-30VI12												
		18	(457)	(Pre)-18-30VI12												
		24	(609)	(Pre)-24-30VI12												
		30	(762)	(Pre)-30-30VI12												
		36	(914)	(Pre)-36-30VI12												
24	(609)	6	(152)	(Pre)-06-30VI24	$19^{7}/_{16}$ (494)	$5^{3}/_{16}$ (132)	$10^{7}/_{16}$ (265)	$19^{11}/_{16}$ (500)	$5^{5}/_{16}$ (135)	$10^{9}/_{16}$ (268)	$20^{3}/_{16}$ (513)	$5^{7}/_{16}$ (138)	$10^{13}/_{16}$ (274)	$20^{11}/_{16}$ (525)	$5^{9}/_{16}$ (141)	$11^{1}/_{16}$ (281)
		9	(228)	(Pre)-09-30VI24												
		12	(305)	(Pre)-12-30VI24												
		18	(457)	(Pre)-18-30VI24												
		24	(609)	(Pre)-24-30VI24												
		30	(762)	(Pre)-30-30VI24												
		36	(914)	(Pre)-36-30VI24												

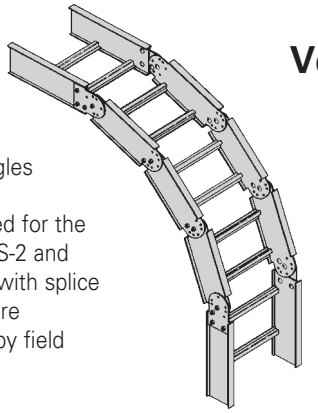
30° Vertical Outside Bend (VO)

Bend Radius R		Width		Catalog No.	VO Dimensions [in. (mm)]		
					All Series 1		
in.	(mm)	in.	(mm)		A	B	C
12	(305)	6	(152)	(Pre)-06-30VO12	$11^{5}/_{8}$ (295)	$3^{1}/_{8}$ (79)	$6^{3}/_{16}$ (157)
		9	(228)	(Pre)-09-30VO12			
		12	(305)	(Pre)-12-30VO12			
		18	(457)	(Pre)-18-30VO12			
		24	(609)	(Pre)-24-30VO12			
		30	(762)	(Pre)-30-30VO12			
		36	(914)	(Pre)-36-30VO12			
24	(609)	6	(152)	(Pre)-06-30VO24	$17^{5}/_{8}$ (448)	$4^{11}/_{16}$ (119)	$9^{7}/_{16}$ (240)
		9	(228)	(Pre)-09-30VO24			
		12	(305)	(Pre)-12-30VO24			
		18	(457)	(Pre)-18-30VO24			
		24	(609)	(Pre)-24-30VO24			
		30	(762)	(Pre)-30-30VO24			
		36	(914)	(Pre)-36-30VO24			

(Pre) See page H-18 for catalog number prefix.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

Vertical Bend Segments (VBS)



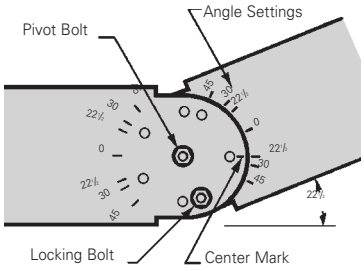
Adjustable Vertical Bends are made up of one or more vertical bend segments and can be used as a vertical inside (VI) or vertical outside (VO) bend. This design provides for vertical changes in direction with angles 45˚, 60˚ and 90˚ for 12" (305 mm) or 24" (609 mm) radius. The chart below shows the number of segments required for the various combinations of angles and radii. The VBS-1, VBS-2 and VBS-3 include one, two or three segments respectively with splice plates and hardware. Holes for setting standard angles are pre-punched in each segment. Other angles can be set by field drilling another hole for the locking bolt.

Available for 148P and 148G only.

Nominal Bend Radius in. (mm)	Catalog No.	Dimensions VO A in. (mm)	VO B in. (mm)	VO R in. (mm)	VI A in. (mm)	VI B in. (mm)	VI R in. (mm)
90˚ Vertical Inside or Outside							
12 (305)	**14(*)-(‡)-VBS-1**	8 1/4 (210)	8 1/4 (210)	6 1/2 (165)	12 1/8 (303)	12 1/8 (303)	10 1/2 (267)
24 (609)	**14(*)-(‡)-VBS-3**	24 (610)	24 (610)	22 1/4 (565)	27 7/8 (708)	27 7/8 (708)	26 1/4 (667)
60˚ Vertical Inside or Outside							
12 (305)	**14(*)-(‡)-VBS-1**	11 3/4 (298)	6 1/2 (165)	12 (305)	14 3/4 (375)	8 1/2 (216)	16 (406)
24 (609)	**14(*)-(‡)-VBS-2**	11 3/4 (298)	6 1/2 (165)	12 (305)	14 3/4 (375)	8 1/2 (216)	16 (406)
45˚ Vertical Inside or Outside							
12 (305)	**14(*)-(‡)-VBS-1**	12 3/4 (324)	5 1/4 (133)	17 1/8 (435)	15 1/2 (394)	6 7/8 (175)	21 (540)
24 (609)	**14(*)-(‡)-VBS-1**	12 3/4 (324)	5 1/4 (133)	17 1/8 (435)	15 1/2 (394)	6 7/8 (175)	21 (540)

Notes:
1. (*) Insert material type: P=Pre Galvanized, G=HDGAF
2. (‡) Insert width 6, 9, 12, 18, 24, 30, 36

Fitting Hole Pattern



Setting the Angle

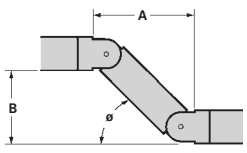
To find correct angle setting, divide angle of offset by the number of segments plus one. The result is equal to the angle setting stamped on the vertical bend segment and the splice plate. After inserting center pivot bolt, align the mark at the end of the segment or splice plate with the angle and insert locking bolt in the pre-punched hole.

Example: 90˚ bend, 24" radius requires 3 segments
3 segments + 1 = 4
90˚ divided by 4 = 22 1/2˚
Set all vertical segments at 22 1/2˚

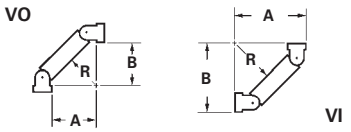
Offset Dimensions

One vertical bend segment can be used to complete a vertical offset. Offset dimensions are shown.

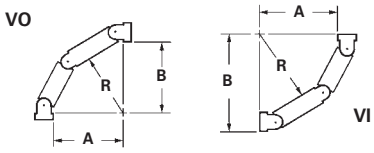
Angle ø	A in. (mm)	B in. (mm)
45˚	12 (305)	8 1/2 (216)
30˚	14 (355)	5 3/4 (146)
22 1/2˚	14 1/4 (362)	5 (127)



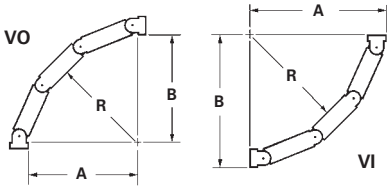
VBS-1 (1 Segment)



VBS-2 (2 Segments)

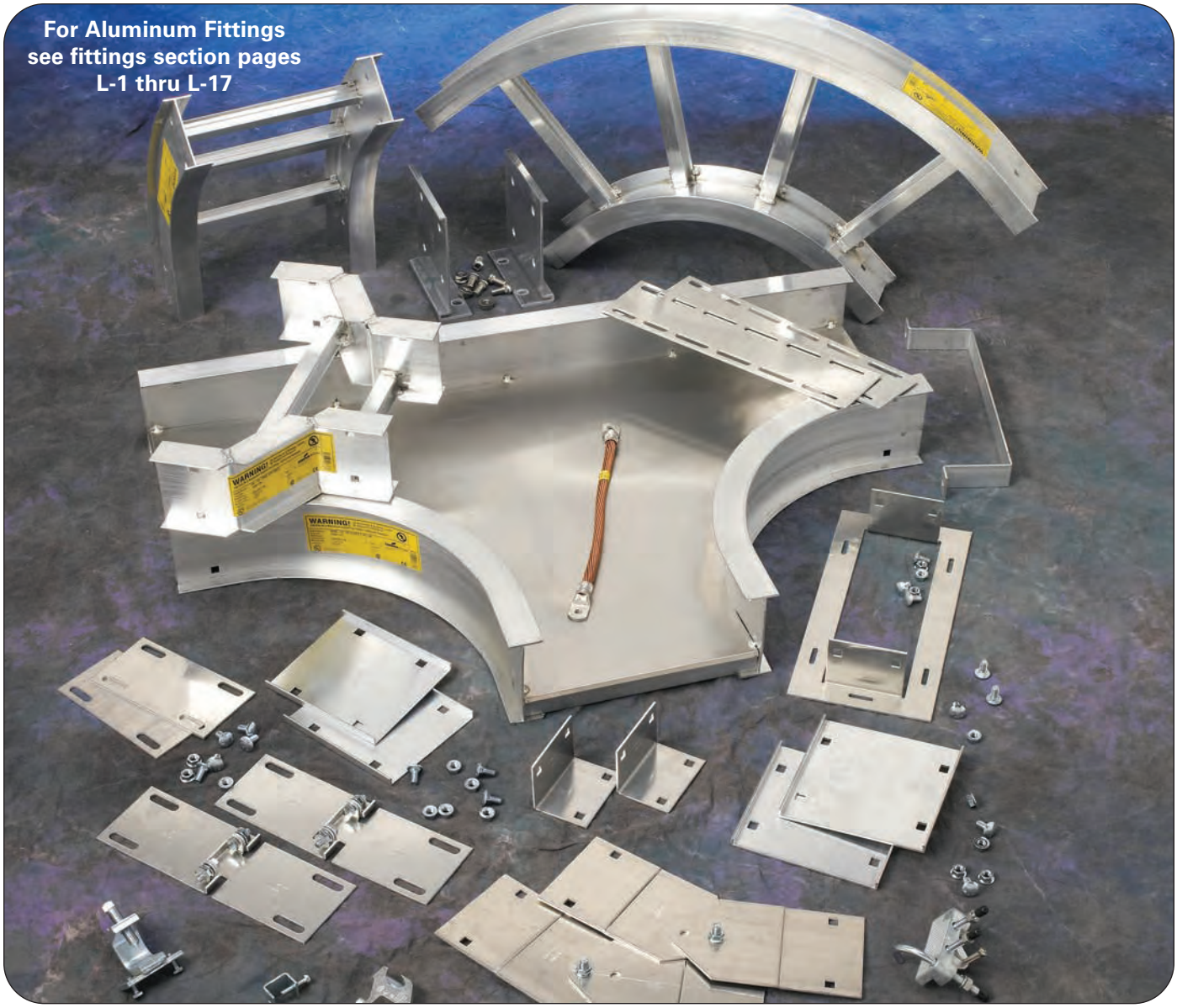


VBS-3 (3 Segments)



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

All dimensions in parentheses are millimeters unless otherwise specified.



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:

34A	VT	-	24	-	144
●	●		●		●

Part will have a normal lead time because of the VT bottom type.

3" NEMA VE 1 Loading Depth
4" Side Rail Height

Straight Section Part Numbering

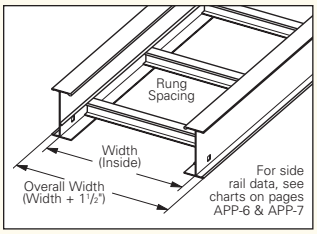
Prefix

Example: **24 A 09 - 24 - 144**

Series	Material	*Type	*Width	Length
● **24**	● **A** = Aluminum	**SB** = Solid Bottom	● **06** = 6"	● ①**144** = 12 ft. ● ②120 = 10 ft. — 24
● **H24**		● **06** = 6" rung spacing	● **09** = 9"	● ①**240** = 20 ft. ● ②144 = 12 ft. — H24
● **34**		● **09** = 9" rung spacing	● **12** = 12"	● ①**240** = 20 ft. ● ②144 = 12 ft. — 34
		● **12** = 12" rung spacing	● **18** = 18"	
			● **24** = 24"	
			● **30** = 30"	
			● **36** = 36"	

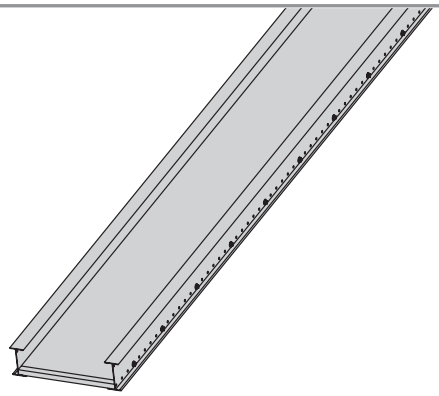
① Primary Length.
② Secondary Length.

See page C-23 for explanation of lengths.



See page APP-1 for additional rung options. *Special sizes available.

Ladder Type
(Specify Rung Spacing)



Solid Bottom

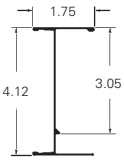
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

3" NEMA VE 1 Loading Depth
4" Side Rail Height

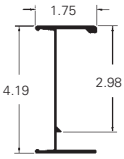
Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

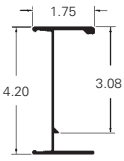
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
24		NEMA: 16A, 12C CSA: 277 kg/m 3.0m D-3m UL Cross-Sectional Area: 1.00 in²	6	487*	0.001	Area = 1.05 in² Sx = 1.34 in³ Ix = 2.85 in⁴	1.8	725*	0.017	Area = 6.77 cm² Sx = 21.96 cm³ Ix = 118.63 cm⁴
			8	284	0.003		2.4	422	0.055	
			10	181	0.008		3.0	270	0.136	
			12	126	0.016		3.7	187	0.279	
			14	93	0.030		4.3	138	0.618	
			16	71	0.052		4.9	105	0.883	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%.
Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

* When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.27 kg/m) for 30" tray width and 325 lbs/ft (483.6 kg/m) for 36" tray width.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
H24		NEMA: 20A CSA: 84 kg/m 6.1m D-6m UL Cross-Sectional Area: 1.00 in²	10	225	0.006	Area = 1.32 in² Sx = 1.57 in³ Ix = 3.69 in⁴	3.0	330	0.106	Area = 8.52 cm² Sx = 25.73 cm³ Ix = 153.59 cm⁴
			12	156	0.013		3.7	226	0.222	
			14	115	0.023		4.3	171	0.400	
			16	88	0.040		4.9	129	0.693	
			18	70	0.064		5.5	103	1.093	
			20	56	0.098		6.1	83	1.682	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
34		NEMA: 20B, 16C CSA: 112 kg/m 6.0m E-6m UL Cross-Sectional Area: 1.50 in²	10	320	0.005	Area = 1.82 in² Sx = 2.10 in³ Ix = 4.98 in⁴	3.0	476	0.077	Area = 11.74 cm² Sx = 34.41 cm³ Ix = 207.28 cm⁴
			12	222	0.009		3.7	331	0.160	
			14	163	0.017		4.3	243	0.296	
			16	125	0.030		4.9	186	0.505	
			18	99	0.047		5.5	147	0.810	
			20	80	0.072		6.1	119	1.234	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

4" NEMA VE 1 Loading Depth
5" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **25 A 09 - 24 - 144**

Series
- **25**
- **35**

Material
- **A** = Aluminum

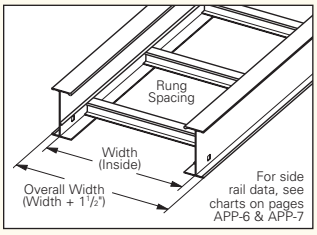
***Type**
- **SB** = Solid Bottom
- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

***Width**
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

Length

25
- ① **144** = 12 ft.
- ② 120 = 10 ft.

35
- ① **240** = 20 ft.
- ② 144 = 12 ft.

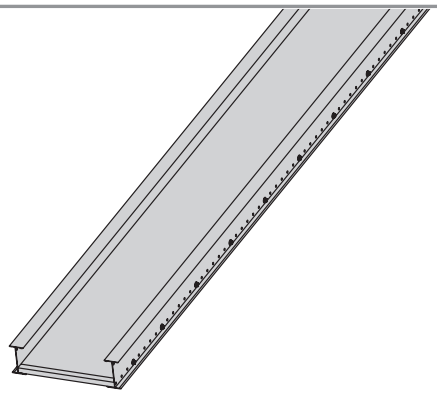


① Primary Length.
② Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.

Ladder Type
(Specify Rung Spacing)



Solid Bottom

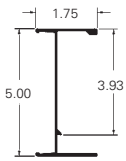
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

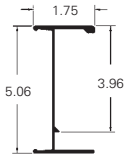
4" NEMA VE 1 Loading Depth
5" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
25		NEMA: 20A, 12C CSA: 67 kg/m 6.0m D-6m UL Cross-Sectional Area: 1.00 in²	10	200	0.0049		3.0	298	0.083	
			12	139	0.010	Area = 1.24 in²	3.7	207	0.172	Area = 8.00 cm²
			14	102	0.019	Sx = 1.80 in³	4.3	152	0.319	Sx = 29.50 cm³
			16	78	0.032	Ix = 4.62 in⁴	4.9	116	0.545	Ix = 192.30 cm⁴
			18	62	0.051		5.5	92	0.873	
			20	50	0.078		6.1	74	1.330	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
35		NEMA: 20B, 16C CSA: 112 kg/m 6.0m E-6m UL Cross-Sectional Area: 1.50 in²	10	310	0.0036		3.0	461	0.060	
			12	215	0.0073	Area = 1.67 in²	3.7	320	0.125	Area = 10.77 cm²
			14	158	0.014	Sx = 2.35 in³	4.3	235	0.232	Sx = 38.51 cm³
			16	121	0.023	Ix = 6.37 in⁴	4.9	180	0.395	Ix = 265.14 cm⁴
			18	96	0.037		5.5	142	0.633	
			20	77	0.057		6.1	115	0.965	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

5" NEMA VE 1 Loading Depth
6" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **26 A 09 - 24 - 144**

Series
- ● **26**
- ● **36**
- ● **46**
- ● **H46**
- ● **56**

Material
- ● **A** = Aluminum

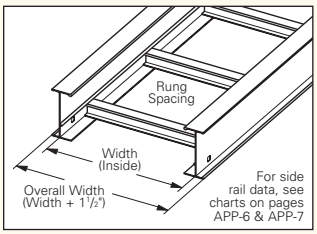
*Type
SB = Solid Bottom
- ● **06** = 6" rung spacing
- ● **09** = 9" rung spacing
- ● **12** = 12" rung spacing

*Width
- ● **06** = 6"
- ● **09** = 9"
- ● **12** = 12"
- ● **18** = 18"
- ● **24** = 24"
- ● **30** = 30"
- ● **36** = 36"
- **42** = 42"†
- **48** = 48"†

† For 56A only

Length

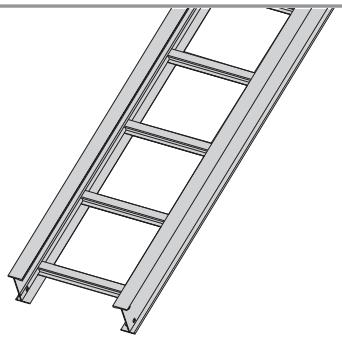
● ① **144** = 12 ft. ● ② 120 = 10 ft.	26
● ① **240** = 20 ft. ● ②144 = 12 ft.	36
● ① **240** = 20 ft. ● ② 288 = 24 ft.	46
● ① **240** = 20 ft. ● ① 300 = 25 ft.	H46
● ① **240** = 20 ft. ● ② 288 = 24 ft. ● ① 300 = 25 ft. ● ② 360 = 30 ft.	57



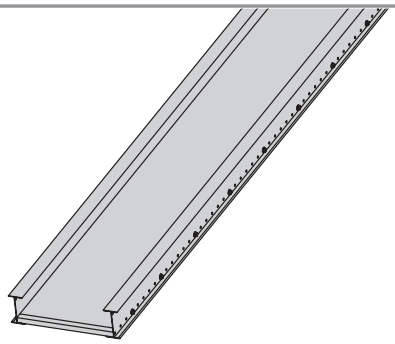
① Primary Length.
② Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)



Solid Bottom

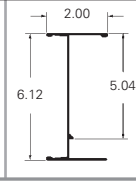
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

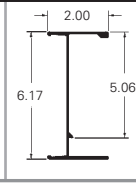
5" NEMA VE 1 Loading Depth
6" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support, without collapse, a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

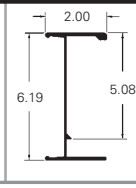
Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
26		NEMA: 20A, 16B CSA: 67 kg/m 6.0m D-6m UL Cross-Sectional Area: 1.00 in²	10	204	0.0028	Area = 1.41 in² Sx = 2.53 in³ Ix = 7.915 in⁴	3.0	304	0.049	Area = 9.10 cm² Sx = 41.46 cm³ Ix = 329.45 cm⁴
			12	142	0.006		3.7	211	0.101	
			14	104	0.011		4.3	155	0.186	
			16	80	0.019		4.9	119	0.318	
			18	63	0.030		5.5	94	0.509	
			20	51	0.045		6.1	76	0.776	

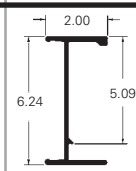
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
36		NEMA: 20B, 16C CSA: 112 kg/m 6.0m E-6m UL Cross-Sectional Area: 1.50 in²	12	233	0.0043	Area = 1.81 in² Sx = 3.36 in³ Ix = 10.85 in⁴	3.7	347	0.073	Area = 11.68 cm² Sx = 55.06 cm³ Ix = 451.61 cm⁴
			14	171	0.008		4.3	255	0.136	
			16	131	0.014		4.9	195	0.232	
			18	104	0.022		5.5	154	0.372	
			20	84	0.033		6.1	125	0.566	
			22	69	0.049		6.7	103	0.829	

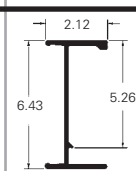
When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
46		NEMA: 20C CSA: 168 kg/m 6.1m E-6m UL Cross-Sectional Area: 1.50 in²	14	210	0.0071	Area = 2.06 in² Sx = 3.59 in³ Ix = 12.18 in⁴	4.3	313	0.121	Area = 13.29 cm² Sx = 58.83 cm³ Ix = 506.97 cm⁴
			16	161	0.012		4.9	239	0.207	
			18	127	0.019		5.5	189	0.331	
			20	103	0.030		6.1	153	0.505	
			22	85	0.043		6.7	127	0.739	
			24	72	0.061		7.3	106	1.046	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
H46		NEMA: 20C+ CSA: 131 kg/m 7.6m E-6m UL Cross-Sectional Area: 2.00 in²	16	261	0.0085	Area = 2.95 in² Sx = 5.33 in³ Ix = 17.30 in⁴	4.9	388	0.145	Area = 19.03 cm² Sx = 87.34 cm³ Ix = 720.08 cm⁴
			18	206	0.014		5.5	307	0.233	
			20	167	0.021		6.1	248	0.355	
			22	138	0.030		6.7	205	0.520	
			24	116	0.043		7.3	173	0.737	
			25	88	0.051		7.6	131	0.867	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
56		NEMA: 20C+ CSA: 112 kg/m 9.1m E-6m UL Cross-Sectional Area: 2.00 in²	20	169	0.016	Area = 3.63 in² Sx = 6.12 in³ Ix = 22.63 in⁴	6.1	251	0.272	Area = 23.42 cm² Sx = 100.29 cm³ Ix = 941.86 cm⁴
			22	139	0.023		6.7	208	0.398	
			24	117	0.033		7.3	174	0.563	
			26	100	0.045		7.9	149	0.776	
			28	86	0.061		8.5	128	1.043	
			30	75	0.081		9.1	112	1.375	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

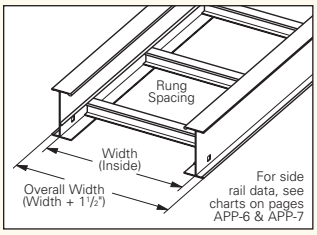
6" NEMA VE 1 Loading Depth
7" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **37** **A** **09** - **24** - **144**

Series	Material	*Type	*Width	Length	
● **27**	● **A** = Aluminum	**SB** = Solid Bottom	● **06** = 6"	● ① **144** = 12 ft.	27
● **37**		● **06** = 6" rung spacing	● **09** = 9"	● ② 120 = 10 ft.	
● **47**		● **09** = 9" rung spacing	● **12** = 12"	● ① **240** = 20 ft.	37
● **H47**†		● **12** = 12" rung spacing	● **18** = 18"	● ② 144 = 12 ft.	
● **57**			● **24** = 24"	● ① **240** = 20 ft.	47
			● **30** = 30"	● ② 288 = 24 ft.	
			● **36** = 36"	● ① **240** = 20 ft.	H47
				● ② 300 = 25 ft.	
				● ① **360** = 30 ft.	57
				● ② 300 = 25 ft.	

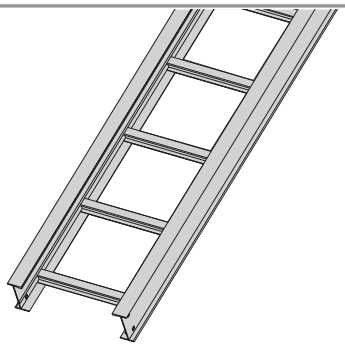


① Primary Length.
② Secondary Length.

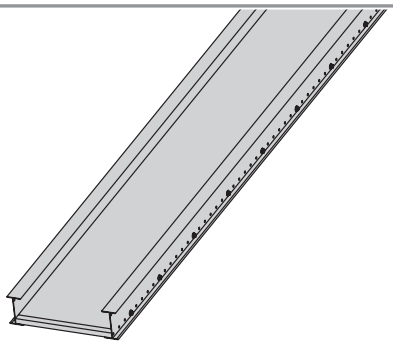
See page C-23 for explanation of lengths.

† *H47A & 57A only available in ladder type 9" and 12" rung spacing. See page APP-2.*

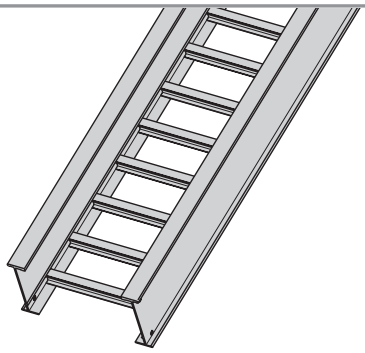
See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)



Solid Bottom



57A available in
(9" & 12" rung spacing in
12" to 36" widths)

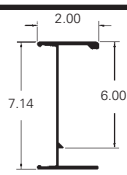
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

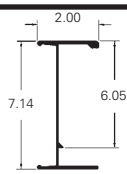
All dimensions in parentheses are millimeters unless otherwise specified.

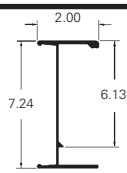
6" NEMA VE 1 Loading Depth
7" Side Rail Height

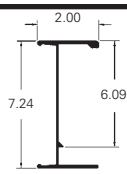
Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

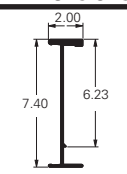
Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
27		NEMA: 12C CSA: 68 kg/m 6.0m D-6m UL Cross-Sectional Area: 1.50 in²	10	177	0.006		3.0	269	0.033	
			12	123	0.013	Area = 1.63 in²	3.7	177	0.073	Area = 10.52 cm²
			14	90	0.023	Sx = 2.93 in³	4.3	134	0.131	Sx = 48.01 cm³
			16	69	0.040	Ix = 11.28 in⁴	4.9	101	0.227	Ix = 469.51 cm⁴
			18	54	0.064		5.5	81	0.357	
			20	44	0.098		6.1	67	0.534	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
37		NEMA: 20B, 16C CSA: 101 kg/m 6.1m D-6m UL Cross-Sectional Area: 1.50 in²	12	222	0.0035		3.7	331	0.059	
			14	163	0.0064	Area = 1.81 in²	4.3	243	0.109	Area = 11.68 cm²
			16	125	0.011	Sx = 3.77 in³	4.9	186	0.186	Sx = 61.78 cm³
			18	99	0.017	Ix = 13.50 in⁴	5.5	147	0.299	Ix = 561.91 cm⁴
			20	80	0.027		6.1	119	0.455	
			22	66	0.039		6.7	98	0.666	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
47		NEMA: 20C CSA: 142 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in²	14	204	0.0048		4.3	305	0.083	
			16	156	0.0082	Area = 2.38 in²	4.9	233	0.141	Area = 15.35 cm²
			18	123	0.0132	Sx = 4.94 in³	5.5	184	0.225	Sx = 80.95 cm³
			20	100	0.0201	Ix = 17.88 in⁴	6.1	149	0.344	Ix = 744.22 cm⁴
			22	83	0.0295		6.7	123	0.503	
			24	69	0.0418		7.3	103	0.713	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
H47		NEMA: 20C+ CSA: 241 kg/m 6.1m E-6m UL Cross-Sectional Area: 2.00 in²	16	233	0.0064		4.9	346	0.110	
			18	184	0.010	Area = 3.04 in²	5.4	274	0.176	Area = 19.61 cm²
			20	149	0.016	Sx = 6.10 in³	6.1	222	0.268	Sx = 99.96 cm³
			22	123	0.023	Ix = 22.91 in⁴	6.7	183	0.393	Ix = 953.59 cm⁴
			24	103	0.033		7.3	154	0.556	
			25	95	0.038		7.6	142	0.655	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
57		NEMA: 20C+ CSA: 151 kg/m 9.1m E-6m UL Cross-Sectional Area: 2.00 in²	20	232	0.011		6.1	345	0.187	
			22	192	0.016	Area = 4.22 in²	6.7	285	0.274	Area = 27.73 cm²
			24	161	0.023	Sx = 7.73 in³	7.3	240	0.388	Sx = 126.67 cm³
			26	136	0.031	Ix = 32.86 in⁴	7.9	202	0.534	Ix = 1367.74 cm⁴
			28	117	0.042		8.5	174	0.718	
			30	102	0.055		9.1	152	0.947	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

6" NEMA VE 1 Loading Depth
8" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **S8 A 09 - 24 - 144**

Series
- **S8**

Material
- **A** = Aluminum

***Type**
Ladder-
- **09** = 9" rung spacing
- **12** = 12" rung spacing

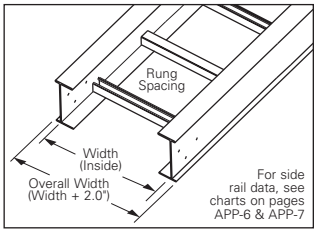
***Width**
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

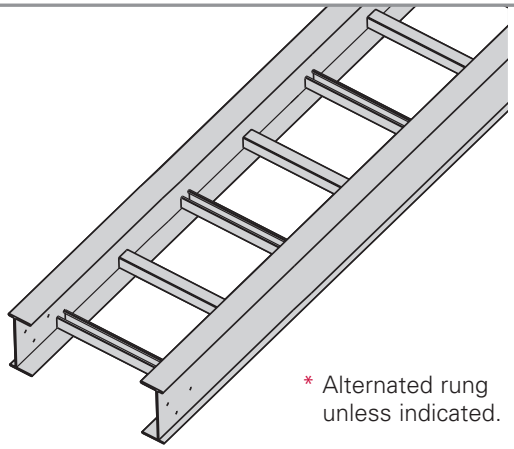
Length
- **480** = 40 ft.
- ① **360** = 30 ft.
- ② **300** = 25 ft.

① Primary Length.
② Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.

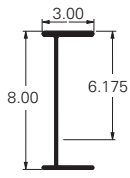




* Alternated rung unless indicated.

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
S8A		NEMA: 20C+	20	363	0.007		6.1	540	0.111	
		CSA: 240 kg/m 9.1m	22	300	0.010		6.7	446	0.163	
			24	252	0.013	Area=5.50 in²	7.3	375	0.230	Area=35.48 cm²
		UL Cross-Sectional	26	215	0.019	Sx=15.39 in³	7.9	320	0.317	Sx=252.20 cm³
		Area: 2.00 in²	28	185	0.025	Ix=55.35 in⁴	8.5	276	0.427	Ix=2303.84 cm⁴
			30	161	0.033		9.1	240	0.562	
			40	101	0.146		12.2	151	2.488	

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

All dimensions in parentheses are millimeters unless otherwise specified.

The following is a list of accessories and fittings that can be provided with S8A tray. For more information on these items, contact our Engineering Department.

● Fittings

Horizontal Bends
30° Bends with 24", 36", or 48" radius
45° Bends with 24", 36", or 48" radius
60° Bends with 24", 36", or 48" radius
90° Bends with 24", 36", or 48" radius

Horizontal Tees & Crosses
With 24", 36", or 48" radius

Vertical Outside Bends
30° Bends with 24", 36", or 48" radius
45° Bends with 24", 36", or 48" radius
60° Bends with 24", 36", or 48" radius
90° Bends with 24", 36", or 48" radius

Vertical Inside Bends
30° Bends with 24", 36", or 48" radius
45° Bends with 24", 36", or 48" radius
60° Bends with 24", 36", or 48" radius
90° Bends with 24", 36", or 48" radius

Reducing Fittings

● Accessories - (standard hardware is stainless steel Type 316)

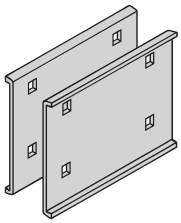
Splice Plate - 9A-1008
Expansion Splice Plate - 9A-1018
Horizontal Adjustable Splice Plate - 9A-FSP8
Vertical Adjustable Splice Plate - 9A-1028
Hold Down Clamps - 9ZN-1281, 9G-1281, 9A-1281
Guides - S9ZN-1202, S9G-1202
Step Down Splice Plate -
9A-1048 = 8" to 4"
9A-1051 = 8" to 5"
9A-1050 = 8" to 6"
9A-1078 = 8" to 7"
Other Accessories Include:
Offset Splice Plates
Blind Ends
Covers - Standard aluminum cover number with S in front (Example: S807A40)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Wedge Lock Splice Plates

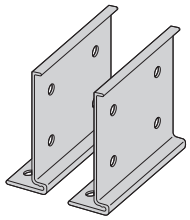
- Furnished in pairs with 3/8" hardware.
- Standard 4-hole pattern.
- Furnished in pairs, with hardware.
- One pair including hardware provided with each section. (Expansion splice quantity subtracted)
- Boxed in pairs with hardware.
- For field installation drill 13/32" hole.



Catalog No.	Height in.	Height mm
9A-1004	4	(101)
9A-1005	5	(127)
9A-1006	6	(152)
9A-1007	7	(178)

H46A, H47A, 56A and 57A Mid-Span Splice

- Furnished in pairs with 3/8" hardware.
- Standard for H46A, H47A, 56A and 57A straight sections.
- Six bolt design 1/2" Stainless Steel Type 316 hardware standard.
- Available on ladder bottoms only. 09 and 12" rung spacing.
- Furnished in pairs with hardware.

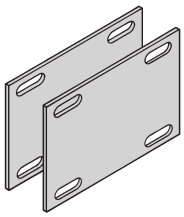


Catalog No.	Tray Series
9A-6006	H46A
9A-6007	H47A, 57A

Expansion Splice Plates

- Expansion plates allow for one inch expansion or contraction of the cable tray, or where expansion joints occur in the supporting structure.
- Furnished in pairs with hardware.
- **Bonding Jumpers are required on each siderail. Order Separately.**

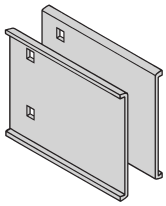
For heavy duty expansion splice plates see page APP-3.



Catalog No.	Height in.	Height mm
9A-1014	4	(101)
9A-1015	5	(127)
9A-1016	6	(152)
9A-1017	7	(178)

Universal Splice Plates

- Furnished in pairs with 3/8" hardware.
- UL Classified.

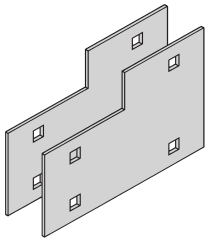


Catalog No.	Height in.	Height mm
9A-1004-1/2	4	(101)
9A-1005-1/2	5	(127)
9A-1006-1/2	6	(152)
9A-1007-1/2	7	(178)

Step Down Splice Plates

- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.

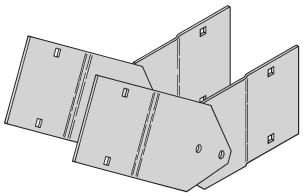
Requires supports within 24" on both sides, per NEMA VE 2.



Catalog No.	Height in.	Height mm
9A-1045	5 to 4	(127 to 101)
9A-1046	6 to 4	(152 to 101)
9A-1060	6 to 5	(152 to 127)
9A-1047	7 to 4	(178 to 101)
9A-1061	7 to 5	(178 to 127)
9A-1062	7 to 6	(178 to 152)

Vertical Adjustable Splice Plates

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Furnished in pairs with hardware.
- Bonding Jumpers not required.



Catalog No.	Height in.	Height mm
9A-1024	4	(101)
9A-1025	5	(127)
9A-1026	6	(152)
9A-1027	7	(178)

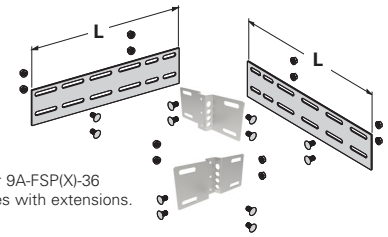
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Adjustable Splice Plates

- Offered to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers **not** required.
- (X) Insert 4, 5, 6 or 7 for side rail height.

9A-FSP(X)
Splice only



9A-FSP(X)-12 or 9A-FSP(X)-36
One pair splice plates with extensions.

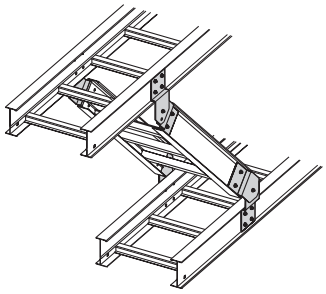
Catalog No.	Width (in.)	Height (in.)	Depth (in.)	Weight (lbs.)
9A-FSP4	8.575	3.891	.820	0.253
9A-FSP5	8.575	4.781	.820	0.312
9A-FSP6	8.575	5.891	.820	0.386
9A-FSP7	8.575	6.891	.820	0.456

Catalog No.	Cable Tray End Cut	Thru Tray Width in.	Thru Tray Width mm	'L' in.	'L' mm
● **9A-FSP(X)**	Mitered	36	(914)	N/A	N/A
● **9A-FSP(X)-12**	Not mitered	12	(305)	16	(406)
● **9A-FSP(X)-36**	Not mitered	36	(914)	41	(1041)

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

Branch Pivot Connectors

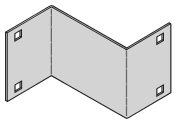
- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers not required).
- Furnished in pairs with hardware.



Catalog No.	Height in.	Height mm
● **9A-2044**	4	(101)
● **9A-2045**	5	(127)
● **9A-2046**	6	(152)
● **9A-2047**	7	(178)

Offset Reducing Splice Plate

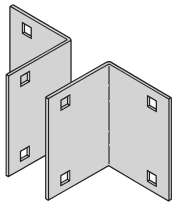
- This plate is used for joining cable trays having different widths. When used in pairs they form a straight reduction; when used singly with a standard splice plate, they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction



Catalog No.	Height in.	Height mm
● **9A-1064-(‡)**	4	(101)
● **9A-1065-(‡)**	5	(127)
● **9A-1066-(‡)**	6	(152)
● **9A-1067-(‡)**	7	(178)

Tray to Box Splice Plates

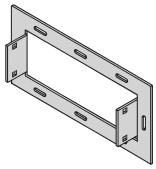
- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware



Catalog No.	Height in.	Height mm
● **9A-1054**	4	(101)
● **9A-1055**	5	(127)
● **9A-1056**	6	(152)
● **9A-1057**	7	(178)

Frame Type Box Connector

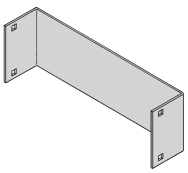
- Designed to attach the end of a cable tray run to a distribution cabinet or control center to help reinforce the box at the point of entry.
- Furnished with tray connection hardware.



Catalog No.	Height in.	Height mm
● **9A-1074-(‡)**	4	(101)
● **9A-1075-(‡)**	5	(127)
● **9A-1076-(‡)**	6	(152)
● **9A-1077-(‡)**	7	(178)

Blind End

- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (‡) Insert tray width



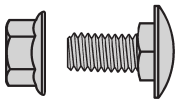
Catalog No.	Height in.	Height mm
● **9A-1084-(‡)**	4	(101)
● **9A-1085-(‡)**	5	(127)
● **9A-1086-(‡)**	6	(152)
● **9A-1087-(‡)**	7	(178)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Standard Tray Hardware (for field installation drill 13/32" hole)

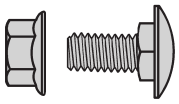
- Finish: Zinc Plated ASTM B633 SC1



Catalog No.	Description
● SNCB 3/8" x 3/4" ZN	Square Neck Carriage Bolt ASTM A307 Grade A
● SFHN 3/8"-16 ZN	Serrated Flange Hex Nut ASTM A563 Grade A

Optional Tray Hardware (for field installation drill 13/32" hole)

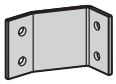
- To order 316 stainless steel hardware add SS6 suffix to catalog number - Example: 9A1004SS6

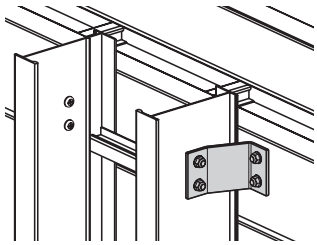


Catalog No.	Description
● SNCB 3/8" x 3/4" SS6	Square Neck Carriage Bolt AISI 316 Stainless Steel
● SFHN 3/8"-16 SS6	Serrated Flange Hex Nut AISI 316 Stainless Steel

Cross Connector Bracket

- For field connecting crossing section.
- Furnished in pairs with 3/8" hardware.

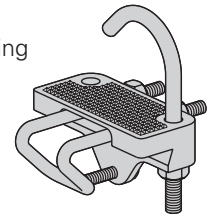


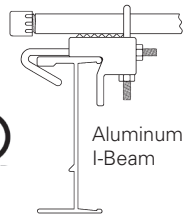


Catalog No.
● 9A-1240

Conduit to Cable Tray Adaptor

- For easy attachment of conduit terminating at a cable tray.
- Use on aluminum or steel cable trays.
- Will not fit on S8A.

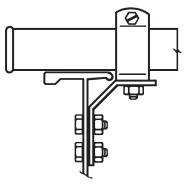




Catalog No.	Conduit Size in.	Conduit Size mm
● 9G-1158-1/2 & 3/4	1/2, 3/4	(15, 20)
● 9G-1158-1 & 1 1/4	1, 1 1/4	(25, 32)
● 9G-1158-1 1/2 & 2	1 1/2, 2	(40, 50)
● 9G-1158-2 1/2 & 3	2 1/2, 3	(65, 80)
● 9G-1158-3 1/2 & 4	3 1/2, 4	(90, 100)

Conduit to Cable Tray Adaptor

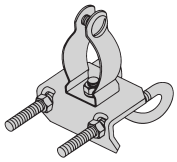
- Assembly required.
- Mounting hardware included.
- Conduit clamps provided.
- (‡) = Insert conduit size (1/2" thru 4").

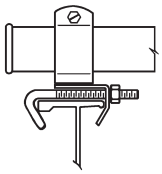


Catalog No.
● 9ZN-1150-(‡)

Conduit to Cable Tray Adaptor

- Assembly required.
- Conduit clamps included.
- Will not fit on S8A.
- (‡) = Insert conduit size (1/2" thru 4").

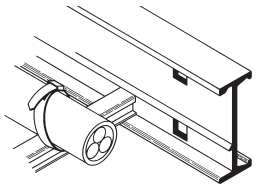




Catalog No.
● 9ZN-1155-(‡)

Cable Tie (Ladder Tray)

- Nylon ties provide easy attachment of cable to ladder rungs; maximum cable O.D. is 3" (76mm).
- Cable ties are UV resistant.



Overall Length 15" (381mm)

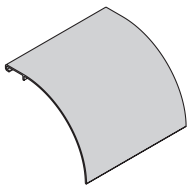
Catalog No.
● 99-2125-15

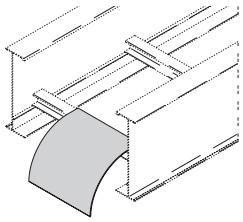
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Ladder Drop-Out

- Specially-designed Ladder Drop-Outs provide a rounded surface with 4" (101 mm) radius to protect cable as it exits from the cable tray, preventing damage to insulation.The drop-out will attach to any desired rung.
- (‡) Insert tray width

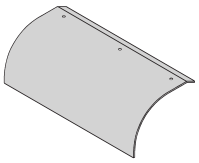




Catalog No.
9A-1104-(‡)

Trough Drop-Out

- This device provides a rounded surface to protect cable as it exits from the cable tray.
- Hardware is included for bottom drop-out.
- (‡) Insert tray width

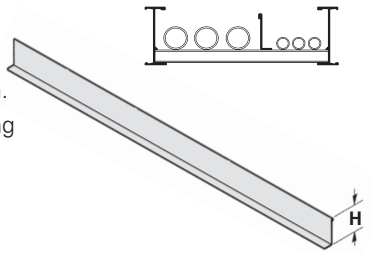


Trough-Type Drop-Out

Catalog No.
9A-1104T-(‡)

Barrier - Straight Section

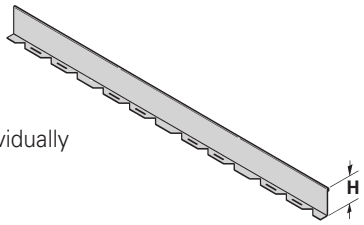
- Length: Insert 120 for [120" - 10 ft.] (3.0 m) or 144 for [144" - 12 ft.] (3.6 m)
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73A-Length	4	(101)	3	(76)
74A-Length	5	(127)	4	(101)
75A-Length	6	(152)	5	(127)
76A-Length	7	(178)	6	(152)

Barrier - Horizontal Bend

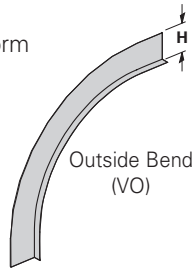
- Horizontal Bend Barriers are flexible in order to conform to any horizontal fitting radius. Can be cut to desired length.
- Standard length is 72" [6 ft.] (1.8 m) - sold individually
- Order catalog number based on loading depth.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73A-90HBFL	4	(101)	3	(76)
74A-90HBFL	5	(127)	4	(101)
75A-90HBFL	6	(152)	5	(127)
76A-90HBFL	7	(178)	6	(152)

Barrier - Vertical Outside Bend

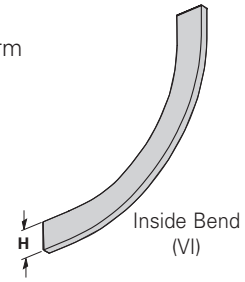
- Vertical Outside Bend Barriers are preformed to conform to a specific vertical outside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73A-(*)VO(†)	4	(101)	3	(76)
74A-(*)VO(†)	5	(127)	4	(101)
75A-(*)VO(†)	6	(152)	5	(127)
76A-(*)VO(†)	7	(178)	6	(152)

Barrier - Vertical Inside Bend

- Vertical Inside Bend Barriers are preformed to conform to a specific vertical inside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73A-(*)VI(†)	4	(101)	3	(76)
74A-(*)VI(†)	5	(127)	4	(101)
75A-(*)VI(†)	6	(152)	5	(127)
76A-(*)VI(†)	7	(178)	6	(152)

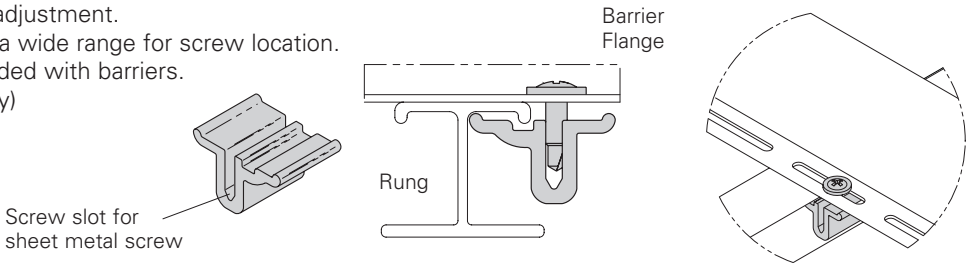
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Barrier Strip Clip

- Provides attachment to rung.
- Allows for installed barrier adjustment.
- Asymmetrical clip provides a wide range for screw location.
- Barriers strip clips not included with barriers. (Must be ordered separately)

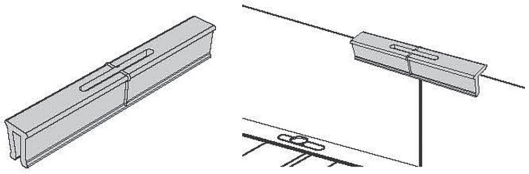
Catalog No.
9A-RBC



Barrier Strip Splice

- 2.85" (72.4mm) long
- Ribbed edge for increased rigidity and grip
- Comfort edge for ease of installation
- Slotted top window with center mark for accurate placement and inspection capability
- Patent pending

Catalog No.
99-9982

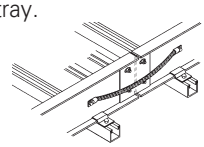


Bonding Jumper

Use at each expansion splice and where the cable tray is not mechanically/electrically continuous to ground. Sold individually.

- Hardware included.
- See table 392.60(A) on page MAN-29 for amperage ratings required to match the UL cross-sectional area of the tray.
- See tray loading chart for UL cross-sectional area.
- Bonding jumper is 14½" (368mm) long.

Catalog No.	Copper Wire Size	Ampacity
99-N1	#1	600
99-30	3/0	1200
99-40	4/0	1200
99-1620	250 MCM	2000

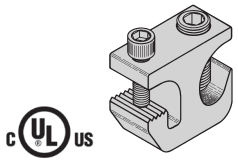


Grounding Clamp

Eaton's B-Line series cable tray is UL® classified as to its suitability as an equipment grounding conductor. If a separate conductor for additional grounding capability is desired, B-Line offers this clamp for bolting the conductor at least once to each cable tray section.

- Accepts #6 AWG to 250 MCM.

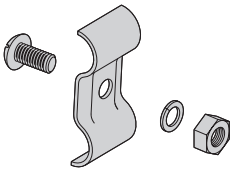
Catalog No.	Material
9A-2130	Tin Plated Aluminum



Ground Wire Clamp

- Mechanically attaches grounding cables to cable tray.
- Hardware included.
- (*) Insert ZN or SS4

Catalog No.	Material
9(*)-2351	#1 thru 2/0
9(*(-2352	3/0 thru 250 MCM

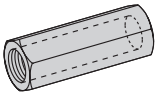


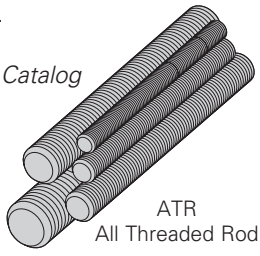
Thread Rod (ATR) & Rod Couplings

Loading based on safety factor 5.
Standard Finish: Zinc plated

See B-Line series Strut Systems Catalog for other sizes and finishes.

Size	Catalog No.	Available Length	Loading
All Threaded Rod			
3/8"-16	ATR 3/8" x Length	36", 72", 120", 144"	730 lbs.
1/2"-13	ATR 1/2" x Length	36", 72", 120", 144"	1350 lbs.
Rod Coupling			
3/8"-16	B655-3/8"	NA	730 lbs.
1/2"-13	B655-1/2"	NA	1350 lbs.


B655
Rod Coupling

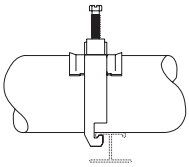

ATR
All Threaded Rod

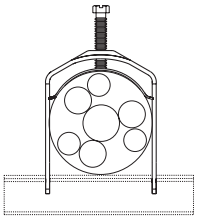
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

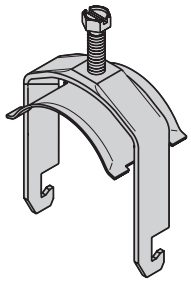
All dimensions in parentheses are millimeters unless otherwise specified.

Stainless Steel Cable Clamp 'P'

- Fits with series 2, 3, & 4 rungs.
- Attaches to rung at any point.
- 14 gauge Type 316 stainless steel material to minimize corrosion and induction heating.
- Plated steel and aluminum also available.





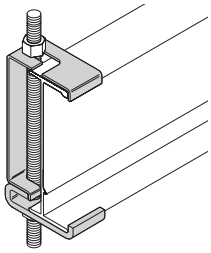


Refer to Section CF Cable Fixing

Catalog No.	Cable Size in.	mm
● BP081SS	.250 - .840	(6.4 - 21.3)
● BP110SS	.810 - 1.100	(20.6 - 28.0)
● BP135SS	.850 - 1.350	(21.6 - 34.8)
● BP175SS	1.250 - 1.750	(31.8 - 44.5)
● BP205SS	1.550 - 2.050	(39.4 - 52.1)
● BP250SS	2.000 - 2.500	(50.8 - 63.5)
● BP300SS	2.500 - 3.000	(63.5 - 76.2)
● BP325SS	2.750 - 3.250	(69.9 - 82.6)
● BP375SS	3.250 - 3.750	(82.6 - 95.3)
● BP425SS	3.750 - 4.250	(95.3 - 108.0)
● BP475SS	4.250 - 4.750	(108.0 - 120.7)

Hanger Rod Clamp

- For 1/2" ATR.
- Furnished in pairs.
- Order ATR and hex nuts separately.
- Two-piece "J"-hanger design.
- 1500 lbs./pair capacity safety factor 3.
- (*) Insert ZN or G

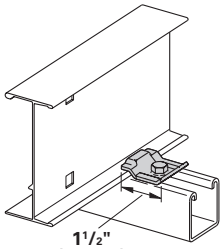


Catalog No.	Height in.	mm
9(*)-5324	4	(101)
9(*)-5325	5	(127)
9(*)-5326	6	(152)
9(*)-5327	7	(178)

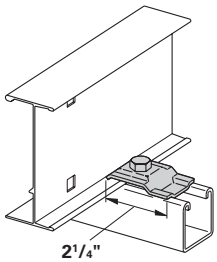
Cable Tray Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs, with or without hardware.
- Not recommended for vertical support.

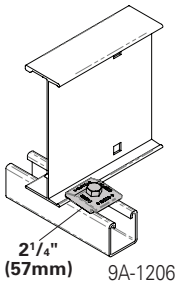
Patent # RE35479



1 1/2" (39mm) 9ZN-1204 shown. Installed as a guide.



2 1/4" (57mm) 9ZN-1208 shown. Installed as a clamp.



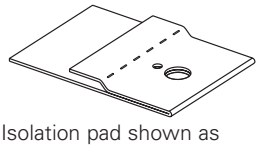
2 1/4" (57mm) 9A-1206 shown. Installed as a clamp.

Catalog No. Without Hardware	With Hardware	Overall Length in. (mm)	Hardware Size in.	Finish
● 9ZN-1204	● 9ZN-1204NB	1 1/2 (38)	1/4"	G90
● 9ZN-1208	● 9ZN-1208NB	2 1/4 (57)	3/8"	G90
● 9A-1206	9A-1206NB	2 1/4 (57)	3/8"	Alum.
● 9A-1205	—	2 1/4 (57)	1/2"	Alum.
● 9G-1205	—	2 1/4 (57)	1/2"	HDGAF
● 9SS6-1205	—	2 1/4 (57)	1/2"	316SS
● 9ZN-1205	—	2 1/4 (57)	1/2"	G90

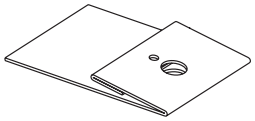
Note: For heavy duty or vertical applications see 9(*)-1241 or 9(*)-1242 page I-22

Isolator Pad

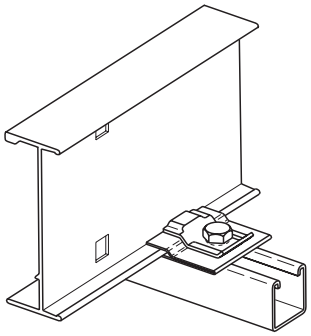
- Use as a friction reducer and/or as a dissimilar metal isolator barrier.
- UV resistant HDPE.
- Temperature range: -100 to 160° F.
- Designed to use with 9(*)-1205 or 9(*)-1208 clamp/guide.
- Color - White.



Isolation pad shown as when used with a guide.



Isolation pad shown with top flange doubled under for clamp application.



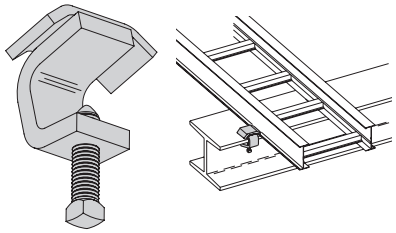
Catalog No.
● 99-PE34

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cable Tray Clamp

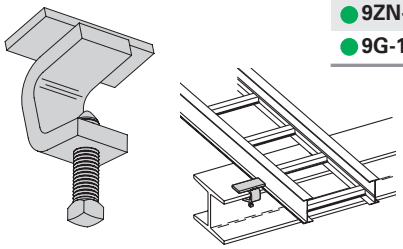
- Hold-down clamps for single or double cable tray runs.
- No drilling of support I-beam or channel is required.
- Sold in pieces - two clamps are required per tray.
- Maximum beam flange thickness 1 1/8" (28.58 mm).



Catalog No.	Finish
9ZN-1249HD	Znplt
9G-1249HD	HDGAF

Cable Tray Guide

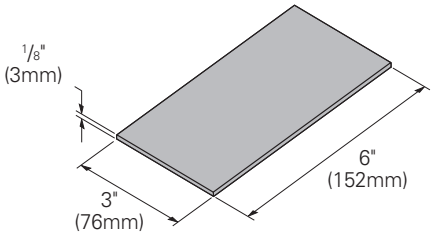
- Expansion guide for single or double cable tray runs.
- Guide allows for longitudinal movement of the cable tray.
- No field drilling of support I-beam or channel is required.
- Guides are required on both sides of cable tray to prevent lateral movement - can be placed on either the inside or outside flange of cable tray.
- Guides are sold in pieces - two guides are required per tray.
- Maximum flange thickness 1 1/8" (28.58 mm).



Catalog No.	Finish
9ZN-1249	Znplt
9G-1249	HDGAF

Nylon Pad

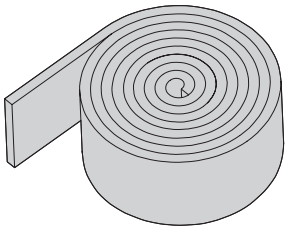
- Use for friction reduction.
- Hardness: Shore D80.
- Low friction coefficient.
- UV resistant.
- Excellent weatherability.
- UL - 94HB.



Catalog No.
99-PE36

Neoprene Roll

- Use for material isolation.
- 1/8" x 2" x 25' roll.
- Hardness: Shore A60.
- Good weatherability.



Catalog No.
99-NP300

DURA-BLOK™ Rooftop Support Bases with B22 Channel

- Designed as a superior rooftop support for cable tray,
- UV resistant and approved for most roofing material or other flat surfaces.
- Can be used with any of B-Line series cable tray clamps and guides.
- Ultimate Load Capacity: 1,000 lbs. (uniform load)

Catalog No.	Height x Width x Length in.	(mm)
DB10-28	5 5/8 x 6 x 28.0	(143 x 152 x 711)
DB10-36	5 5/8 x 6 x 36.0	(143 x 152 x 914)
DB10-42	5 5/8 x 6 x 42.0	(143 x 152 x 1067)
DB10-50	5 5/8 x 6 x 50.0	(143 x 152 x 1270)
DB10-60	5 5/8 x 6 x 60.0	(143 x 152 x 1524)

LEEDS credit available, base made from 100% recycled material.

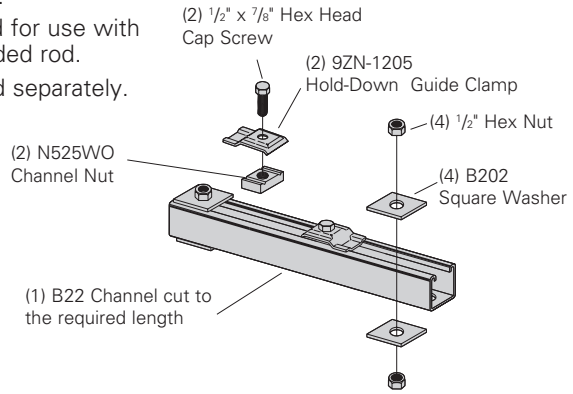
General Note: Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

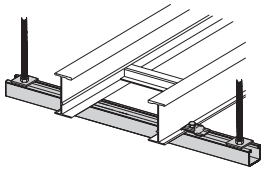
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Trapeze Support Kit

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminate the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with ½" threaded rod.
  Order rod separately.





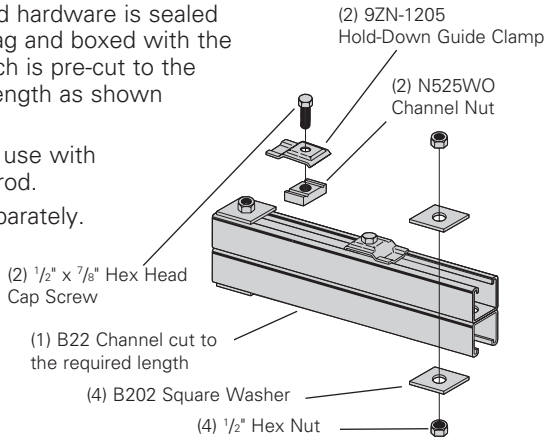
Catalog No.	Tray Width in.	Tray Width mm	Channel Length in.	Channel Length mm	Uniform Load lbs	Uniform Load kN
● 9(*)-5506-22SH(†)	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SH(†)	9	(229)	18	(457)	1250	(5.56)
● 9(*)-5512-22SH(†)	12	(305)	22	(559)	1125	(5.00)
● 9(*)-5518-22SH(†)	18	(457)	28	(711)	865	(3.85)
● 9(*)-5524-22SH(†)	24	(610)	34	(864)	700	(3.11)
● 9(*)-5530-22SH(†)	30	(762)	40	(1016)	590	(2.62)
● 9(*)-5536-22SH(†)	36	(914)	46	(1168)	510	(2.27)
● 9(*)-5542-22SH(†)	42	(1067)	52	(1321)	450	(2.00)

- (*) Insert P G or GRN
- (†) Insert ⅜ for ⅜" threaded rod hardware.

Safety factor of 3.0 on all loads.

Heavy Duty Trapeze Support Kit

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminates the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with ½" threaded rod.
  Order rod separately.

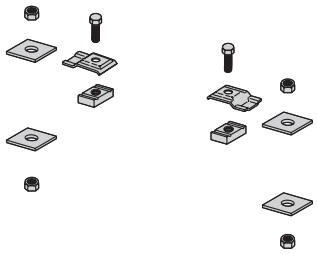


Catalog No.	Tray Width in.	Tray Width mm	Channel Length in.	Channel Length mm	Uniform Load lbs	Uniform Load kN
● 9(*)-5506-22SHA	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SHA	9	(229)	18	(457)	1350	(6.00)
● 9(*)-5512-22SHA	12	(305)	22	(559)	1350	(6.00)
● 9(*)-5518-22SHA	18	(457)	28	(711)	1350	(6.00)
● 9(*)-5524-22SHA	24	(610)	34	(864)	1350	(6.00)
● 9(*)-5530-22SHA	30	(762)	40	(1016)	1350	(6.00)
● 9(*)-5536-22SHA	36	(914)	46	(1168)	1350	(6.00)
● 9(*)-5542-22SHA	42	(1067)	52	(1321)	1350	(6.00)

- (*) Insert P G or GRN

Safety factor of 3.0 on all loads.

Trapeze Hardware Kit



Catalog No.	● 9ZN-5500-½	● 9G-5500-½
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw ½ x ⅞ ZN 2 N525 WO ZN 4 B202 ZN ½" sq washer 4 HN ½ ZN	1 pr. 9G-1205 2 HHC Screw ½ x ⅞ SS6 2 N525 WO SS6 4 B202 HDG ½" sq washer 4 HN ½" SS6

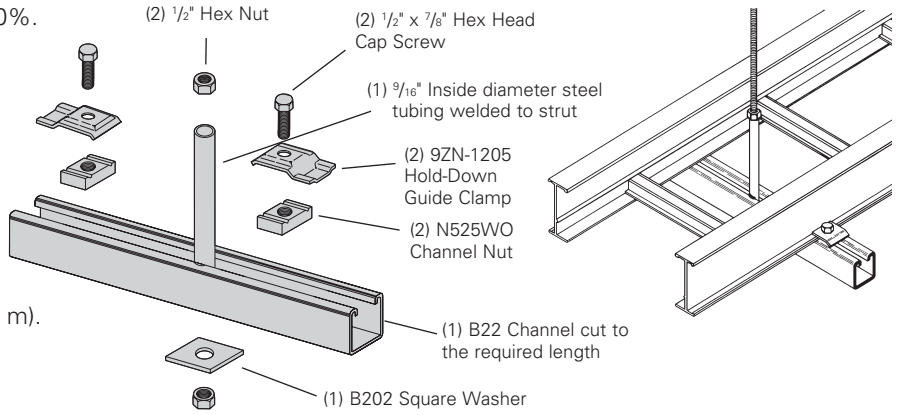
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

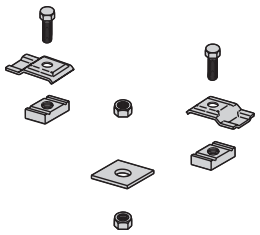
Center Hung Tray Support

- Center Hung Cable Tray Support allows cable to be laid-in from both sides.
- Eliminates costly cable pulling and field cutting of cable tray supports. Labor costs are dramatically reduced.
- Required hardware and threaded rod material for trapeze assemblies are reduced by up to 50%.
- Designed for use with 1/2" threaded rod. (Order rod separately)
- Use with all aluminum and steel cable trays through 24" width.
- Load capacity is 700 lbs. (311kN) per support. Safety factor of 3.0. Eccentric loading is not to exceed a 60% vs. 40% load differential.
- The maximum recommended unsupportedspan length is 144"/12 ft. (3.66 m).
- Hardware shown is furnished.
- Finish available: Zinc Plated

Catalog No.	Tray Width in.	Tray Width (mm)	Channel Length in.	Channel Length (mm)
●9ZN-5212	6", 9", 12"	(152, 228, 305)	18"	(457)
●9ZN-5224	18", 24"	(457, 609)	30"	(762)



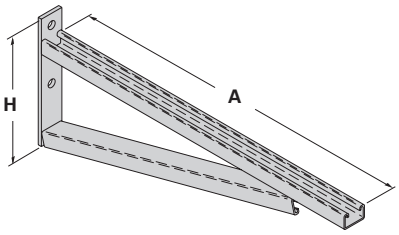
Center Hung Support Hardware Kit



Catalog No.	● 9ZN-5200
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw 1/2 x 7/8 ZN 2 N525 WO ZN 1 B202 ZN 1/2" sq washer 4 HN 1/2 ZN

Bracket (12" - 48")

- (*) Insert available finish: ZN GRN or HDG
- Safety Load Factor 2.5



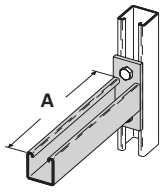
Bottom brace is B42 channel on B494-24 and smaller and B22 channel on B494-30 and larger

Catalog No.	Uniform Load lbs	Uniform Load (kN)	Tray Width in.	Tray Width (mm)	'A' in.	'A' (mm)	'H' in.	'H' (mm)
●B494-12	2500	(11.12)	6 & 9	(152 & 229)	12	(305)	8 3/4	(222)
●B494-18	1700	(7.56)	12	(305)	18	(457)	8 3/4	(222)
●B494-24	1300	(5.78)	18	(457)	24	(610)	8 3/4	(222)
B494-30	1600	(7.11)	24	(610)	30	(762)	11 1/4	(286)
B494-36	1100	(4.89)	30	(762)	36	(914)	11 1/4	(286)
B494-42	980	(4.36)	36	(914)	42	(1067)	16	(406)
B494-48	980	(4.36)	42	(1067)	48	(1219)	16	(406)

For more dimensional data see Strut Systems catalog

Cantilever Bracket

- (*) Insert available finish: ZN GRN HDG SS4 or SS6
- Safety Load Factor 2.5



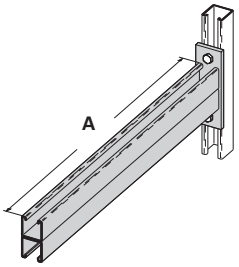
Catalog No.	Uniform Load lbs	Uniform Load kN	Tray Width in.	Tray Width mm	'A' in.	'A' mm
B409-12	960	(4.27)	6 & 9	(152 & 229)	12	(305)
B409-18	640	(2.84)	12	(305)	18	(457)
B409-24	480	(2.13)	18	(457)	24	(610)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cantilever Bracket

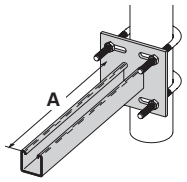
- (*) Insert available finish: ZN GRN HDG or SS4
- Safety Load Factor 2.5



Catalog No.	Uniform Load lbs	Uniform Load kN	Tray Width in.	Tray Width mm	'A' in.	'A' mm
B297-12	1660	(7.38)	6 & 9	(152 & 229)	12	(305)
B297-18	1100	(4.89)	12	(305)	18	(457)
B297-24	835	(3.71)	18	(457)	24	(610)
B297-30	665	(2.93)	24	(610)	30	(762)
B297-36	550	(2.44)	30	(762)	36	(914)
B297-42	465	(2.06)	36	(914)	42	(1067)

Underfloor Support (U-Bolts not included)

- Finishes available: ZN
- Safety Load Factor 2.5

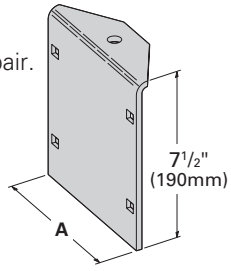


U-Bolt Size	Fits Pipe O.D.
B501-3/4	.841 - 1.050
B501-1	1.051 - 1.315
B501-1 1/4	1.316 - 1.660
B501-1 1/2	1.661 - 1.900
B501-2	1.901 - 2.375
B501-2 1/2	2.376 - 2.875

Catalog No.	Uniform Load lbs	Uniform Load (kN)	Tray Width in.	Tray Width (mm)	'A' in.	'A' (mm)
B409UF-12	800	(3.56)	6 & 9	(152 & 229)	12	(305)
B409UF-21	450	(2.00)	12 & 18	(305 & 457)	21	(533)

Vertical Hanger Splice Plates

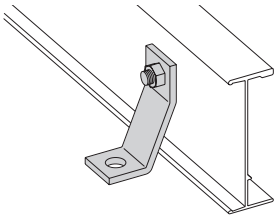
- Design load is 1500 lbs (6.67kN) per pair.
- Safety Factor of 2.5
- Furnished in pairs.
- Hole size: 9/16" (14mm) for 1/2" threaded rod.



Catalog No.	Outside Cable Tray Ht.	'A' in.	'A' (mm)
● 9A-1224	4"	3.84	(97.54)
● 9A-1225	5"	4.73	(120.14)
● 9A-1226	6"	5.84	(148.34)
● 9A-1227	7"	6.84	(173.74)

Heavy Duty Hold Down Bracket

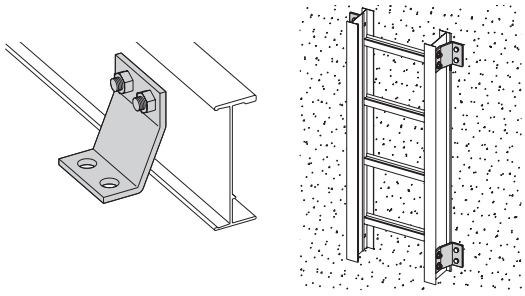
- Design load is 2000 lbs (8.89kN) per pair.
- Two bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided.
- 3/8" support attachment hardware **not** provided.
- (*) Insert ZN SS4 or SS6
- Recommended for support of vertical trays.



Catalog No.
9(*)-1241

Heavy Duty Hold Down Bracket

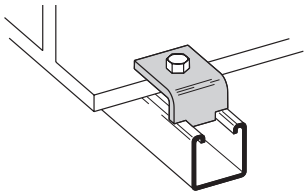
- Design load is 4000 lbs (17.79kN) per pair.
- Four bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided
- 3/8" support attachment hardware **not** provided.
- (*) Insert ZN SS4 or SS6
- Recommended for support of vertical trays.



Catalog No.
9(*)-1242

Beam Clamp

- Finishes available: ZN GRN HDG or SS4
- Sold in pieces.
- Design load is 1200 lbs (5.34kN) per pair.
- Safety Load Factor 5.0.
- Order HHCS and Channel Nuts separately.



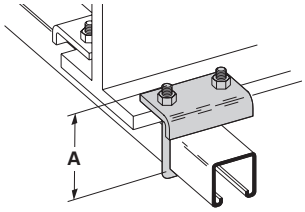
Catalog No.
B355

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

All dimensions in parentheses are millimeters unless otherwise specified.

Beam Clamp

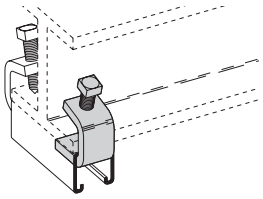
- Finishes available: ZN or HDG
- Sold in pieces.
- *Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	Design Load lbs (kN)	'A' in. (mm)
B441-22	1200 (5.34)	3 3/8 (86)
B441-22A	1200 (5.34)	5 (127)

Beam Clamp

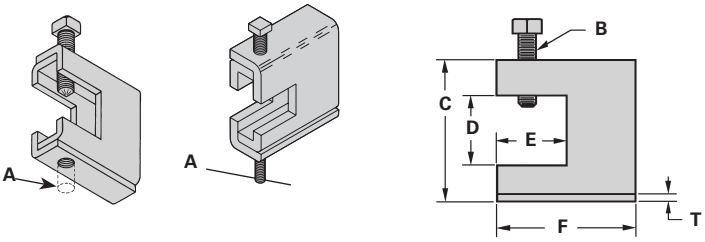
- Finishes available: ZN or HDG
- Sold in pieces.
- *Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	B212-1/4	B212-3/8
Design Load *	600 lbs. (2.67kN)	1000 lbs. (4.45 kN)
Max. Flange Thick	3/4" (19 mm)	1 1/8" (28.6 mm)
Mat'l. Thickness	1/4" (6.3 mm)	3/8" (9.5 mm)

B305 Thru B308 & B321 Series Beam Clamps

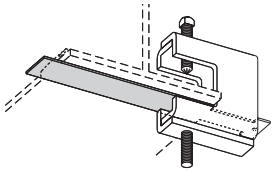
- Finishes available: ZN or HDG
- Setscrew included.
- Safety Load Factor 5.0



Catalog No.	Rod Size A	B	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	T in. (mm)	Design Load lbs (kN)
B305	3/8"-16	3/8"-16	2 5/16 (58.7)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	11 Ga. (3.0)	600 (2.67)
B306	3/8"-16	1/2"-13	2 7/16 (61.9)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	7 Ga. (4.5)	1100 (4.90)
B307	1/2"-13	1/2"-13	2 7/16 (61.9)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	7 Ga. (4.5)	1100 (4.90)
B308	1/2"-13	1/2"-13	2 9/16 (65.1)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	1/4 (6.3)	1500 (6.68)
B321-1	3/8"-16	1/2"-13	3 9/16 (90.5)	1 11/16 (42.9)	1 5/8 (41.3)	3 1/4 (82.5)	1/4 (6.3)	1300 (5.79)
B321-2	1/2"-13	1/2"-13	3 9/16 (90.5)	1 11/16 (42.9)	1 5/8 (41.3)	3 1/4 (82.5)	1/4 (6.3)	1400 (6.23)

Anchor Strap - for B305 thru B308 & B321 Series

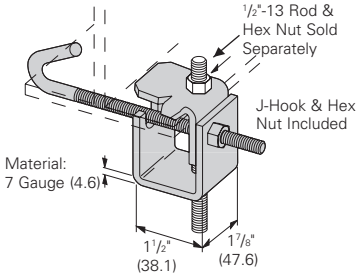
- Finish available: ZN
- For a maximum beam thickness of 3/4" (19mm).
- For thicker beams, step up one flange width size.



Catalog No.	Flange Width in. (mm)
B312-6	Up to 6 (Up to 152)
B312-9	6 - 9 (152 to 228)
B312-12	9 - 12 (228 to 305)

Beam Clamp

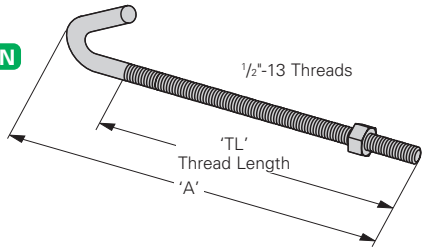
- Finish available: ZN
- Design Load 500 lbs. (2.22 kN)
- Safety Load Factor 5.0
- Recommended torque: 'J'-Hook Nut 125 In.-Lbs. (14.1 kN/m)
- Maximum flange thickness of 3/4" (19mm).



Catalog No.	For Flange Width in. (mm)	Wt./C lbs (kg)
B750-J4	3 - 6 (76.2 - 152.4)	109 (49.4)
B750-J6	5 - 9 (127.0 - 288.6)	124 (56.2)
B750-J9	8 - 12 (203.2 - 304.8)	135 (61.,2)
B750-J12	11 - 15 (279.4 - 381.0)	147 (66.7)

'J'-Hook

- Finishes available: ZN
- Hex Nut included.

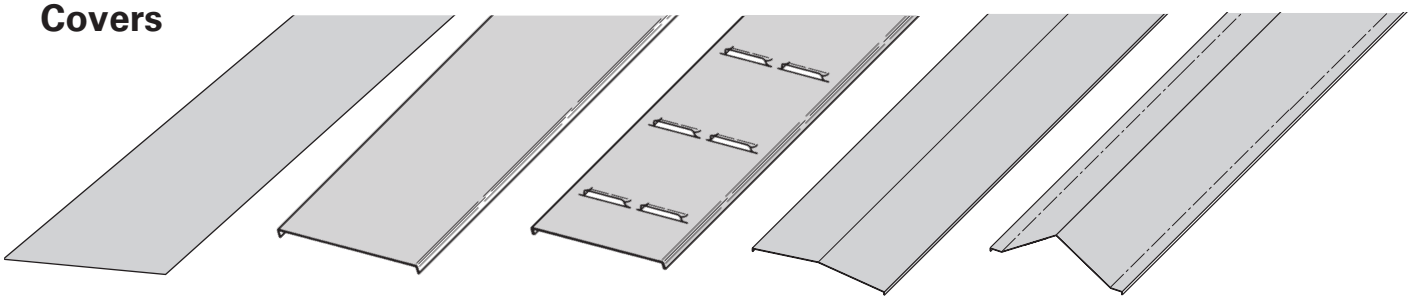


Catalog No.	'A' in. (mm)	'TL' in. (mm)	Wt./C lbs (kg)
B700-J4	8 1/2 (215.9)	5 (127.0)	44 (19.9)
B700-J6	11 1/2 (292.1)	6 (152.4)	53 (24.0)
B700-J9	12 1/4 (368.3)	6 (152.4)	63 (28.6)
B700-J12	17 1/2 (444.5)	6 (152.4)	78 (35.4)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Covers



Solid Non-Flanged | Solid Flanged | Ventilated Flanged | Peaked Flanged | 2 to 3 Pitch Peaked Flanged (See page APP-4)

A full range of covers is available for straight sections and fittings.

Solid covers should be used when maximum enclosure of the cable is desired and no accumulation of heat is expected.
Ventilated covers provide an overhead cable shield, yet allow heat to escape.

We recommend that covers be placed on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a 1/2 in. (13 mm) flange. Cover clamps are not included with the cover and must be ordered separately. All **peaked covers** are flanged. Standard peaked covers have 1/2" peak. Special purpose peaked covers, having a 2 to 3 pitch, provide additional slope and material thickness. The 2 to 3 pitch fitting covers are of multiple piece, welded construction.

Aluminum Cover Part Numbering

Example: **80 7 A - 24 - 144** (Prefix)

Cover Type
- 80 = Solid
- 81 = Ventilated
- 82 = Peaked

Detail
- 6 = Non-Flanged (80 & 81 type only)
- 7 = Flange

Material
- A = Aluminum

Tray Width
- 06 = 6"
- 09 = 9"
- 12 = 12"
- 18 = 18"
- 24 = 24"
- 30 = 30"
- 36 = 36"

Item Description
For Straight Section Cover:
- 144 = 12 ft. (3.66 m)
- 120 = 10 ft. (3.05 m)
- 72 = 6 ft. (1.83 m)
- 60 = 5 ft. (1.52 m)

For fitting covers: Insert suffix of fitting to be covered. See example below.

Examples of Catalog Numbers for Fitting Covers:

Horizontal Bend Cover

Prefix: 80 7 A - Suffix: 18 - 90 HB 24

- 24 = Radius
- HB = Fitting
- 90 = Angle
- 18 = Width
- A = Material
- 7 = Detail
- 80 = Cover Type

Vertical Bend Cover

Prefix: 80 7 A - Suffix: 24 - 90 VO 24 - 4*

- 4* = Side Rail* Height
- 24 = Radius
- VO = Fitting
- 90 = Angle
- 24 = Width
- A = Material
- 7 = Detail
- 80 = Cover Type

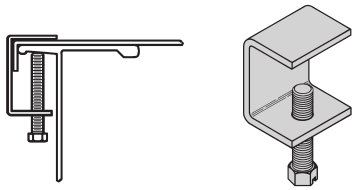
* Required for VO fittings only

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

All dimensions in parentheses are millimeters unless otherwise specified.

Standard Cover Clamp

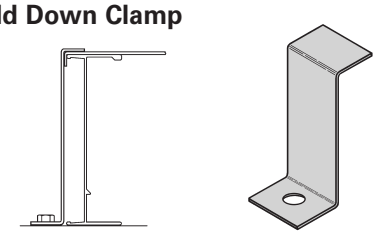
- For indoor service only.
- Setscrew included.
- Sold per piece.



Tray Type	Catalog No.	Side Rail Height
Aluminum	● 9ZN-9012	All Sizes
	● 9A-9012	

Combination Cover and Hold Down Clamp

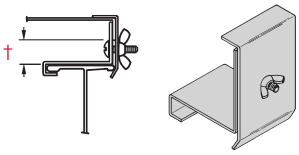
- Sold per piece.
- For indoor service only.



Tray Type	Catalog No.	Side Rail Height in.	(mm)
Aluminum	● 9A-9043	4	(101)
	● 9A-9053	5	(127)
	● 9A-9063	6	(152)
	● 9A-9073	7	(78)

Raised Cover Clamp

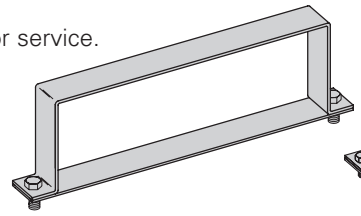
- For indoor service only.
- For use with flanged covers only.
  † Specify gap of 1", 2", 3" or 4".



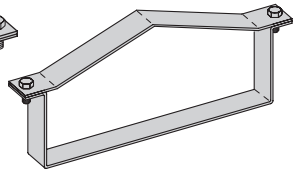
Tray Type	Catalog No.	Side Rail Height
Aluminum	● 9ZN-9112-†	4 & 5 Deep
	● 9ZN-9113-†	6 & 7 Deep

Heavy Duty Cover Clamp

- Recommended for outdoor service.
- (‡) Insert tray width
  †Add P to Catalog No. for peaked cover clamp.



Peaked Cover Clamp



Catalog No.	Side Rail Height in.	mm
● 9A-(‡)-9044†	4	(101)
● 9A-(‡)-9054†	5	(127)
● 9A-(‡)-9064†	6	(152)
● 9A-(‡)-9074†	7	(178)

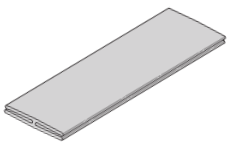
Quantity of Standard Cover Clamps Required

Notes:
When using the Heavy Duty Cover Clamp, only on-half the number of clamps stated above is required.
Additional clamps may be necessary in extreme wind applications.

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.

Cover Joint Strip

- Used to join covers
- Plastic
- Only for use on flat covers
- Color - gray.
- (‡) Insert tray width



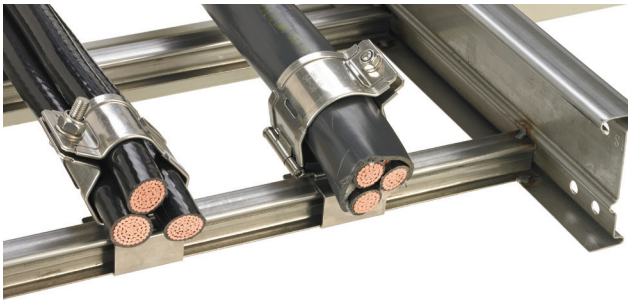
Catalog No.
● 99-9980-(‡)

Cable Cleats

(see pages N-1 thru N-5) Standard

Trefoil Cable Cleats

Single Cable Cleats



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

All dimensions in parentheses are millimeters unless otherwise specified.

Section 1- Acceptable Manufacturers

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

Section 2- Cable Tray Sections and Components

2.01 General: Except as otherwise indicated, provide metal 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.

2.02 Materials and Finish: Straight section and fitting side rails and rungs shall be extruded from Aluminum Association Alloy 6063. All fabricated parts shall be made from Aluminum Association Alloy 5052.

2.03 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded 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 over and above the cable load with a safety factor of 1.5.

2.04 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.

2.05 Straight sections shall have side rails fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.

2.06 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.

2.06 Splice plates shall be the Wedge-Lock design with 4 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.

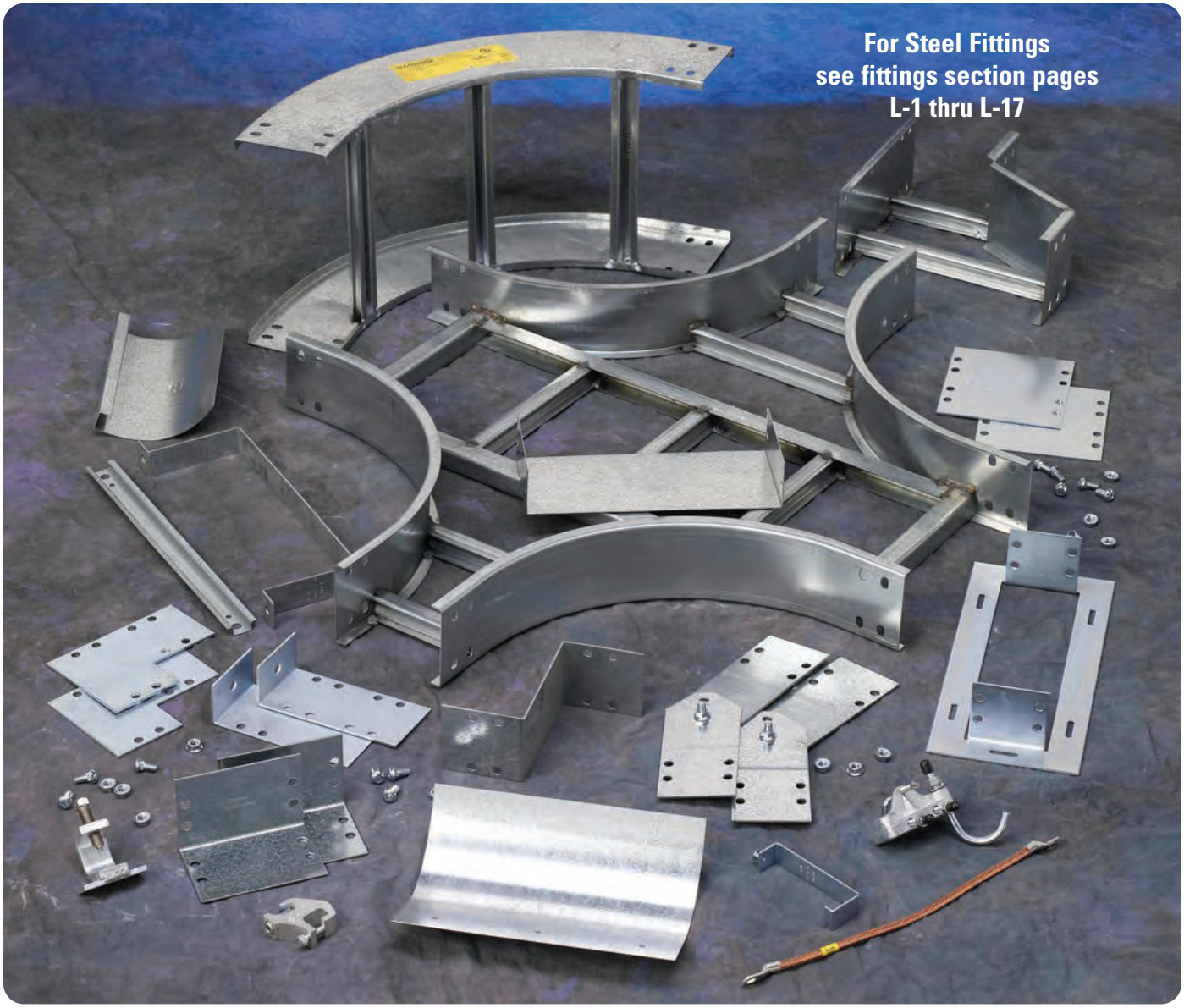
2.08 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

Section 3- Loading Capacities and Testing

3.01 Cable tray shall be capable of carrying a uniformly distributed load of _____ lbs./ft. on a _____ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.

3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.

Series 2, 3, 4, & 5 Steel - Straight Sections



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: **258G 12 - 24 - 144**

Part will have a long lead time because of the 258G material.

Changing the part number from 258G to 258P will change the coding to black and reduce lead time.

3" NEMA VE 1 Loading Depth
4" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **248 P 09 - 24 - 144**

Series

- **248**
- **346**
- **444**

Material

- **P** = Pre-Galvanized
- **G** = HDGAF

***Type**

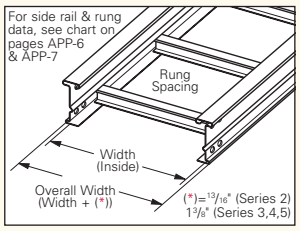
- **SB** = Solid Bottom
- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

***Width**

- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

Length

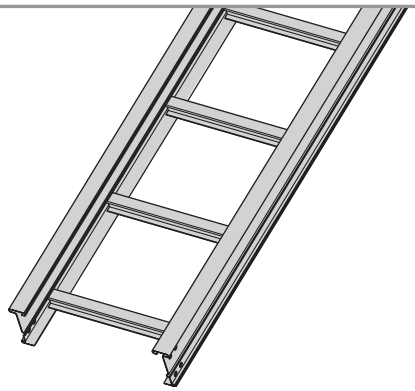
① **144** = 12 ft.	248
②120 = 10 ft.	
① **240** = 20 ft.	346
②144 = 12 ft.	
① **240** = 20 ft.	444
②288 = 24 ft.	



①Primary Length.
②Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)

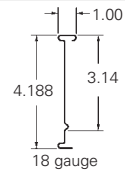
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

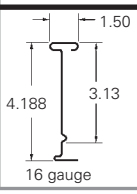
All dimensions in parentheses are millimeters unless otherwise specified.

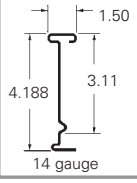
3" NEMA VE 1 Loading Depth
4" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
248		NEMA: 16A, 12C CSA: D1-3m UL Cross-Sectional Area: 0.40 in²	6	412*	0.0007	Area = 0.62 in² Sx = 0.64 in³ Ix = 1.43 in⁴	1.8	613*	0.012	Area = 4.00 cm² Sx = 10.49 cm³ Ix = 59.52 cm⁴
			8	232	0.0022		2.4	345	0.038	
			10	148	0.0054		3.0	221	0.093	
			12	103	0.011		3.7	153	0.192	
			14	76	0.021		4.3	113	0.356	
			16	58	0.036		4.9	86	0.607	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
346		NEMA: 20A, 16B CSA: D1-6m UL Cross-Sectional Area: 0.70 in²	10	252	0.0036	Area = 0.89 in² Sx = 0.96 in³ Ix = 2.22 in⁴	3.0	375	0.060	Area = 5.74 cm² Sx = 15.73 cm³ Ix = 92.40 cm⁴
			12	175	0.0072		3.7	260	0.124	
			14	129	0.013		4.3	191	0.229	
			16	98	0.023		4.9	146	0.391	
			18	78	0.037		5.5	116	0.626	
			20	63	0.056		6.1	94	0.955	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
444		NEMA: 20B, 16C CSA: E-3m UL Cross-Sectional Area: 1.00 in²	12	253	0.0055	Area = 1.19 in² Sx = 1.27 in³ Ix = 2.94 in⁴	3.7	376	0.093	Area = 7.68 cm² Sx = 20.81 cm³ Ix = 122.37 cm⁴
			16	142	0.027		4.9	212	0.295	
			18	112	0.028		5.5	167	0.473	
			20	91	0.042		6.1	135	0.721	
			22	75	0.062		6.7	112	1.055	
			24	63	0.088		7.3	94	1.495	

*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

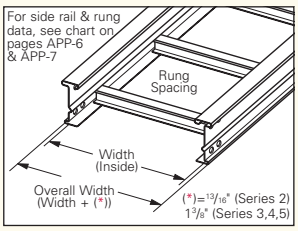
4" NEMA VE 1 Loading Depth
5" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **258 P 09 - 24 - 144**

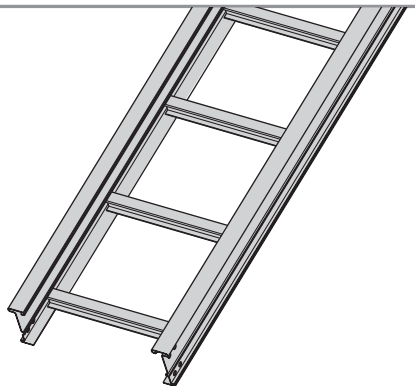
Series	Material	*Type	*Width	Length
● **258**	● **P** = Pre-Galvanized	**SB** = Solid Bottom	● **06** = 6"	● ①**144** = 12 ft.
● **356**	● **G** = HDGAF	● **06** = 6" rung spacing	● **09** = 9"	● ②120 = 10 ft. (258)
● **454**		● **09** = 9" rung spacing	● **12** = 12"	● ①**240** = 20 ft.
		● **12** = 12" rung spacing	● **18** = 18"	● ②144 = 12 ft. (356)
			● **24** = 24"	● ①**240** = 20 ft.
			● **30** = 30"	● ②288 = 24 ft. (454)
			● **36** = 36"	



①Primary Length.
②Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)

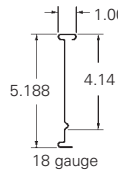
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

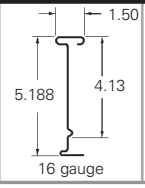
All dimensions in parentheses are millimeters unless otherwise specified.

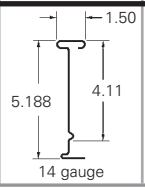
4" NEMA VE 1 Loading Depth
5" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
258		NEMA: 16A, 12C CSA: D1-3m UL Cross-Sectional Area: 0.40 in²	6	436*	0.0004	Area = 0.71 in² Sx = 0.89 in³ Ix = 2.44 in⁴	1.8	649*	0.007	Area = 4.58 cm² Sx = 14.58 cm³ Ix = 101.56 cm⁴
			8	245	0.0013		2.4	365	0.022	
			10	157	0.0032		3.0	234	0.054	
			12	109	0.0066		3.7	162	0.113	
			14	80	0.012		4.3	119	0.209	
			16	61	0.021		4.9	91	0.356	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
356		NEMA: 20A, 16C CSA: D1-6m UL Cross-Sectional Area: 0.70 in²	10	276	0.0021	Area = 1.00 in² Sx = 1.31 in³ Ix = 3.73 in⁴	3.0	411	0.036	Area = 6.45 cm² Sx = 21.47 cm³ Ix = 155.25 cm⁴
			12	192	0.0043		3.7	285	0.074	
			14	141	0.0080		4.3	210	0.136	
			16	108	0.014		4.9	160	0.233	
			18	85	0.022		5.5	127	0.373	
			20	69	0.033		6.1	103	0.568	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
454		NEMA: 20C CSA: E-6m UL Cross-Sectional Area: 1.00 in²	12	294	0.0032	Area = 1.34 in² Sx = 1.75 in³ Ix = 4.96 in⁴	3.7	438	0.055	Area = 8.65 cm² Sx = 28.68 cm³ Ix = 206.45 cm⁴
			16	166	0.010		4.9	246	0.175	
			18	131	0.016		5.5	195	0.280	
			20	106	0.026		6.1	158	0.427	
			22	88	0.037		6.7	130	0.625	
			24	74	0.052		7.3	110	0.886	

*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

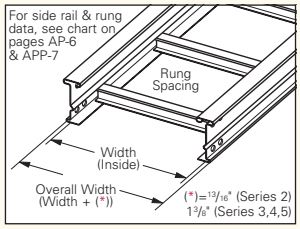
5" NEMA VE 1 Loading Depth
6" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **268 P 09 - 24 - 144**

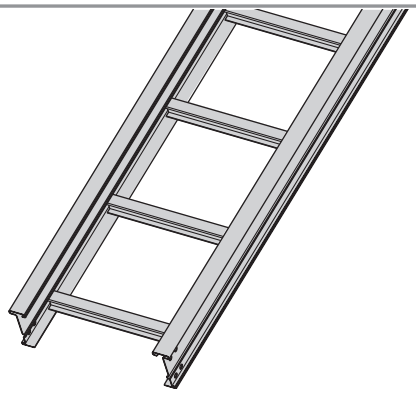
Series	Material	*Type	*Width	Length
● **268**	● **P** = Pre-Galvanized	**SB** = Solid Bottom	● **06** = 6"	● ① **144** = 12 ft.
	● **G** = HDGAF	● **06** = 6" rung spacing	● **09** = 9"	● ② 120 = 10 ft. (268)
● **366**		● **09** = 9" rung spacing	● **12** = 12"	● ① **240** = 20 ft.
		● **12** = 12" rung spacing	● **18** = 18"	● ② 144 = 12 ft. (366)
● **464**			● **24** = 24"	● ① **240** = 20 ft.
			● **30** = 30"	● ② 288 = 24 ft. (464)
			● **36** = 36"	



①Primary Length.
②Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)

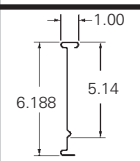
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

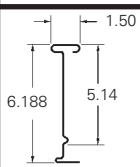
All dimensions in parentheses are millimeters unless otherwise specified.

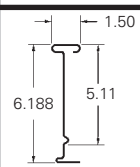
5" NEMA VE 1 Loading Depth
6" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
268		NEMA: 16A, 12C CSA: D1-3m UL Cross-Sectional Area: 0.70 in²	6	440*	0.0003		1.8	655*	0.005	
			8	248	0.0008	Area = 0.80 in²	2.4	368	0.014	Area = 5.16 cm²
			10	158	0.0020	Sx = 1.18 in³	3.0	236	0.035	Sx = 19.34 cm³
			12	110	0.0042	Ix = 3.81 in⁴	3.7	164	0.072	Ix = 158.58 cm⁴
			14	81	0.0078		4.3	120	0.134	
			16	62	0.013		4.9	92	0.228	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
366		NEMA: 20B, 16C CSA: E-6m UL Cross-Sectional Area: 1.00 in²	10	300	0.0014		3.0	446	0.023	
			12	208	0.0028	Area = 1.11 in²	3.7	310	0.048	Area = 7.16 cm²
			14	153	0.0052	Sx = 1.71 in³	4.3	228	0.089	Sx = 28.02 cm³
			16	117	0.0089	Ix = 5.74 in⁴	4.9	174	0.151	Ix = 238.92 cm⁴
			18	93	0.014		5.5	138	0.242	
			20	75	0.022		6.1	112	0.369	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
464		NEMA: 20C CSA: E-6m UL Cross-Sectional Area: 1.00 in²	12	342*	0.002		3.7	508*	0.035	
			16	192	0.007	Area = 1.49 in²	4.9	286	0.113	Area = 9.61 cm²
			18	152	0.011	Sx = 2.27 in³	5.5	226	0.182	Sx = 37.36 cm³
			20	123	0.016	Ix = 7.65 in⁴	6.1	183	0.277	Ix = 318.42 cm⁴
			22	102	0.024		6.7	151	0.406	
			24	85	0.034		7.3	127	0.574	

*When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.272 kg/m) for 30" cable tray width and 325 lbs/ft (483.6 kg/m) for 36" cable tray width. When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

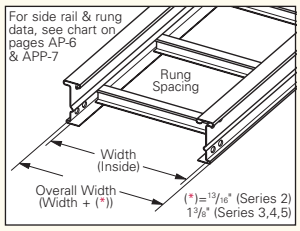
6" NEMA VE 1 Loading Depth
7" Side Rail Height

Straight Section Part Numbering

Prefix

Example: **378 P 09 - 24 - 144**

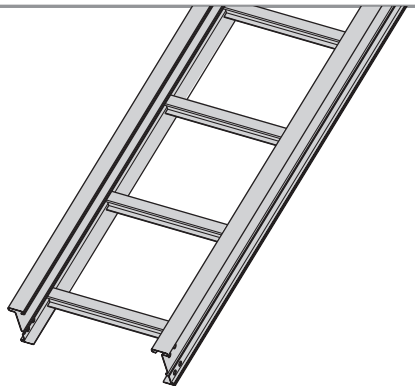
Series	Material	*Type	*Width	Length	
● **378**	● **P** = Pre-Galvanized ● **G** = HDGAF	**SB** = Solid Bottom ● **06** = 6" rung spacing ● **09** = 9" rung spacing ● **12** = 12" rung spacing	● **06** = 6" ● **09** = 9" ● **12** = 12" ● **18** = 18" ● **24** = 24" ● **30** = 30" ● **36** = 36"	● ① **144** = 12 ft. ● ② 120 = 10 ft.	378
● **476**				● ① **240** = 20 ft. ● ② 144 = 12 ft.	476
● **574**				● ① **240** = 20 ft. ● ② 288 = 24 ft.	574



①Primary Length.
②Secondary Length.

See page C-23 for explanation of lengths.

See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)

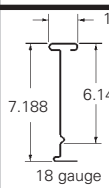
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

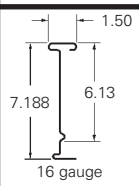
All dimensions in parentheses are millimeters unless otherwise specified.

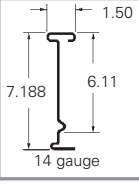
6" NEMA VE 1 Loading Depth
7" Side Rail Height

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply publish 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 tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
378		NEMA: 20A, 16B CSA: D1-3m UL Cross-Sectional Area: 0.70 in²	8	319	0.0006	Area = 1.01 in² Sx = 1.77 in³ Ix = 6.90 in⁴	2.4	474	0.009	Area = 6.52 cm² Sx = 29.01 cm³ Ix = 287.20 cm⁴
			10	204	0.0014		3.0	304	0.023	
			12	142	0.0028		3.7	211	0.048	
			14	104	0.0052		4.3	155	0.089	
			16	80	0.0089		4.9	119	0.151	
			18	63	0.014		5.5	94	0.242	
			20	51	0.022		6.1	76	0.369	

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
476		NEMA: 20B, 16C CSA: D1-6m UL Cross-Sectional Area: 1.00 in²	12	214	0.0019	Area = 1.22 in² Sx = 2.14 in³ Ix = 8.30 in⁴	3.7	318	0.033	Area = 7.87 cm² Sx = 35.07 cm³ Ix = 345.47 cm⁴
			16	129	0.0061		4.9	179	0.105	
			18	95	0.010		5.5	141	0.168	
			20	77	0.015		6.1	115	0.255	
			22	64	0.022		6.7	95	0.374	
			24	53	0.031		7.3	80	0.529	

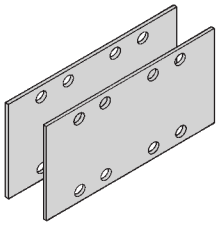
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
574		NEMA: 20C CSA: E-6m UL Cross-Sectional Area: 1.50 in²	12	361	0.0014	Area = 1.64 in² Sx = 2.87 in³ Ix = 11.10 in⁴	3.7	537	0.025	Area = 10.58 cm² Sx = 47.03 cm³ Ix = 462.02 cm⁴
			16	203	0.0046		4.9	302	0.078	
			18	160	0.0073		5.5	239	0.125	
			20	130	0.011		6.1	193	0.191	
			22	107	0.016		6.7	160	0.280	
			24	90	0.023		7.3	134	0.396	

When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%.
Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

All dimensions in parentheses are millimeters unless otherwise specified.

Splice Plates

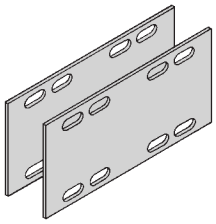
- Standard 8-hole pattern for all steel splice plates.
- Furnished in pairs with hardware.
- One pair including hardware provided with straight section. (Expansion splice quantity subtracted)
- Boxed in pairs with hardware.
- (*) Insert ZN or G



Catalog No.	Height in.	Height mm
9(*)-8004	4	(101)
9(*)-8005	5	(127)
9(*)-8006	6	(152)
9(*)-8007	7	(178)

Expansion Splice Plates

- Expansion plates allow for one inch expansion or contraction of the cable tray, or where expansion joints occur in the support structure.
- Furnished in pairs with hardware.
- Bonding Jumpers are required on each siderail. Order Separately.
- (*) Insert ZN or G

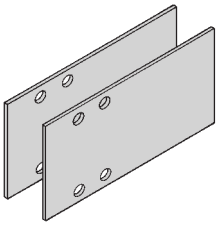


For heavy duty expansion splice plates see page APP-3.

Catalog No.	Height in.	Height mm
9(*)-8014	4	(101)
9(*)-8015	5	(127)
9(*)-8016	6	(152)
9(*)-8017	7	(178)

Universal Splice Plates

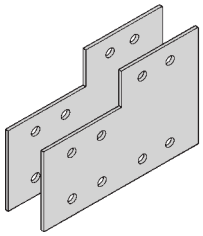
- Used to splice to existing cable tray systems.
- Furnished in pairs with hardware.
- (*) Insert ZN or G



Catalog No.	Height in.	Height mm
9(*)-8004-1/2	4	(101)
9(*)-8005-1/2	5	(127)
9(*)-8006 -1/2	6	(152)
9(*)-8007 -1/2	7	(178)

Step Down Splice Plates

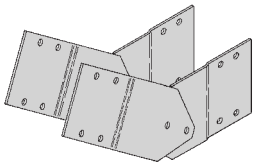
- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.
- (*) Insert ZN or G



Catalog No.	Height in.	Height mm
9(*)-8045	5 to 4	(127 to 101)
9(*)-8046	6 to 4	(152 to 101)
9(*)-8060	6 to 5	(152 to 127)
9(*)-8047	7 to 4	(178 to 101)
9(*)-8061	7 to 5	(178 to 127)
9(*)-8062	7 to 6	(178 to 152)

Vertical Adjustable Splice Plates

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Furnished in pairs with hardware.
- **Bonding Jumpers not required.**
- (*) Insert G or P

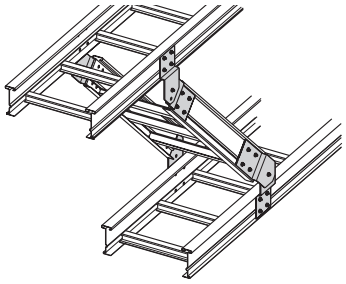


Requires supports within 24" on both sides, per NEMA VE 2.

Catalog No.	Height in.	Height mm
9(*)-8024	4	(101)
9(*)-8025	5	(127)
9(*)-8026	6	(152)
9(*)-8027	7	(178)

Branch Pivot Connectors

- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers not required).
- Furnished in pairs with hardware.
- (*) Insert ZN or G



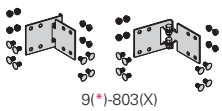
Catalog No.	Height in.	Height mm
9(*)-8244	4	(101)
9(*)-8245	5	(127)
9(*)-8246	6	(152)
9(*)-8247	7	(178)

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

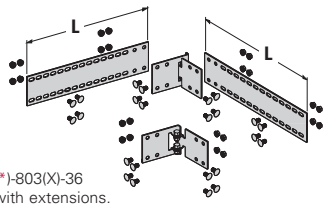
All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Adjustable Splice Plates

- Offered to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers **not** required.
- (*) Insert ZN or G
- (X) Insert 4, 5, 6 or 7 for side rail height.



9(*)-803(X)
Splice only



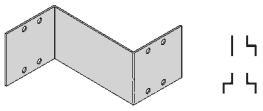
9(*)-803(X)-12 or 9(*)-803(X)-36
One pair splice plates with extensions.

Catalog No.	Cable Tray End Cut	Thru Tray Width in.	Thru Tray Width (mm)	'L' in.	'L' (mm)
9(*)-803(X)	Mitered	36	(914)	N/A	(NA)
9(*)-803(X)-12	Not mitered	12	(305)	16	(406)
9(*)-803(X)-36	Not mitered	36	(914)	41	(1041)

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

Offset Reducing Splice Plate

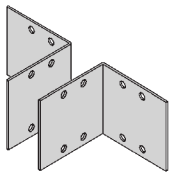
- This plate is used for joining cable trays having different widths. When used in pairs they form a straight reduction; when used singly with a standard splice plate, they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction
- (*) Insert G or P



Catalog No.	Height in.	Height mm
9(*)-8064-(‡)	4	(101)
9(*)-8065-(‡)	5	(127)
9(*)-8066-(‡)	6	(152)
9(*)-8067-(‡)	7	(178)

Tray to Box Splice Plates

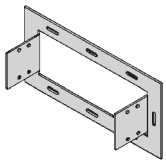
- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware.
- (*) Insert G or P



Catalog No.	Height in.	Height mm
9(*)-8054	4	(101)
9(*)-8055	5	(127)
9(*)-8056	6	(152)
9(*)-8057	7	(178)

Frame Type Box Connector

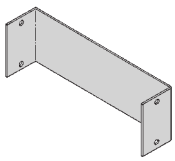
- Designed to attach the end of a cable tray run to a distribution cabinet or control center to help reinforce the box at the point of entry.
- Furnished with tray connection hardware.
- (*) Insert ZN or G
- (‡) Insert tray width



Catalog No.	Height in.	Height mm
9(*)-8074-(‡)	4	(101)
9(*)-8075-(‡)	5	(127)
9(*)-8076-(‡)	6	(152)
9(*)-8077-(‡)	7	(178)

Blind End

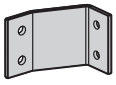
- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (*) Insert G or P
- (‡) Insert tray width

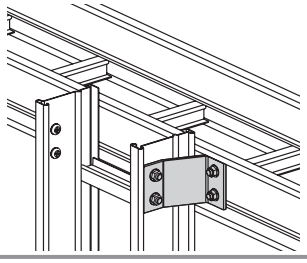


Catalog No.	Height in.	Height mm
9(*)-8084-(‡)	4	(101)
9(*)-8085-(‡)	5	(127)
9(*)-8086-(‡)	6	(152)
9(*)-8087-(‡)	7	(178)

Cross Connector Bracket

- For field connecting crossing section.
- Furnished in pairs with 3/8" hardware.
- (*) Insert ZN or G





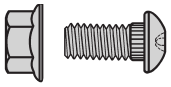
Catalog No.
9(*)-1240

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

All dimensions in parentheses are millimeters unless otherwise specified.

Standard Tray Hardware (for field installation drill 13/32" hole)

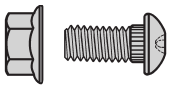
- Finishes: [ZN] Zinc Plated ASTM B633 SC1 for pre-galvanized tray [CZ] Chromium Zinc Plated F1136-88 Grade A for hot dip galvanized tray



Catalog No.	Description
● RNCB 3/8" x 3/4" ZN	Ribbed Neck Carriage Bolt ASTM A307 Grade A
● SFHN 3/8"-16 ZN	Serrated Flange Hex Nut ASTM A563 Grade A
● RNCB 3/8" x 3/4" CZ	Ribbed Neck Carriage Bolt ASTM F1136-88 Grade 3
● SFHN 3/8"-16 CZ	Serrated Flange Hex Nut ASTM F1136-88 Grade A

Optional Tray Hardware (for field installation drill 13/32" hole)

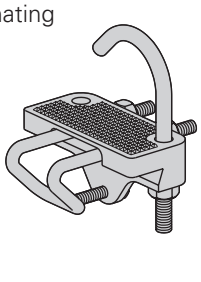
- To order 316 stainless steel hardware add SS6 suffix to catalog number - Example: 9G-8004SS6



Catalog No.	Description
● RNCB 3/8" x 3/4" SS6	Ribbed Neck Carriage Bolt AISI 316 Stainless Steel
● SFHN 3/8"-16 SS6	Serrated Flange Hex Nut AISI 316 Stainless Steel

Conduit to Cable Tray Adaptor

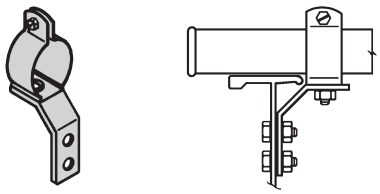
- For easy attachment of conduit terminating at a cable tray.
- Use on aluminum or steel cable trays.



Catalog No.	Conduit Size in.	mm
● 9G-1158-1/2 & 3/4	1/2, 3/4	(15, 20)
● 9G-1158-1 & 1 1/4	1, 1 1/4	(25, 32)
● 9G-1158-1 1/2 & 2	1 1/2, 2	(40, 50)
● 9G-1158-2 1/2 & 3	2 1/2, 3	(65, 80)
● 9G-1158-3 1/2 & 4	3 1/2, 4	(90, 100)

Conduit to Cable Tray Adaptor

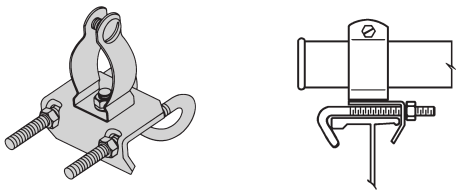
- Assembly required.
- Mounting hardware included.
- Conduit clamps provided.
- (‡) = Insert conduit size (1/2" thru 4").



Catalog No.
● 9ZN-1150-(‡)

Conduit to Cable Tray Adaptor

- Assembly required.
- Conduit clamps included.
- (‡) = Insert conduit size (1/2" thru 4").

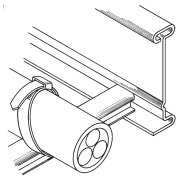


Catalog No.
● 9ZN-1155-(‡)

Cable Tie (Ladder Tray)

- Nylon ties provide easy attachment of cable to ladder rungs; maximum cable O.D. is 3" (76mm).
- Cable ties are UV resistant.

Overall Length 15" (381mm)



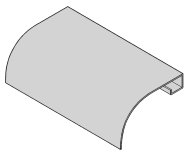
Catalog No.
● 99-2125-15

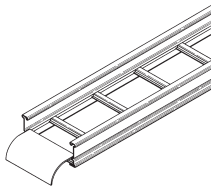
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Ladder Drop-Out

- Specially-designed Ladder Drop-Outs provide a rounded surface with 4" (101 mm) radius to protect cable as it exits from the cable tray, preventing damage to insulation. The drop-out will attach to any desired rung.
- (*) Insert P or G
- (‡) Insert tray width

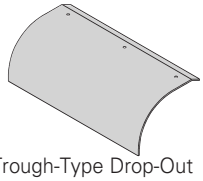




Catalog No.
● 9(*)-1104-(‡)

Trough Drop-Out

- These devices provide a rounded surface to protect cable as it exits.
- Hardware is included.
- (*) Insert P or G
- (‡) Insert tray width

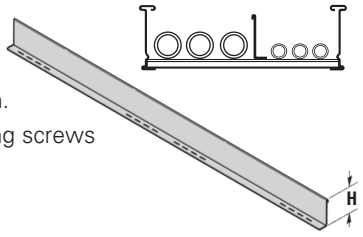


Trough-Type Drop-Out

Catalog No.
9(*)-1104T-(‡)

Barrier - Straight Section

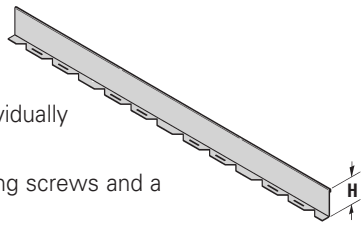
- Length: Insert 120 for [120" - 10 ft.] (3.0 m) or 144 for [144" - 12 ft.] (3.6 m)
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert P or G



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-Length	4	(101)	3	(76)
74(*)-Length	5	(127)	4	(101)
75(*)-Length	6	(152)	5	(127)
76(*)-Length	7	(178)	6	(152)

Barrier - Horizontal Bend

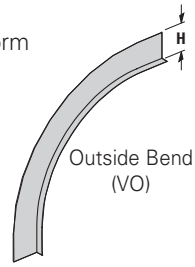
- Horizontal Bend Barriers are flexible in order to conform to any horizontal fitting radius. Can be cut to desired length.
- Standard length is 72" [6 ft.] (1.8 m) - sold individually
- Order catalog number based on loading depth.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert P or G



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-90HBFL	4	(101)	3	(76)
74(*)-90HBFL	5	(127)	4	(101)
75(*)-90HBFL	6	(152)	5	(127)
76(*)-90HBFL	7	(178)	6	(152)

Barrier - Vertical Outside Bend

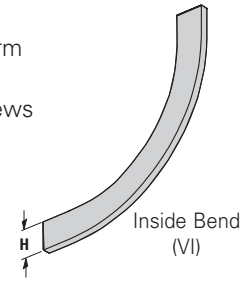
- Vertical Outside Bend Barriers are preformed to conform to a specific vertical outside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert P or G
- (**) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-(**)VO(†)	4	(101)	3	(76)
74(*)-(**)VO(†)	5	(127)	4	(101)
75(*)-(**)VO(†)	6	(152)	5	(127)
76(*)-(**)VO(†)	7	(178)	6	(152)

Barrier - Vertical Inside Bend

- Vertical Inside Bend Barriers are preformed to conform to a specific vertical inside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert P or G
- (**) Insert 30, 45, 60 or 90 for degrees
- (†) Insert 12, 24, 36 or 48 for radius



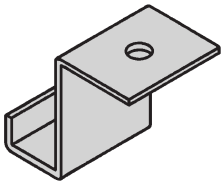
Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-(**)VI(†)	4	(101)	3	(76)
74(*)-(**)VI(†)	5	(127)	4	(101)
75(*)-(**)VI(†)	6	(152)	5	(127)
76(*)-(**)VI(†)	7	(178)	6	(152)

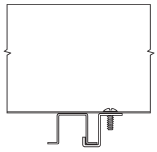
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Barrier Strip Clip

- Zinc plated steel barrier clip fastens to either aluminum or steel ladder rung.
- Furnished with one #10 x 1/2" zinc plated self-drilling screw.

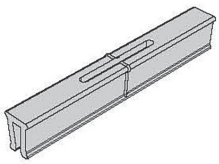


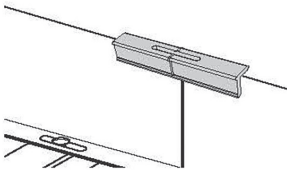


Catalog No.
9ZN-9002

Barrier Strip Splice

- 2.85" (72.4mm) long
- Ribbed edge for increased rigidity and grip
- Comfort edge for ease of installation
- Slotted top window with center mark for accurate placement and inspection capability
- Patent pending



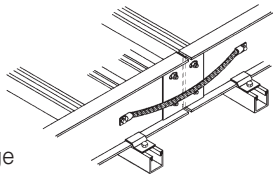


Catalog No.
99-9982

Bonding Jumper

Use at each expansion splice and where the cable tray is not mechanically/electrically continuous to ground. Sold individually.

- Hardware included.
- See table See table 392.60(A) on page MAN-29 for amperage ratings required to match the UL cross-sectional area of the tray.
- See tray loading chart for UL cross-sectional area.
- Bonding jumper is 14 1/2" (368mm) long.

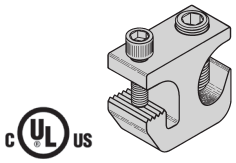


Catalog No.	Copper Wire Size	Ampacity
99-N1	#1	600
99-N6	#6	200

Grounding Clamp

B-Line series cable tray is UL® classified as to its suitability as an equipment grounding conductor. If a separate conductor for additional grounding capability is desired, we offer this clamp for bolting the conductor at least once to each cable tray section.

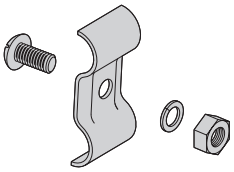
- Accepts #6 AWG to 250 MCM.



Catalog No.	Material
9A-2130	Tin Plated Aluminum

Ground Wire Clamp

- Mechanically attaches grounding cables to cable tray.
- Hardware included.
- (*) Insert ZN or SS4



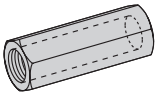
Catalog No.	Material
9(*)-2351	#1 thru 2/0
9(*)-2352	3/0 thru 250 MCM

Thread Rod (ATR) & Rod Couplings

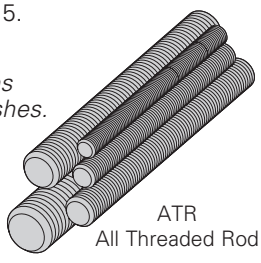
Loading based on safety factor 5.

Standard Finish: Zinc plated

See B-Line series Strut Systems Catalog for other sizes and finishes.



B655
Rod Coupling



ATR
All Threaded Rod

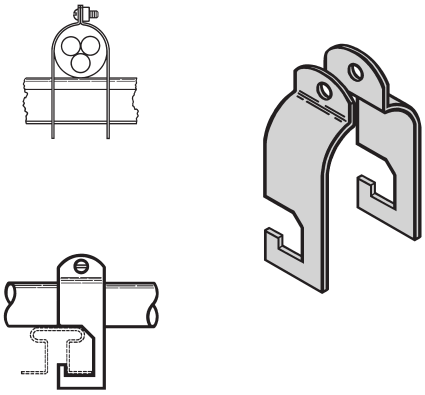
Size	Catalog No.	Available Length	Loading
All Threaded Rod			
3/8"-16	**ATR 3/8" x Length**	36", 72", 120", 144"	730 lbs.
1/2"-13	**ATR 1/2" x Length**	36", 72", 120", 144"	1350 lbs.
Rod Coupling			
3/8"-16	**B655-3/8"**	NA	730 lbs.
1/2"-13	**B655-1/2"**	NA	1350 lbs.

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

All dimensions in parentheses are millimeters unless otherwise specified.

Stainless Steel Cable Clamp

- Fits with series 2, 3, 4 & 5 standard steel rungs.
- Shipped flat. Field form around the cable at the time of installation.

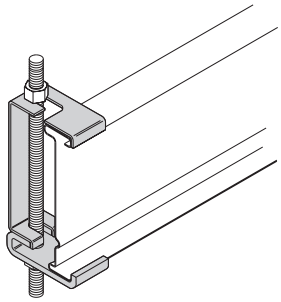


Refer to Section CF Cable Fixing

Catalog No.	Cable Size in.	Cable Size mm
9SS4-4050	0.50 - 0.75	(13 - 19)
9SS4-4075	0.75 - 1.00	(19 - 25)
9SS4-4100	1.00 - 1.25	(25 - 32)
9SS4-4125	1.25 - 1.50	(32 - 38)
9SS4-4150	1.50 - 1.75	(38 - 45)
9SS4-4175	1.75 - 2.00	(45 - 51)
9SS4-4200	2.00 - 2.25	(51 - 57)
9SS4-4225	2.25 - 2.50	(57 - 64)
9SS4-4250	2.50 - 2.75	(64 - 70)
9SS4-4275	2.75 - 3.00	(70 - 76)
9SS4-4300	3.00 - 3.25	(76 - 82)
9SS4-4325	3.25 - 3.50	(82 - 89)
9SS4-4350	3.50 - 3.75	(89 - 95)
9SS4-4375	3.75 - 4.00	(95 - 100)
9SS4-4400	4.00 - 4.25	(100 - 106)
9SS4-4425	4.25 - 4.50	(106 - 113)
9SS4-4450	4.50 - 4.75	(113 - 121)
9SS4-4475	4.75 - 5.00	(121 - 125)

Hanger Rod Clamp

- For 1/2" ATR.
- Furnished in pairs.
- Order ATR and hex nuts separately.
- Two-piece "J"-hanger design.
- 1500 lbs./pair capacity safety factor 3.
- (*) Insert ZN or G

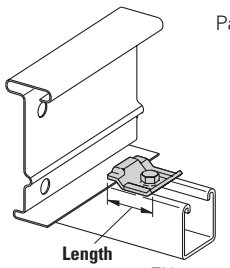


Catalog No.	Height in.	Height mm
9(*)-5324	4	(101)
9(*)-5325	5	(127)
9(*)-5326	6	(152)
9(*)-5327	7	(178)

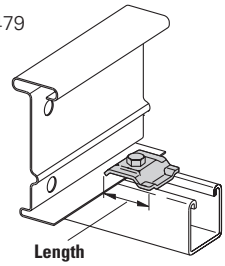
Cable Tray Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs, with or without hardware.
- Not recommended for vertical support.

Patent # RE35479



9ZN-1204 shown.
Installed as a guide.



9ZN-1208 shown.
Installed as a clamp.

When installing this device as an expansion guide on the outside flange of *Steel Side Rail*, use the Catalog No. **B202** Square Washer in order to properly elevate the guide.

Note: For heavy duty or vertical applications see 9(*)-1241 or 9(*)-1242 page J-20

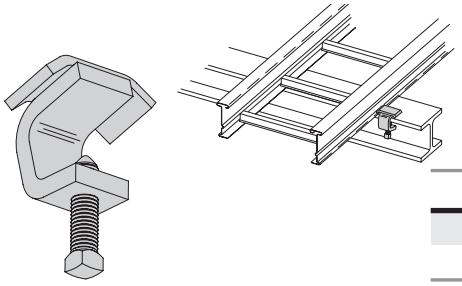
Catalog No. Without Hardware	Catalog No. With Hardware	Overall Length in. (mm)	Hardware Size in.	Finish
9ZN-1204	9ZN-1204NB	1 1/2 (38)	1/4"	G90
9ZN-1208	9ZN-1208NB	2 1/4 (57)	3/8"	G90
9A-1205	—	2 1/4 (57)	1/2"	Alum.
9G-1205	—	2 1/4 (57)	1/2"	HDGAF
9SS6-1205	—	2 1/4 (57)	1/2"	316SS
9ZN-1205	—	2 1/4 (57)	1/2"	G90

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cable Tray Clamp

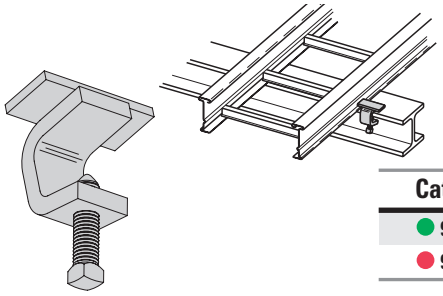
- Hold-down clamps for single or double cable tray runs.
- No drilling of support I-beam or channel is required.
- Sold in pieces - two clamps are required per tray.
- Maximum beam flange thickness 1 1/8" (28.58 mm).



Catalog No.	Finish
9ZN-1249HD	Znplt
9G-1249HD	HDGAF

Cable Tray Guide

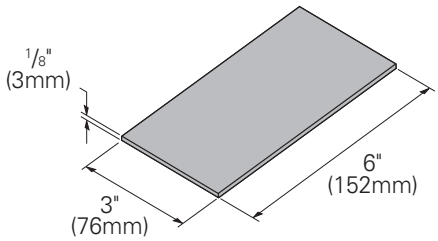
- Expansion guide for single or double cable tray runs.
- Guide allows for longitudinal movement of the cable tray.
- No field drilling of support I-beam or channel is required.
- Guides are required on both sides of cable tray to prevent lateral movement - can be placed on either the inside or outside flange of cable tray.
- Guides are sold in pieces - two guides are required per tray.
- Maximum flange thickness 1 1/8" (28.58 mm).



Catalog No.	Finish
9ZN-1249	Znplt
9G-1249	HDGAF

Nylon Pad

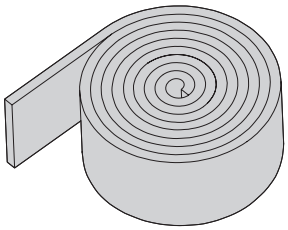
- Use for friction reduction.
- Hardness: Shore D80.
- Low friction coefficient.
- UV resistant.
- Excellent weatherability.
- UL - 94HB.



Catalog No.
99-PE36

Neoprene Roll

- Use for material isolation.
- 1/8" x 2" x 25' roll.
- Hardness: Shore A60.
- Good weatherability.



Catalog No.
99-NP300

DURA-BLOK™ Rooftop Support Bases with B22 Channel

- Designed as a superior rooftop support for cable tray,
- UV resistant and approved for most roofing material or other flat surfaces.
- Can be used with any of B-Line series cable tray clamps and guides.
- Ultimate Load Capacity: 1,000 lbs. (uniform load)

Catalog No.	Height x Width x Length in.	(mm)
DB10-28	5 5/8 x 6 x 28.0	(143 x 152 x 711)
DB10-36	5 5/8 x 6 x 36.0	(143 x 152 x 914)
DB10-42	5 5/8 x 6 x 42.0	(143 x 152 x 1067)
DB10-50	5 5/8 x 6 x 50.0	(143 x 152 x 1270)
DB10-60	5 5/8 x 6 x 60.0	(143 x 152 x 1524)

LEEDS credit available, base made from 100% recycled material.

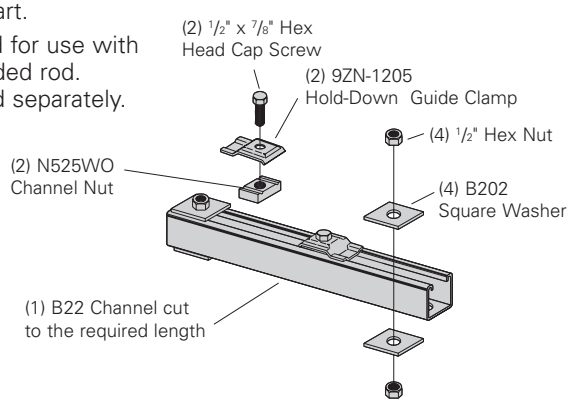
General Note: Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

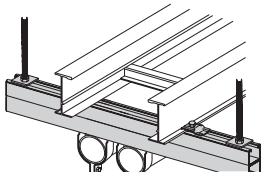
Green = Fastest shipped items Black = Normal lead-time items Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Trapeze Support Kit

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware,hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminate the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with ½" threaded rod. Order rod separately.





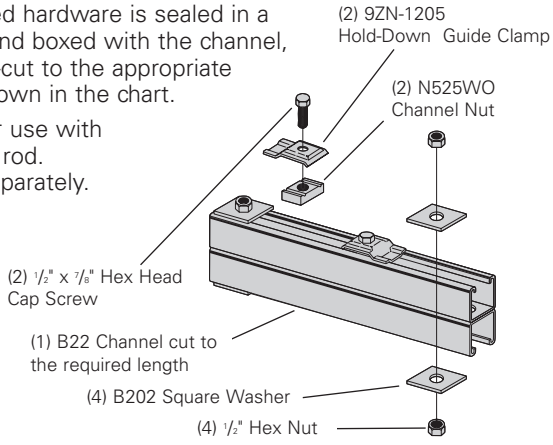
Catalog No.	Tray Width in.	Tray Width mm	Channel Length in.	Channel Length mm	Uniform Load lbs	Uniform Load kN
● 9(*)-5506-22SH(†)	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SH(†)	9	(229)	18	(457)	1250	(5.56)
● 9(*)-5512-22SH(†)	12	(305)	22	(559)	1125	(5.00)
● 9(*)-5518-22SH(†)	18	(457)	28	(711)	865	(3.85)
● 9(*)-5524-22SH(†)	24	(610)	34	(864)	700	(3.11)
● 9(*)-5530-22SH(†)	30	(762)	40	(1016)	590	(2.62)
● 9(*)-5536-22SH(†)	36	(914)	46	(1168)	510	(2.27)
● 9(*)-5542-22SH(†)	42	(1067)	52	(1321)	450	(2.00)

- (*) Insert P G or GRN
- (†) Insert ⅜ for ⅜" threaded rod hardware.

Safety factor of 3.0 on all loads.

Heavy Duty Trapeze Support Kit

- Eaton's B-Line series trapeze kits provide the components required for a single trapeze support in one package. These kits are available in pre-galvanized steel with zinc-plated hardware, hot dip galvanized steel with 316 stainless steel hardware, or DURA GREEN™ painted steel with zinc-plated hardware.
- The SH channel provides the convenience of pre-punched slots, which eliminates the need for field drilling.
- The illustrated hardware is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with ½" threaded rod. Order rod separately.

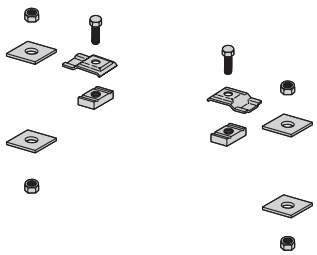


Catalog No.	Tray Width in.	Tray Width mm	Channel Length in.	Channel Length mm	Uniform Load lbs	Uniform Load kN
● 9(*)-5506-22SHA	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SHA	9	(229)	18	(457)	1350	(6.00)
● 9(*)-5512-22SHA	12	(305)	22	(559)	1350	(6.00)
● 9(*)-5518-22SHA	18	(457)	28	(711)	1350	(6.00)
● 9(*)-5524-22SHA	24	(610)	34	(864)	1350	(6.00)
● 9(*)-5530-22SHA	30	(762)	40	(1016)	1350	(6.00)
● 9(*)-5536-22SHA	36	(914)	46	(1168)	1350	(6.00)
● 9(*)-5542-22SHA	42	(1067)	52	(1321)	1350	(6.00)

- (*) Insert P G or GRN

Safety factor of 3.0 on all loads.

Trapeze Hardware Kit



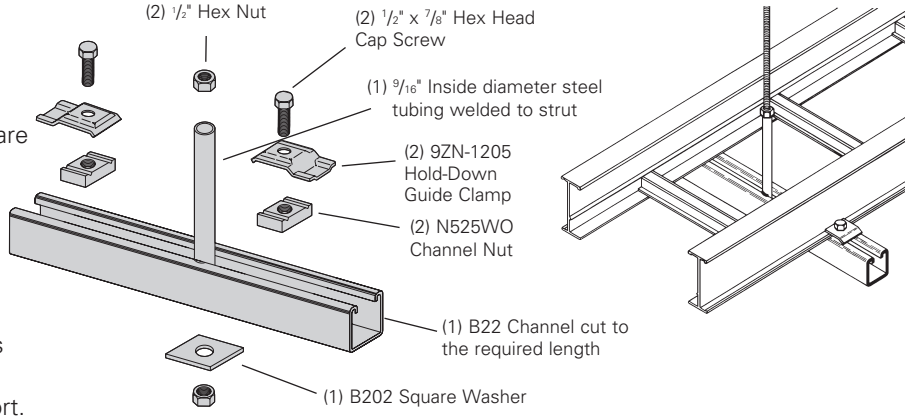
Catalog No.	● 9ZN-5500-½	● 9G-5500-½
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw ½ x ⅞ ZN 2 N525 WO ZN 4 B202 ZN ½" sq washer 4 HN ½ ZN	1 pr. 9G-1205 2 HHC Screw ½ x ⅞ SS6 2 N525 WO SS6 4 B202 HDG ½" sq washer 4 HN ½" SS6

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

All dimensions in parentheses are millimeters unless otherwise specified.

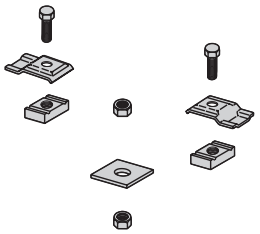
Center Hung Tray Support

- Center Hung Cable Tray Support allows cable to be laid-in from both sides.
- Eliminates costly cable pulling and field cutting of cable tray supports. Labor costs are dramatically reduced.
- Required hardware and threaded rod material for trapeze assemblies are reduced by up to 50%.
- Designed for use with 1/2" threaded rod. (Order rod separately)
- Use with all aluminum and steel cable trays through 24" width.
- Load capacity is 700 lbs. (311kN) per support. Safety factor of 3.0. Eccentric loading is not to exceed a 60% vs. 40% load differential.
- The maximum recommended unsupported span length is 144"/12 ft. (3.66 m).
- Hardware shown is furnished.
- Finish available: Zinc Plated



Catalog No.	Tray Width in.	Tray Width (mm)	Channel Length in.	Channel Length (mm)
● 9ZN-5212	6", 9", 12"	(152, 228, 305)	18"	(457)
● 9ZN-5224	18", 24"	(457, 609)	30"	(762)

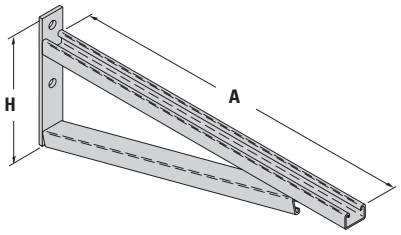
Center Hung Support Hardware Kit



Catalog No.	● 9ZN-5200
In plastic bag	1 pr. 9ZN-1205 2 HHC Screw 1/2 x 7/8 ZN 2 N525 WO ZN 1 B202 ZN 1/2" sq washer 4 HN 1/2 ZN

Bracket (12" - 48")

- (*) Insert available finish: ZN GRN or HDG
- Safety Load Factor 2.5



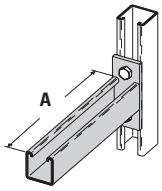
Bottom brace is B42 channel on B494-24 and smaller and B22 channel on B494-30 and larger

Catalog No.	Uniform Load lbs	Uniform Load (kN)	Tray Width in.	Tray Width (mm)	'A' in.	'A' (mm)	'H' in.	'H' (mm)
● B494-12	2500	(11.12)	6 & 9	(152 & 229)	12	(305)	8 3/4	(222)
● B494-18	1700	(7.56)	12	(305)	18	(457)	8 3/4	(222)
● B494-24	1300	(5.78)	18	(457)	24	(610)	8 3/4	(222)
B494-30	1600	(7.11)	24	(610)	30	(762)	11 1/4	(286)
B494-36	1100	(4.89)	30	(762)	36	(914)	11 1/4	(286)
B494-42	980	(4.36)	36	(914)	42	(1067)	16	(406)
B494-48	980	(4.36)	42	(1067)	48	(1219)	16	(406)

For more dimensional data see Strut Systems catalog

Cantilever Bracket

- (*) Insert available finish: ZN GRN or HDG
- Safety Load Factor 2.5



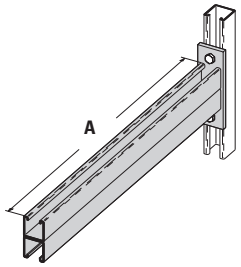
Catalog No.	Uniform Load lbs	Uniform Load kN	Tray Width in.	Tray Width mm	'A' in.	'A' mm
B409-12	960	(4.27)	6 & 9	(152 & 229)	12	(305)
B409-18	640	(2.84)	12	(305)	18	(457)
B409-24	480	(2.13)	18	(457)	24	(610)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Cantilever Bracket

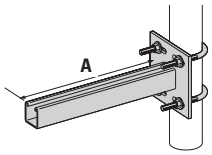
- (*) Insert available finish: ZN GRN or HDG
- Safety Load Factor 2.5



Catalog No.	Uniform Load lbs kN	Tray Width in. mm	'A' in. mm
B297-12	1660 (7.38)	6 & 9 (152 & 229)	12 (305)
B297-18	1100 (4.89)	12 (305)	18 (457)
B297-24	835 (3.71)	18 (457)	24 (610)
B297-30	665 (2.93)	24 (610)	30 (762)
B297-36	550 (2.44)	30 (762)	36 (914)
B297-42	465 (2.06)	36 (914)	42 (1067)

Underfloor Support (U-Bolts not included)

- Finishes available: ZN
- Safety Load Factor 2.5

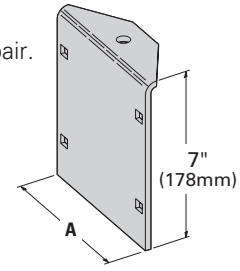


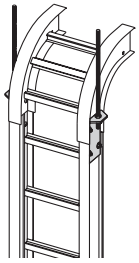
U-Bolt Size	Fits Pipe O.D.
B501-3/4	.841 - 1.050
B501-1	1.051 - 1.315
B501-1 1/4	1.316 - 1.660
B501-1 1/2	1.661 - 1.900
B501-2	1.901 - 2.375
B501-2 1/2	2.376 - 2.875

Catalog No.	Uniform Load lbs (kN)	Tray Width in. (mm)	'A' in. (mm)
B409UF-12	800 (3.56)	6 & 9 (152 & 229)	12 (305)
B409UF-21	450 (2.00)	12 & 18(305 & 457)	21 (533)

Vertical Hanger Splice Plates

- Design load is 1500 lbs (6.67kN) per pair.
- Safety Factor of 2.5
- Furnished in pairs.
- Hole size: 9/16" (14mm) for 1/2" threaded rod.
- (*) Insert ZN or G

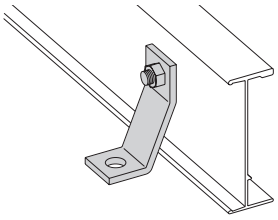




Catalog No.	Outside Cable Tray Ht.	'A' in. (mm)
●9(*)-8224	4"	3.84 (97.54)
●9(*)-8225	5"	4.73 (120.14)
●9(*)-8226	6"	5.84 (148.34)
●9(*)-8227	7"	6.84 (173.74)

Heavy Duty Hold Down Bracket

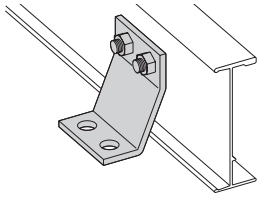
- Design load is 2000 lbs (8.89kN) per pair.
- Two bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided.
- 3/8" support attachment hardware **not** provided.
- (*) Insert ZN or G
- Recommended for support of vertical trays.

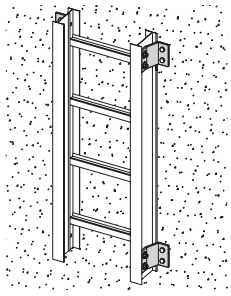


Catalog No.
9(*)-1241

Heavy Duty Hold Down Bracket

- Design load is 4000 lbs (17.79kN) per pair.
- Four bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided
- 3/8" support attachment hardware **not** provided.
- (*) Insert ZN or G
- Recommended for support of vertical trays.

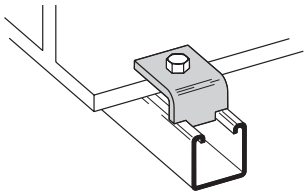




Catalog No.
9(*)-1242

Beam Clamp

- Finishes available: ZN GRN HDG or SS4
- Sold in pieces.
- Design load is 1200 lbs (5.34kN) per pair.
- Safety Load Factor 5.0.
- Order HHCS and Channel Nuts separately.



Catalog No.
B355

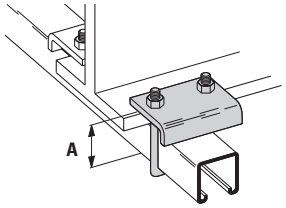
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Series 2, 3, 4, & 5 Steel - Accessories

Beam Clamp

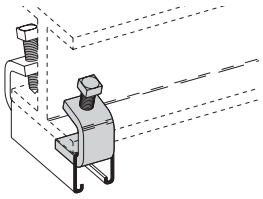
- Finishes available: ZN or HDG
- Sold in pieces.
- *Design load when used in pairs. Safety Load Factor 5.0



Catalog No.	Design Load lbs (kN)	'A' in. (mm)
B441-22	1200 (5.34)	3 3/8 (86)
B441-22A	1200 (5.34)	5 (127)

Beam Clamp

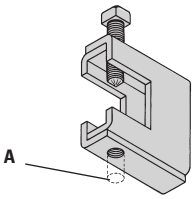
- Finishes available: ZN GRN or HDG
- Sold in pieces.
- *Design load when used in pairs. Safety Load Factor 5.0

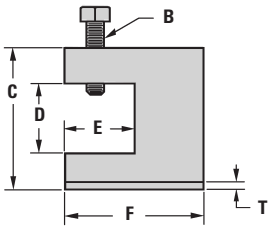


Catalog No.	B212-1/4	B212-3/8
Design Load *	600 lbs. (2.67kN)	1000 lbs. (4.45 kN)
Max. Flange Thick	3/4" (19 mm)	1 1/8" (28.6 mm)
Mat'l. Thickness	1/4" (6.3 mm)	3/8" (9.5 mm)

B305 Thru B308 & B321 Series Beam Clamps

- Finishes available: ZN or HDG
- Setscrew included.
- Safety Load Factor 5.0

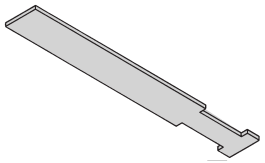




Catalog No.	Rod Size A	B	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	T in. (mm)	Design Load lbs (kN)
B305	3/8"-16	3/8"-16	2 5/16 (58.7)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	11 Ga. (3.0)	600 (2.67)
B306	3/8"-16	1/2"-13	2 7/16 (61.9)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	7 Ga. (4.5)	1100 (4.90)
B307	1/2"-13	1/2"-13	2 7/16 (61.9)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	7 Ga. (4.5)	1100 (4.90)
B308	1/2"-13	1/2"-13	2 9/16 (65.1)	7/8 (22.2)	1 1/8 (28.6)	2 1/2 (63.5)	1/4 (6.3)	1500 (6.68)
B321-1	3/8"-16	1/2"-13	3 9/16 (90.5)	1 11/16 (42.9)	1 5/8 (41.3)	3 1/4 (82.5)	1/4 (6.3)	1300 (5.79)
B321-2	1/2"-13	1/2"-13	3 9/16 (90.5)	1 11/16 (42.9)	1 5/8 (41.3)	3 1/4 (82.5)	1/4 (6.3)	1400 (6.23)

Anchor Strap - for B305 thru B308 & B321 Series

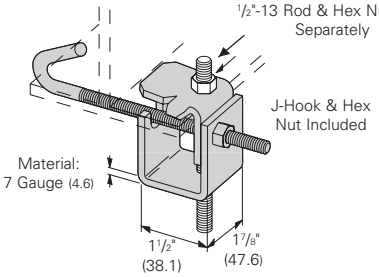
- Finish available: ZN
- For a maximum beam thickness of 3/4" (19mm).
- For thicker beams, step up one flange width size.



Catalog No.	Flange Width in. (mm)
B312-6	Up to 6 (Up to 152)
B312-9	6 - 9 (152 to 228)
B312-12	9 - 12 (228 to 305)

Beam Clamp

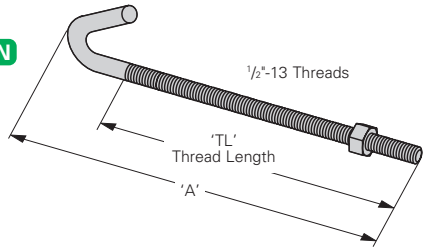
- Finish available: ZN
- Design Load 500 lbs. (2.22 kN)
- Safety Load Factor 5.0
- Recommended torque: 'J'-Hook Nut 125 In.-Lbs. (14.1 kN/m)
- Maximum flange thickness of 3/4" (19mm).



Catalog No.	For Flange Width in. (mm)	Wt./C lbs (kg)
B750-J4	3 - 6 (76.2 - 152.4)	109 (49.4)
B750-J6	5 - 9 (127.0 - 288.6)	124 (56.2)
B750-J9	8 - 12 (203.2 - 304.8)	135 (61.2)
B750-J12	11 - 15 (279.4 - 381.0)	147 (66.7)

'J'-Hook

- Finishes available: ZN
- Hex Nut included.

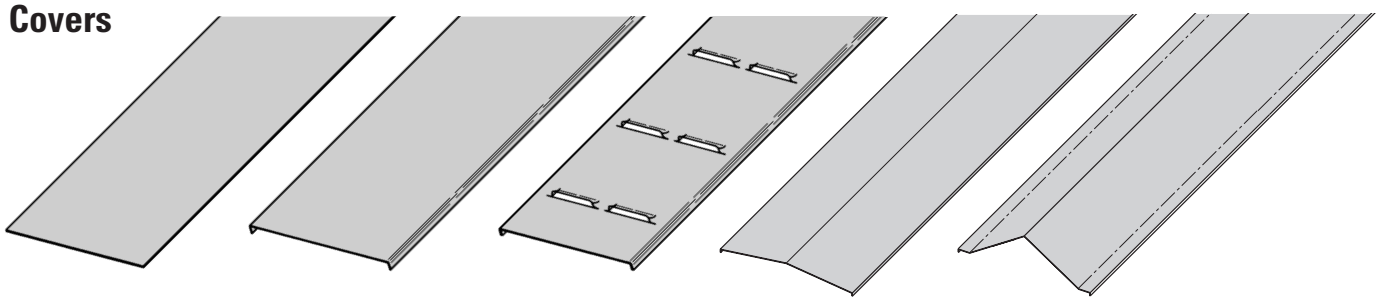


Catalog No.	'A' in. (mm)	'TL' in. (mm)	Wt./C lbs (kg)
B700-J4	8 1/2 (215.9)	5 (127.0)	44 (19.9)
B700-J6	11 1/2 (292.1)	6 (152.4)	53 (24.0)
B700-J9	12 1/4 (368.3)	6 (152.4)	63 (28.6)
B700-J12	17 1/2 (444.5)	6 (152.4)	78 (35.4)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Covers



Solid Non-Flanged | Solid Flanged | Ventilated Flanged | Peaked Flanged | 2 to 3 Pitch Peaked Flanged (See page APP-4)

A full range of covers is available for straight sections and fittings.

Solid covers should be used when maximum enclosure of the cable is desired and no accumulation of heat is expected.

Ventilated covers provide an overhead cable shield, yet allow heat to escape.

We recommend that covers be placed on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a ½ in. (13 mm) flange. Cover clamps are not included with the cover and must be ordered separately. All **peaked covers** are flanged. Standard peaked covers have ½" peak. Special purpose peaked covers, having a 2 to 3 pitch, provide additional slope and material thickness. The 2 to 3 pitch fitting covers are of multiple piece, welded construction.

Steel Cover Part Numbering

Prefix

Example: **80 2 P - 24 - 144**

Cover Type
- 80 = Solid
- 81 = Ventilated
- 82 = Peaked

Detail
- 2 = Flanged Steel (248,258, 268 straight sections and all fittings)
- 3 = Flanged Steel (all straight sections except 248, 258, 268)
- 4 = Non-Flanged Steel (80 & 81 type only)

Material
- P = Pre-Galvanized (Not available in Type 83)
- G = HDGAF

Tray Width
- 06 = 6"
- 09 = 9"
- 12 = 12"
- 18 = 18"
- 24 = 24"
- 30 = 30"
- 36 = 36"

Item Description
For Straight Section Cover:

Pre-Galvanized Only
- 144 = 12 ft. (3.66 m)
- 120 = 10 ft. (3.05 m)

Pre-Galvanized & HDGAF
- 72 = 6 ft. (1.83 m)
- 60 = 5 ft. (1.52 m)

For fitting covers: Insert suffix of fitting to be covered. See example below.

Examples of Catalog Numbers for Fitting Covers:

Horizontal Bend Cover

Prefix | Suffix

80 2 P - 18 - 90 HB 24

- 24 = Radius
- HB = Fitting
- 90 = Angle
- 18 = Width
- P = Material
- 2 = Detail
- 80 = Cover Type

Vertical Bend Cover

Prefix | Suffix

80 2 G - 24 - 90 VO 24 - 4*

- 4* = Side Rail* Height
- 24 = Radius
- VO = Fitting
- 90 = Angle
- 24 = Width
- G = Material
- 2 = Detail
- 80 = Cover Type

* Required for VO fittings only

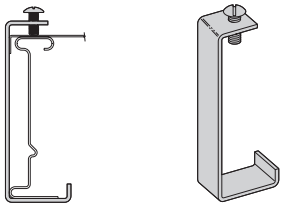
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Series 2, 3, 4, & 5 Steel - Accessories

Standard Cover Clamp

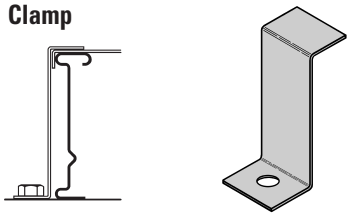
- For indoor service only.
- Screw included.
- Sold per piece.
- (*) Insert ZN or G



Tray Type	Catalog No.	Side Rail Height in.	(mm)
Steel	9(*)-9014	4	(101)
	9(*)-9015	5	(127)
	9(*)-9016	6	(152)
	9(*)-9017	7	(78)

Combination Cover and Hold Down Clamp

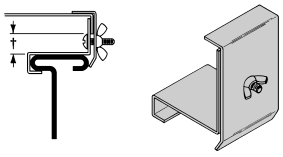
- Sold per piece.
- For indoor service only.
- (*) Insert P or G



Tray Type	Catalog No.	Side Rail Height in.	(mm)
Steel	9(*)-9043	4	(101)
	9(*)-9053	5	(127)
	9(*)-9063	6	(152)
	9(*)-9073	7	(78)

Raised Cover Clamp

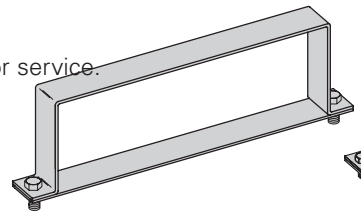
- For indoor service only.
- For use with flanged covers only.
  † Specify gap of 1", 2", 3" or 4".



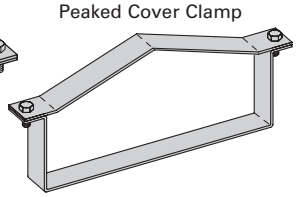
Tray Type	Catalog No.	Tray Type
●	9ZN-9114-†	Series 2 Steel Straight Section
●	9ZN-9115-†	Series 3 & 4 Steel Straight Section
●	9ZN-910†	All Steel Fittings (Also Series 1 Steel Straight Sections)

Heavy Duty Cover Clamp

- Recommended for outdoor service.
- (‡) Insert tray width
  † Add P to Catalog No. for peaked cover clamp.
- (*) Insert P or G



Peaked Cover Clamp



Catalog No.	Side Rail Height in.	mm
9(*)-(‡)-9044†	4	(101)
9(*)-(‡)-9054†	5	(127)
9(*)-(‡)-9064†	6	(152)
9(*)-(‡)-9074†	7	(178)

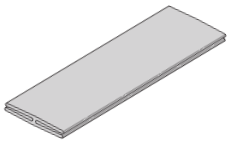
Quantity of Standard Cover Clamps Required

Notes:
When using the Heavy Duty Cover Clamp, only on-half the number of clamps stated above is required.
Additional clamps may be necessary in extreme wind applications.

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.

Cover Joint Strip

- Used to join covers
- Plastic
- Only for use on flat covers
- Color - gray.
- (‡) Insert tray width



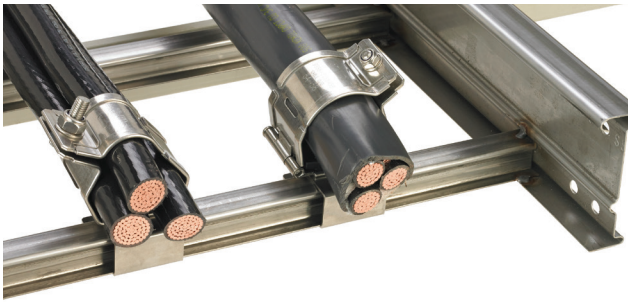
Catalog No.
● 99-9980-(‡)

Cable Cleats

(see pages N-1 thru N-5) Standard

Trefoil Cable Cleats

Single Cable Cleats



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

All dimensions in parentheses are millimeters unless otherwise specified.

Section 1- Acceptable Manufacturers

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

Section 2- Cable Tray Sections and Components

2.01 General: Except as otherwise indicated, provide metal 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.

2.02 Pre-Galvanized Steel: Straight sections, fitting side rails, rungs, and covers shall be made from structural quality steel meeting the minimum mechanical properties and mill galvanized in accordance with ASTM A653 SS, Grade 33, coating designation G90. Hardware finish shall be electrogalvanized zinc per ASTM B633.

2.03 Hot Dip Galvanized Steel: All side rails, covers, splice plates, and rungs shall be made from structural quality steel meeting the minimum mechanical properties of ASTM A1011 SS, Grade 33 for 14 gauge and heavier, ASTM A1008, Grade 33 Type 2 for 16 gauge and lighter, and shall be hot dip galvanized after fabrication in accordance with ASTM A123. Mill galvanized covers are not acceptable for hot dip galvanized cable tray. Hardware finish shall be chromium zinc per ASTM F-1136-88.

2.04 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded 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. No portion of the rungs shall protrude below the bottom plane of the side rails. Each rung must be capable of supporting a 200 lb. concentrated load at the center of the cable tray over and above the cable load with a safety factor of 1.5.

2.05 Cable tray loading depth shall be [3] [4] [5] [6] inches per NEMA VE 1.

2.06 Straight sections shall have side rails fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.

2.07 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.

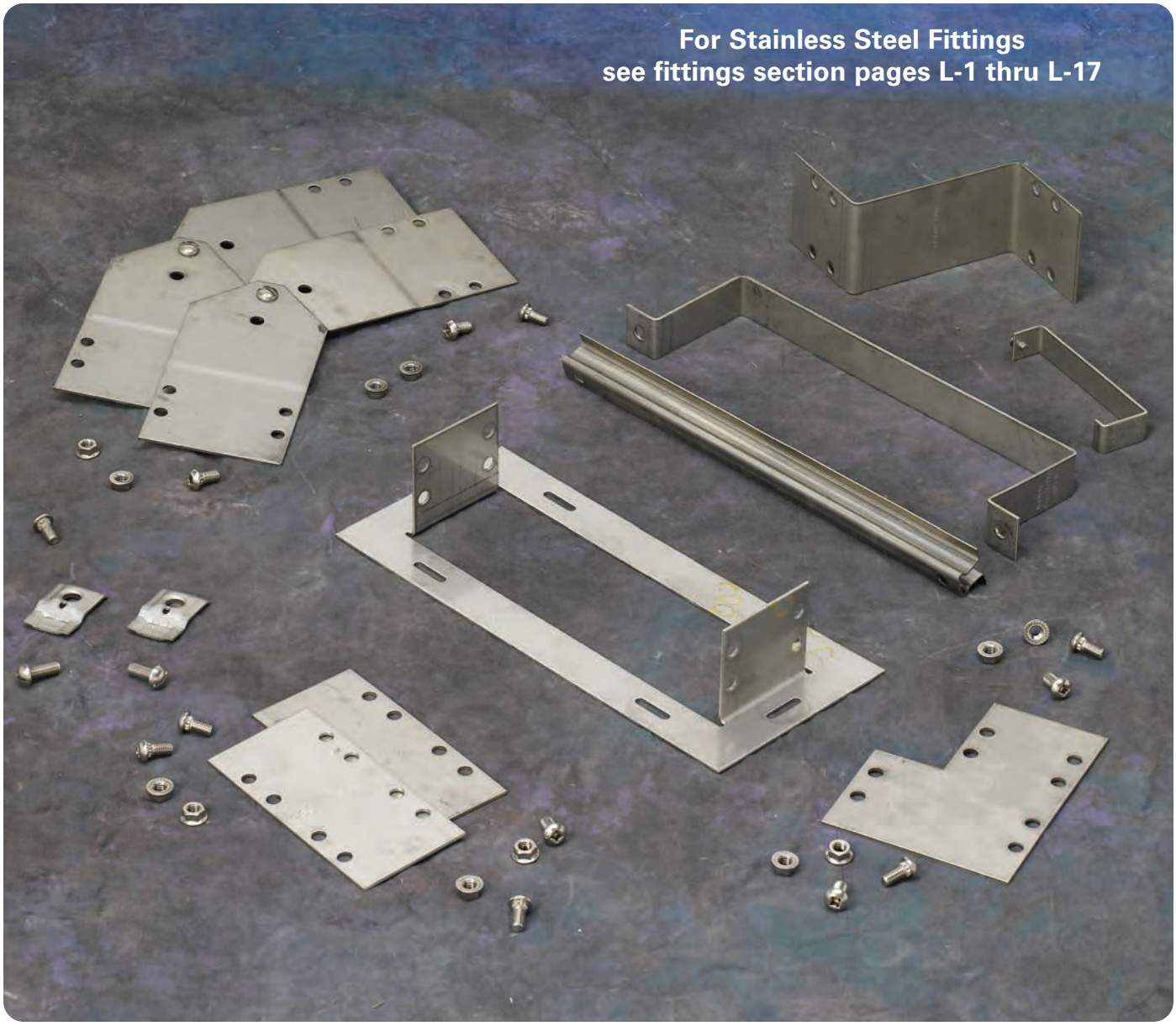
2.08 Splice plates shall be manufactured of high strength steel, meeting the minimum mechanical properties of ASTM A1011 HSLAS, Grade 50, Class 1 and be secured with 8 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.

2.09 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

Section 3- Loading Capacities and Testing

3.01 Cable tray shall be capable of carrying a uniformly distributed load of _____ lbs./ft. on a _____ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.

3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.



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: **348SS4 09 - 12 - 144** (red)

Part will have a long lead time.

3" NEMA VE 1 Loading Depth
4" Side Rail Height

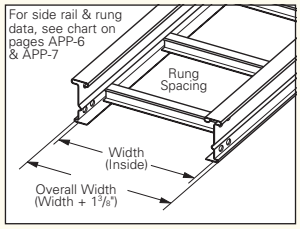
Straight Section Part Numbering

Prefix

Example: **348 SS6 09 - 24 - 144**

Series
- **348**

Material
- **SS4** = 304 Stainless Steel
- **SS6** = 316 Stainless Steel



***Type**
- **SB** = Solid Bottom
- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

***Width**
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

Length
- ① **144** = 12 ft.
- ② **120** = 10 ft.

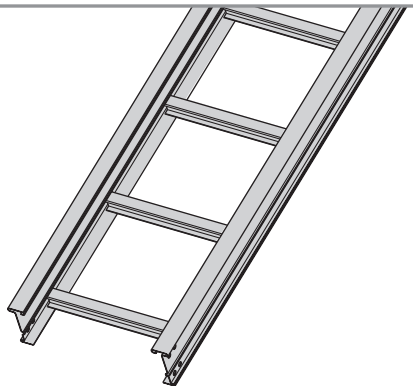
348

Notes:
① Primary Length.
② Secondary Length.

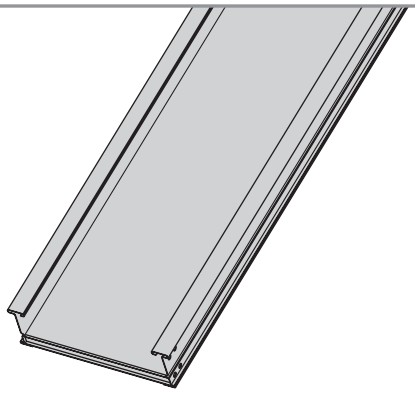
See page C-23 for explanation of lengths.

Passivation available see page C-2.

See page APP-1 for additional rung options. *Special sizes available.

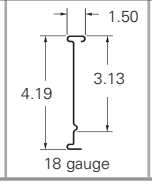


Ladder Type
(Specify Rung Spacing)



Solid Bottom

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. 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.

B-Line series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
348 SS†		NEMA: 16A, 12C CSA: C1-3m UL Cross-Sectional Area: 0.40 in²	10	180	0.0042	Area = 0.74 in² Sx = 0.79 in³ Ix = 1.85 in⁴	3.0	268	0.072	Area = 4.77 cm² Sx = 12.95 cm³ Ix = 77.00 cm⁴
			12	125	0.009		3.7	186	0.148	
			14	92	0.016		4.3	137	0.275	
			16	70	0.027		4.9	105	0.469	
			18	56	0.044		5.5	83	0.752	
			20	45	0.067		6.1	67	1.145	

When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus. † Insert 4 for 304 stainless steel or 6 for 316 stainless steel.

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

All dimensions in parentheses are millimeters unless otherwise specified.

4" NEMA VE 1 Loading Depth
5" Side Rail Height

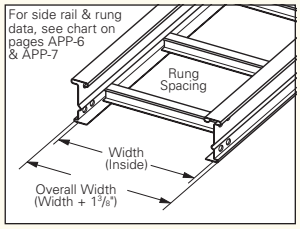
Straight Section Part Numbering

Prefix

Example: **358** **SS6** **09** - **24** - **144**

Series
- **358**

Material
- **SS4** = 304 Stainless Steel
- **SS6** = 316 Stainless Steel



***Type**
- **SB** = Solid Bottom
- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

***Width**
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

Length
- ① **144** = 12 ft.
- ② **120** = 10 ft.

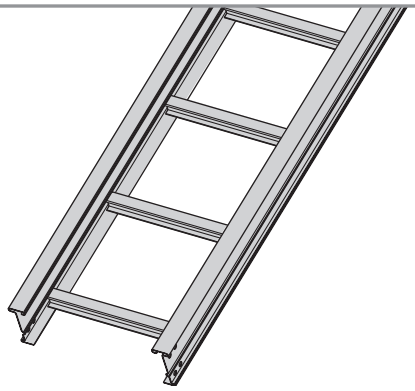
358

Notes:
① Primary Length.
② Secondary Length.

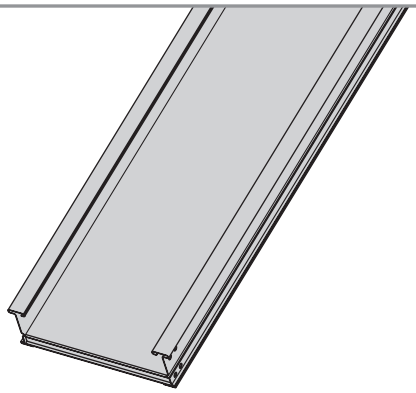
See page C-23 for explanation of lengths.

Passivation available see page C-2.

See page APP-1 for additional rung options. *Special sizes available.

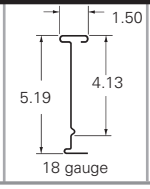


Ladder Type
(Specify Rung Spacing)



Solid Bottom

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. 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.

B-Line series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
358 SS†		NEMA: 20A, 16B CSA: 89kg/m 6.1m UL Cross-Sectional Area: 0.70 in²	10	248	0.0025	Area = 0.83 in² Sx = 1.09 in³ Ix = 3.10 in⁴	3.0	369	0.043	Area = 5.35 cm² Sx = 17.86 cm³ Ix = 129.03 cm⁴
			12	172	0.0052		3.7	256	0.089	
			14	127	0.010		4.3	188	0.164	
			16	97	0.016		4.9	144	0.280	
			18	77	0.026		5.5	114	0.448	
			20	62	0.040		6.1	92	0.684	

When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus. † Insert 4 for 304 stainless steel or 6 for 316 stainless steel.

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

All dimensions in parentheses are millimeters unless otherwise specified.

5" NEMA VE 1 Loading Depth
6" Side Rail Height

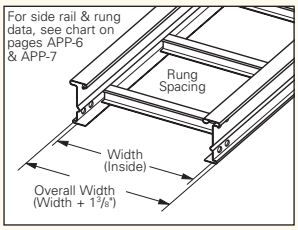
Straight Section Part Numbering

Prefix

Example: **368** **SS6** **09** - **24** - **144**

Series
- **368**
- **464**

Material
- **SS4** = 304 Stainless Steel
- **SS6** = 316 Stainless Steel



***Type**
- **SB** = Solid Bottom
- **06** = 6" rung spacing
- **09** = 9" rung spacing
- **12** = 12" rung spacing

***Width**
- **06** = 6"
- **09** = 9"
- **12** = 12"
- **18** = 18"
- **24** = 24"
- **30** = 30"
- **36** = 36"

Length

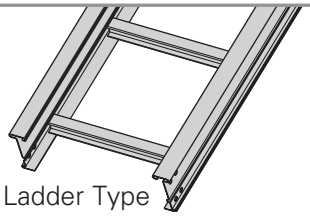
① **144** = 12 ft.	368
② **120** = 10 ft.	
① **144** = 12 ft.	464
② **120** = 10 ft.	

Notes:
① Primary Length.
② Secondary Length.

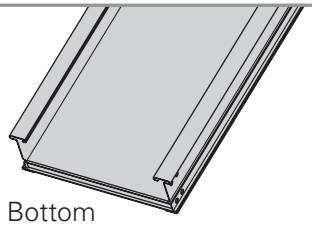
See page C-23 for explanation of lengths.

Passivation available see page C-2.

See page APP-1 for additional rung options. *Special sizes available.

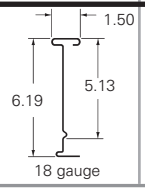


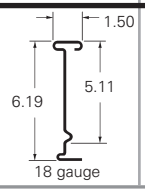
Ladder Type
(Specify Rung Spacing)



Solid Bottom

Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. 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.

B-Line series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
368 SS†		NEMA: 20A, 16B CSA: D1-3m UL Cross-Sectional Area: 0.70 in²	10	236	0.0016		3.0	351	0.028	
			12	164	0.0034	Area = 0.92 in²	3.7	244	0.058	Area = 5.94 cm²
			14	120	0.0062	Sx = 1.41 in³	4.3	179	0.107	Sx = 23.11 cm³
			16	92	0.011	Ix = 4.77 in⁴	4.9	137	0.182	Ix = 198.54 cm⁴
			18	73	0.017		5.5	108	0.291	
			20	59	0.026		6.1	88	0.444	

B-Line series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
464 SS†		NEMA: 20C+ CSA: E-6m UL Cross-Sectional Area: 1.00 in²	12	342	0.002		3.7	508	0.036	
			16	192	0.007	Area = 1.49 in²	4.9	286	0.113	Area = 9.61 cm²
			18	152	0.011	Sx = 2.28 in³	5.5	226	0.182	Sx = 37.36 cm³
			20	123	0.016	Ix = 7.65 in⁴	6.1	183	0.277	Ix = 318.42 cm⁴
			22	102	0.024		6.7	151	0.406	
			24	85	0.034		7.3	127	0.574	

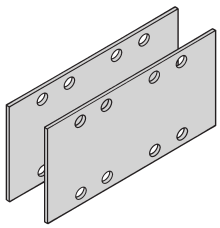
When cable trays are used in continuous spans, the deflection of the cable tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus. † Insert 4 for 304 stainless steel or 6 for 316 stainless steel.

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

All dimensions in parentheses are millimeters unless otherwise specified.

Splice Plates

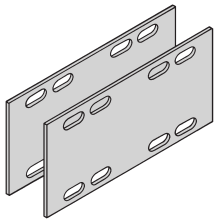
- Standard 8-hole pattern for all steel splice plates.
- Furnished in pairs with hardware.
- One pair including hardware provided with straight section. (Expansion splice quantity subtracted).
- Boxed in pairs with hardware.
- (*) Insert SS4 or SS6.



Catalog No.	Height in.	Height mm
9(*)-8004	4	(101)
9(*)-8005	5	(127)
9(*)-8006	6	(152)

Expansion Splice Plates

- Expansion plates allow for one inch expansion or contraction of the cable tray or where expansion joints occur in the support structure.
- Furnished in pairs with hardware.
- Bonding jumpers are required on each side rail. Order separately.
- (*) Insert SS4 or SS6.

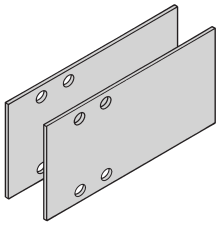


Catalog No.	Height in.	Height mm
9(*)-8014	4	(101)
9(*)-8015	5	(127)
9(*)-8016	6	(152)

For heavy duty expansion splice plates see page APP-3.

Universal Splice Plates

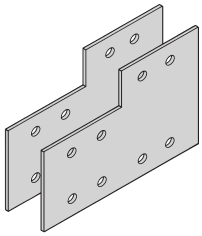
- Used to splice to existing cable tray systems.
- Furnished in pairs with hardware.
- (*) Insert SS4 or SS6.



Catalog No.	Height in.	Height mm
9(*)-8004-1/2	4	(101)
9(*)-8005-1/2	5	(127)
9(*)-8006-1/2	6	(152)

Step Down Splice Plates

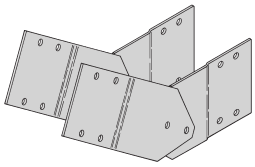
- These splice plates are offered for connecting cable tray sections having side rails of different heights.
- Furnished in pairs with hardware.
- (*) Insert SS4 or SS6.



Catalog No.	Height in.	Height mm
9(*)-8045	5 to 4	(127 to 101)
9(*)-8046	6 to 4	(152 to 101)
9(*)-8060	6 to 5	(152 to 127)

Vertical Adjustable Splice Plates

- These plates provide for changes in elevation that do not conform to standard vertical fittings.
- Furnished in pairs with hardware.
- Bonding jumpers not required.
- (*) Insert SS4 or SS6.

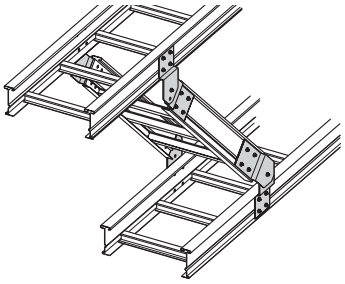


Catalog No.	Height in.	Height mm
9(*)-8024	4	(101)
9(*)-8025	5	(127)
9(*)-8026	6	(152)

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

Branch Pivot Connectors

- Branch from existing cable tray runs at any point.
- Pivot to any required angle.
- UL Classified for grounding (bonding jumpers not required).
- Furnished in pairs with hardware.
- (*) Insert SS4 or SS6.

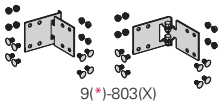


Catalog No.	Height in.	Height mm
9(*)-8244	4	(101)
9(*)-8245	5	(127)
9(*)-8246	6	(152)

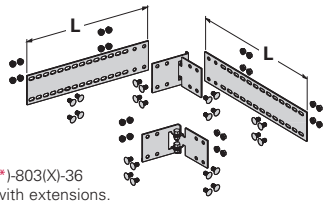
Horizontal Adjustable Splice Plates

- Used to adjust a cable tray run for changes in direction in a horizontal plane that do not conform to standard horizontal fittings.
- Furnished in pairs with hardware.
- Bonding jumpers **not** required.
- (*) Insert SS4 or SS6.
- (X) Insert 4, 5, 6 or 7 for side rail height.

Catalog No.	Cable Tray End Cut	Thru Tray Width in. (mm)	'L' in. (mm)
9(*)-803(X)	Mitered	36 (914)	N/A (NA)
9(*)-803(X)-12	Not mitered	12 (305)	16 (406)
9(*)-803(X)-36	Not mitered	36 (914)	41 (1041)



9(*)-803(X)
Splice only

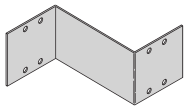


9(*)-803(X)-12 or 9(*)-803(X)-36
One pair splice plates with extensions.

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

Offset Reducing Splice Plate

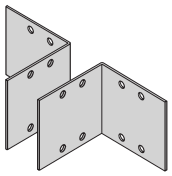
- This plate is used for joining cable trays having different widths. When used in pairs, they form a straight reduction.When used singly with a standard splice plate, they form an offset reduction.
- Furnished as one plate with hardware.
- (‡) Insert reduction
- (*) Insert SS4 or SS6.



Catalog No.	Height in. mm
9(*)-8064-(‡)	4 (101)
9(*)-8065-(‡)	5 (127)
9(*)-8066-(‡)	6 (152)

Tray to Box Splice Plates

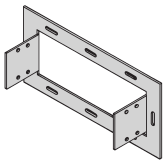
- Used to attach the end of a cable tray run to a distribution box or control panel.
- Furnished in pairs with hardware.
- (*) Insert SS4 or SS6.



Catalog No.	Height in. mm
9(*)-8054	4 (101)
9(*)-8055	5 (127)
9(*)-8056	6 (152)

Frame Type Box Connector

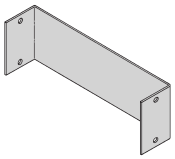
- Used to attach the end of a cable tray run to a distribution cabinet or control center. Helps reinforce the box at the point of entry.
- Furnished with tray connection hardware.
- (*) Insert SS4 or SS6.
- (‡) Insert tray width.



Catalog No.	Height in. mm
9(*)-8074-(‡)	4 (101)
9(*)-8075-(‡)	5 (127)
9(*)-8076-(‡)	6 (152)

Blind End

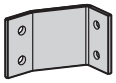
- This plate forms a closure for a dead end cable tray.
- Furnished as one plate with hardware.
- (*) Insert SS4 or SS6.
- (‡) Insert tray width.

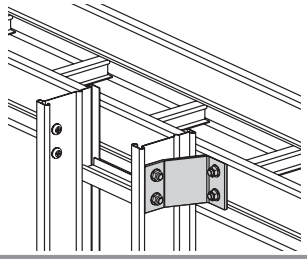


Catalog No.	Height in. mm
9(*)-8084-(‡)	4 (101)
9(*)-8085-(‡)	5 (127)
9(*)-8086-(‡)	6 (152)

Cross Connector Bracket

- For field connecting crossing section.
- Furnished in pairs with 3/8" hardware.
- (*) Insert SS4 or SS6.

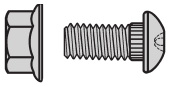




Catalog No.
9(*)-1240

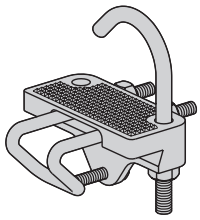
Standard Tray Hardware
(for field installation drill 13/32" hole)

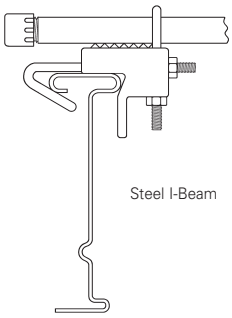
Catalog No.	Description
● **RNCB 3/8" x 3/4" SS6**	Ribbed Neck Carriage Bolt AISI 316 Stainless Steel
● **SFHN 3/8"-16 SS6**	Serrated Flange Hex Nut AISI 316 Stainless Steel



Conduit to Cable Tray Adaptor

- For easy attachment of conduit termination on a cable tray.
- Use on aluminum or steel cable trays.

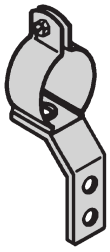


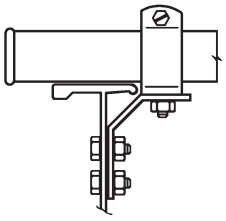


Catalog No.	Conduit Size in.	mm
● **9G-1158-1/2 & 3/4**	1/2, 3/4	(15, 20)
● **9G-1158-1 & 1 1/4**	1, 1 1/4	(25, 32)
● **9G-1158-1 1/2 & 2**	1 1/2, 2	(40, 50)
● **9G-1158-2 1/2 & 3**	2 1/2, 3	(65, 80)
● **9G-1158-3 1/2 & 4**	3 1/2, 4	(90, 100)

Conduit to Cable Tray Adaptor

- Assembly required.
- Mounting hardware included.
- Conduit clamps provided.
- (‡) = Insert conduit size (1/2" thru 4").

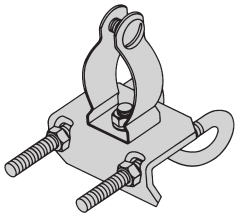


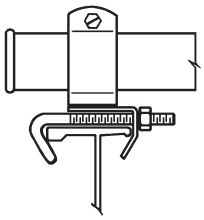


Catalog No.
● **9SS4-1150-(‡)**

Conduit to Cable Tray Adaptor

- Assembly required.
- Conduit clamps included.
- (‡) = Insert conduit size (1/2" thru 4").



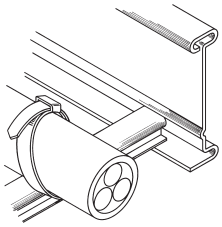


Catalog No.
● **9SS4-1155-(‡)**

Cable Tie (Ladder Tray)

- Nylon ties provide easy attachment of cable to ladder rungs.
- Maximum cable O.D. is 3" (76mm).
- Cable ties are UV resistant.

Overall Length 15" (381mm)



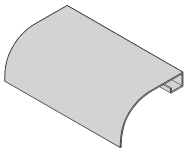
Catalog No.
● **99-2125-15**

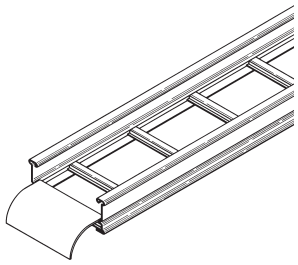
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Ladder Drop-Out

- Provide a rounded surface with 4" (101 mm) radius to help protect cable as it exits from the cable tray.
- Helps prevent damage to insulation.
- Attaches to any rung in the cable tray.
- (*) Insert SS4 or SS6.
- (‡) Insert tray width.

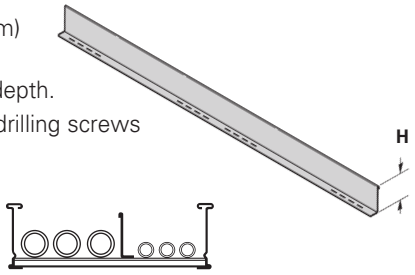




Catalog No.
9(*)-1104-(‡)

Barrier - Straight Section

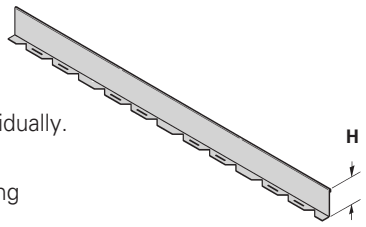
- Length: Insert 120 for [120" - 10 ft.] (3.0 m) or 144 for [144" - 12 ft.] (3.6 m)
- Order catalog number based on loading depth.
- Furnished with four #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert SS4 or SS6.



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-Length	4	(101)	3	(76)
74(*)-Length	5	(127)	4	(101)
75(*)-Length	6	(152)	5	(127)

Barrier - Horizontal Bend

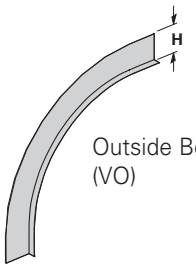
- Flexible to help conform to any horizontal fitting radius.
- Can be cut to desired length.
- Standard length is 72" [6 ft.] (1.8 m); sold individually.
- Order catalog number based on loading depth.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert SS4 or SS6.



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-90HBFL	4	(101)	3	(76)
74(*)-90HBFL	5	(127)	4	(101)
75(*)-90HBFL	6	(152)	5	(127)

Barrier - Vertical Outside Bend

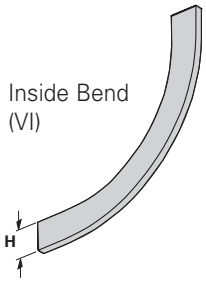
- For use to help conform to a specific vertical outside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert SS4 or SS6.
- (**) Insert 30, 45, 60 or 90 for degrees.
- (†) Insert 12, 24, 36 or 48 for radius.



Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-(**)VO(†)	4	(101)	3	(76)
74(*)-(**)VO(†)	5	(127)	4	(101)
75(*)-(**)VO(†)	6	(152)	5	(127)

Barrier - Vertical Inside Bend

- Vertical Inside Bend Barriers are preformed to conform to a specific vertical inside bend fitting.
- Furnished with three #10 x ½" plated self-drilling screws and a 99-9982 Barrier Strip Splice.
- (*) Insert SS4 or SS6.
- (**) Insert 30, 45, 60 or 90 for degrees.
- (†) Insert 12, 24, 36 or 48 for radius.



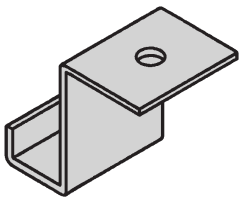
Catalog No.	Side Rail Height in.	Side Rail Height mm	Loading Depth 'H' in.	Loading Depth 'H' mm
73(*)-(**)VI(†)	4	(101)	3	(76)
74(*)-(**)VI(†)	5	(127)	4	(101)
75(*)-(**)VI(†)	6	(152)	5	(127)

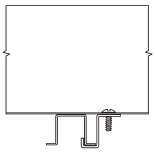
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Barrier Strip Clip

- Barrier clip fastens to either aluminum or steel ladder rung.
- Furnished with one #10 x 1/2" zinc plated self-drilling screw.
- (*) Insert SS4 or SS6.

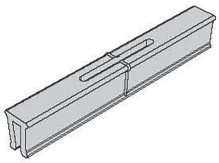


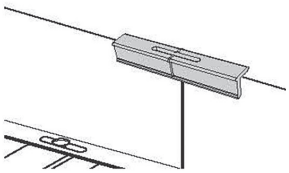


Catalog No.
9(*)-9002

Barrier Strip Splice

- 2.85" (72.4mm) long
- Ribbed edge for increased rigidity and grip
- Comfort edge for ease of installation
- Slotted top window with center mark for accurate placement and inspection capability
- Patent pending



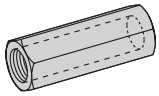


Catalog No.
● 99-9982

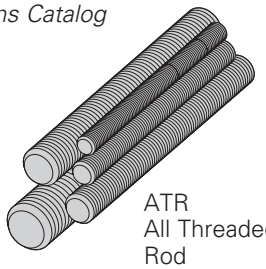
Thread Rod (ATR) & Rod Couplings

- Loading based on safety factor 5.
- Standard Finish: SS4 or SS6.

See B-Line series Strut Systems Catalog for other sizes and finishes.



B655
Rod Coupling

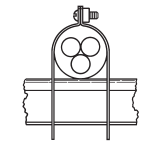


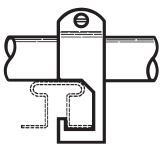
ATR
All Threaded
Rod

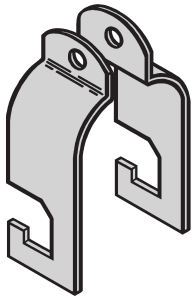
Size	Catalog No.	Available Length	Loading
All Threaded Rod			
3/8"-16	● **ATR 3/8" x Length**	36", 72", 120", 144"	730 lbs.
1/2"-13	● **ATR 1/2" x Length**	36", 72", 120", 144"	1350 lbs.
Rod Coupling			
3/8"-16	● **B655-3/8"**	NA	730 lbs.
1/2"-13	● **B655-1/2"**	NA	1350 lbs.

Stainless Steel Cable Clamp

- Fits with series 2, 3, 4 & 5 standard steel rungs.
- See cable cleats section of the cable tray catalog for more information.
- Field form around the cable at the time of installation.
- Shipped flat.







Catalog No.	Cable Size in.	Cable Size mm
● 9SS4-4050	0.50 - 0.75	(13 - 19)
● 9SS4-4075	0.75 - 1.00	(19 - 25)
● 9SS4-4100	1.00 - 1.25	(25 - 32)
● 9SS4-4125	1.25 - 1.50	(32 - 38)
● 9SS4-4150	1.50 - 1.75	(38 - 45)
● 9SS4-4175	1.75 - 2.00	(45 - 51)
● 9SS4-4200	2.00 - 2.25	(51 - 57)
● 9SS4-4225	2.25 - 2.50	(57 - 64)
● 9SS4-4250	2.50 - 2.75	(64 - 70)
● 9SS4-4275	2.75 - 3.00	(70 - 76)
● 9SS4-4300	3.00 - 3.25	(76 - 82)
● 9SS4-4325	3.25 - 3.50	(82 - 89)
● 9SS4-4350	3.50 - 3.75	(89 - 95)
● 9SS4-4375	3.75 - 4.00	(95 - 100)
● 9SS4-4400	4.00 - 4.25	(100 - 106)
● 9SS4-4425	4.25 - 4.50	(106 - 113)
● 9SS4-4450	4.50 - 4.75	(113 - 121)
● 9SS4-4475	4.75 - 5.00	(121 - 125)

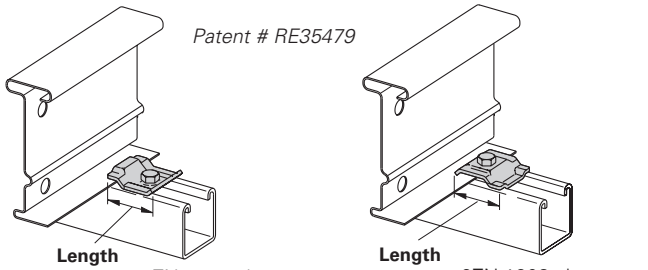
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Cable Tray Clamp/Guide

- Features a no-twist design.
- Has four times the strength of the traditional design.
- Each side is labeled to ensure proper installation.
- Furnished in pairs without hardware.
- Not recommended for vertical support.

Catalog No.		Overall Length	Hardware Size	Finish
Without Hardware	With Hardware	in. (mm)	in.	
● 9SS6-1205	● 9SS6-1205NB	2¼ (57)	½"	316SS



9ZN-1204 shown. Installed as a guide.

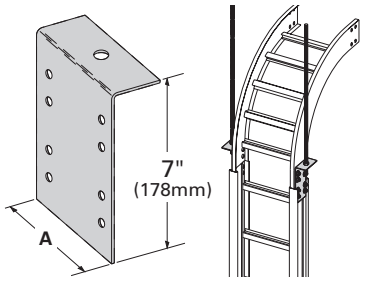
9ZN-1208 shown. Installed as a clamp.

When installing this device as an expansion guide on the outside flange of *Steel Side Rail*, use the Catalog No. **B202** Square Washer in order to properly elevate the guide.

Note: For heavy duty or vertical applications see 9(*)-1241 or 9(*)-1242 page K-15

Vertical Hanger Splice Plates

- Design load is 1500 lbs (6.67kN) per pair.
- Safety Factor of 2.5.
- Furnished in pairs.
- Hole size: 9/16" (14mm) for ½" threaded rod.
- (*) Insert SS4 or SS6.

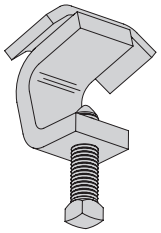


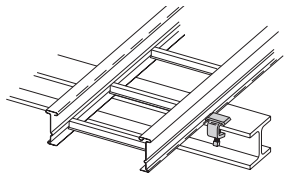
Catalog No.	Outside Cable Tray Ht.	'A' in.	'A' (mm)
9(*)-8224	4"	3.84	(97.54)
9(*)-8225	5"	4.73	(120.14)
9(*)-8226	6"	5.84	(148.34)
9(*)-8227	7"	6.84	(173.74)

Cable Tray Clamp

- Hold-down clamps for single or double cable tray runs.
- No drilling of support I-beam or channel is required.
- Sold in pieces; two clamps are required per tray.
- Maximum beam flange thickness 1⅛" (28.58 mm).
- (*) Insert SS4 or SS6.

Catalog No.	Finish
● 9SS4-1249HD	304SS
● 9SS6-1249HD	316SS

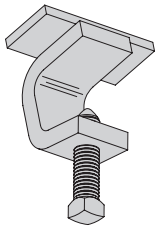


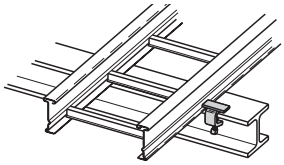


Cable Tray Guide

- Expansion guide for single or double cable tray runs.
- Guide allows for longitudinal movement of the cable tray.
- No field drilling of support I-beam or channel is required.
- Guides are required on both sides of cable tray to prevent lateral movement; can be placed on either the inside or outside flange of cable tray.
- Guides are sold in pieces - two guides are required per tray.
- Maximum flange thickness 1⅛" (28.58 mm).
- (*) Insert SS4 or SS6.

Catalog No.	Finish
● 9SS4-1249	304SS
● 9SS6-1249	316SS



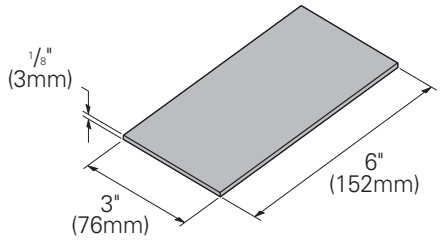


● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Nylon Pad

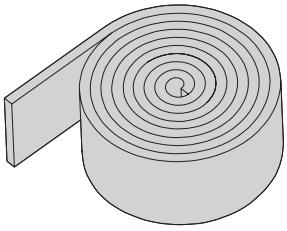
- Use for friction reduction.
- Hardness: Shore D80.
- Low friction coefficient.
- UV resistant.
- Excellent weatherability.
- UL - 94HB.



Catalog No.
● 99-PE36

Neoprene Roll

- Use for material isolation.
- 1/8" x 2" x 25' roll.
- Hardness: Shore A60.
- Good weatherability.



Catalog No.
● 99-NP300

DURA-BLOK™ Rooftop Support Bases with B22 Channel

- Designed as a superior rooftop support for cable tray.
- UV resistant and approved for most roofing material or other flat surfaces.
- Can be used with any of B-Line series cable tray clamps and guides.
- Ultimate Load Capacity: 1,000 lbs. (uniform load).

Catalog No.	Height x Width x Length in.	(mm)
● DB10-28	5 5/8 x 6 x 28.0	(143 x 152 x 711)
● DB10-36	5 5/8 x 6 x 36.0	(143 x 152 x 914)
● DB10-42	5 5/8 x 6 x 42.0	(143 x 152 x 1067)
● DB10-50	5 5/8 x 6 x 50.0	(143 x 152 x 1270)
● DB10-60	5 5/8 x 6 x 60.0	(143 x 152 x 1524)

LEEDS credit available, base made from 100% recycled material.

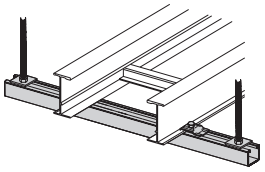
General Note: Consult roofing manufacturer or engineer for roof load capacity. The weakest point may be the insulation board beneath the rubber membrane.

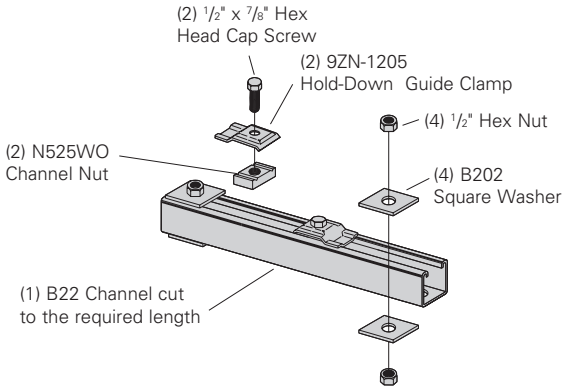
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Trapeze Support Kit

- Kit includes components for a single trapeze support in one package.
- The SH channel provides the convenience of pre-punched slots, which helps eliminate the need for field drilling.
- The illustrated hardware is (shown below) sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with 1/2" threaded rod. **Order rod separately.**
- Available in type 304 or Type 316 stainless steel.





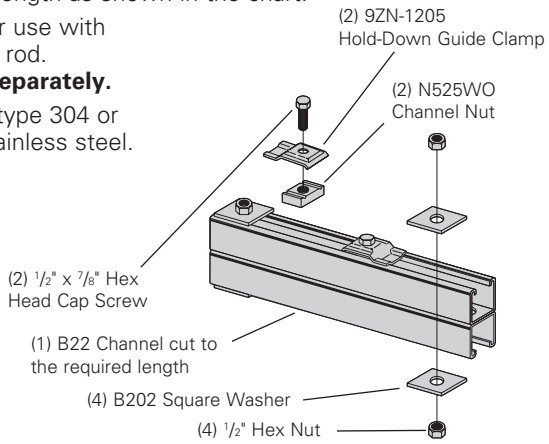
Catalog No.	Tray Width in.	mm	Channel Length in.	mm	Uniform Load lbs	kN
● 9(*)-5506-22SH(†)	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SH(†)	9	(229)	18	(457)	1250	(5.56)
● 9(*)-5512-22SH(†)	12	(305)	22	(559)	1125	(5.00)
● 9(*)-5518-22SH(†)	18	(457)	28	(711)	865	(3.85)
● 9(*)-5524-22SH(†)	24	(610)	34	(864)	700	(3.11)
● 9(*)-5530-22SH(†)	30	(762)	40	(1016)	590	(2.62)
● 9(*)-5536-22SH(†)	36	(914)	46	(1168)	510	(2.27)
● 9(*)-5542-22SH(†)	42	(1067)	52	(1321)	450	(2.00)

- (*) Insert SS4 or SS6.
- (†) Insert 3/8 for 3/8" threaded rod hardware.

Safety factor of 3.0 on all loads.

Heavy Duty Trapeze Support Kit

- Kit includes components for a single trapeze support in one package.
- The SH channel provides the convenience of pre-punched slots, which helps eliminates the need for field drilling.
- The illustrated hardware (shown below) is sealed in a plastic bag and boxed with the channel, which is pre-cut to the appropriate length as shown in the chart.
- Designed for use with 1/2" threaded rod. **Order rod separately.**
- Available in type 304 or Type 316 stainless steel.



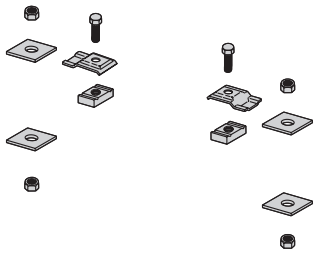
Catalog No.	Tray Width in.	mm	Channel Length in.	mm	Uniform Load lbs	kN
● 9(*)-5506-22SHA	6	(152)	16	(406)	1350	(6.00)
● 9(*)-5509-22SHA	9	(229)	18	(457)	1350	(6.00)
● 9(*)-5512-22SHA	12	(305)	22	(559)	1350	(6.00)
● 9(*)-5518-22SHA	18	(457)	28	(711)	1350	(6.00)
● 9(*)-5524-22SHA	24	(610)	34	(864)	1350	(6.00)
● 9(*)-5530-22SHA	30	(762)	40	(1016)	1350	(6.00)
● 9(*)-5536-22SHA	36	(914)	46	(1168)	1350	(6.00)
● 9(*)-5542-22SHA	42	(1067)	52	(1321)	1350	(6.00)

- (*) Insert SS4 or SS6.

Safety factor of 3.0 on all loads.

Trapeze Hardware Kit

- Hardware shipped in plastic bag.



Description	Catalog No.	
	● 9SS4-5500-1/2	● 9SS6-5500-1/2
Items included in the kit.	1 pr. 9SS6-1205 2 HHC Screw 1/2 x 7/8 SS4 2 N525 WO SS6 4 B202 SS4 1/2" sq washer 4 HN 1/2 SS4	1 pr. SS6-1205 2 HHC Screw 1/2 x 7/8 SS6 2 N525 WO SS6 4 B202 SS6 1/2" sq washer 4 HN 1/2" SS6

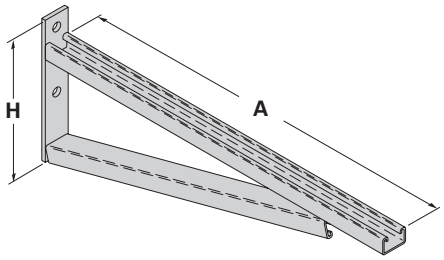
● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

All dimensions in parentheses are millimeters unless otherwise specified.

Bracket (12"- 42")

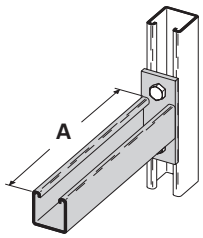
- Bottom brace is B42 channel on B494-24 and smaller and B22 channel on B494-30 and larger.
- For more dimensional data see Strut Systems catalog.
- Safety Load Factor 2.5.
- (*) Insert available finish: SS4 or SS6.
- Safety Load Factor 2.5.

Catalog No.	Uniform Load lbs	(kN)	Tray Width in.	(mm)	'A' in.	(mm)	'H' in.	(mm)
B494-12	2500	(11.12)	6 & 9	(152 & 229)	12	(305)	8 3/4	(222)
B494-18	1700	(7.56)	12	(305)	18	(457)	8 3/4	(222)
B494-24	1300	(5.78)	18	(457)	24	(610)	8 3/4	(222)
B494-30	1600	(7.11)	24	(610)	30	(762)	11 1/4	(286)
B494-36	1100	(4.89)	30	(762)	36	(914)	11 1/4	(286)
B494-42	980	(4.36)	36	(914)	42	(1067)	16	(406)
B494-48	980	(4.36)	42	(1067)	48	(1219)	16	(406)



Cantilever Bracket

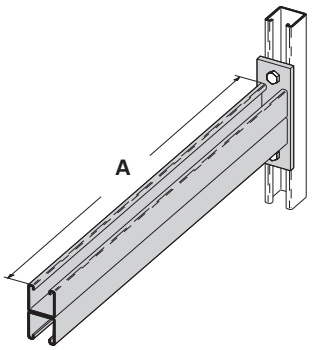
- (*) Insert available finish: SS4 or SS6.
- Safety Load Factor 2.5.



Catalog No.	Uniform Load lbs	kN	Tray Width in.	mm	'A' in.	mm
B409-12(*)	960	(4.27)	6 & 9	(152 & 229)	12	(305)
B409-18(*)	640	(2.84)	12	(305)	18	(457)
B409-24(*)	480	(2.13)	18	(457)	24	(610)

Cantilever Bracket

- (*) Insert available finish: SS4 or SS6.
- Safety Load Factor 2.5.



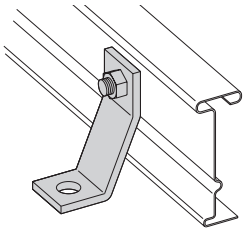
Catalog No.	Uniform Load lbs	kN	Tray Width in.	mm	'A' in.	mm
B297-12(*)	1660	(7.38)	6 & 9	(152 & 229)	12	(305)
B297-18(*)	1100	(4.89)	12	(305)	18	(457)
B297-24(*)	835	(3.71)	18	(457)	24	(610)
B297-30(*)	665	(2.93)	24	(610)	30	(762)
B297-36(*)	550	(2.44)	30	(762)	36	(914)
B297-42(*)	465	(2.06)	36	(914)	42	(1067)

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

All dimensions in parentheses are millimeters unless otherwise specified.

Heavy Duty Hold Down Bracket

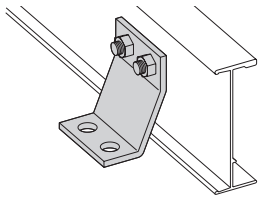
- Design load is 2000 lbs (8.89kN) per pair.
- Two bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided.
- 3/8" support attachment hardware **not** provided.
- Recommended for support of vertical trays.
- (*) Insert SS4 or SS6.

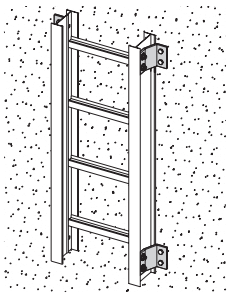


Catalog No.
9(*)-1241

Heavy Duty Hold Down Bracket

- Design load is 4000 lbs (17.79kN) per pair.
- Four bolt design.
- Sold in pairs.
- 3/8" cable tray attachment hardware provided
- 3/8" support attachment hardware **not** provided.
- Recommended for support of vertical trays.
- (*) Insert SS4 or SS6.

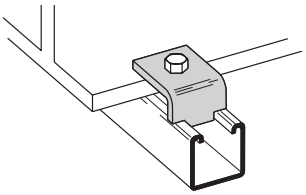




Catalog No.
9(*)-1242

Beam Clamp

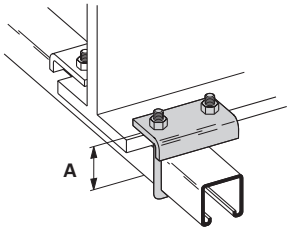
- Sold in pieces.
- Design load is 1200 lbs (5.34kN) per pair.
- Safety Load Factor 5.0.
- Order HHCS and Channel Nuts separately.
- Finishes available: SS4.



Catalog No.
B355SS4

Beam Clamp

- Sold in pieces.
- (*) Insert SS4 or SS6.

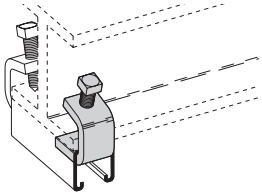


Catalog No.	Design Load lbs (kN)	'A' in. (mm)
B441-22(*)	1200 (5.34)	3 3/8 (86)
B441-22A(*)	1200 (5.34)	5 (127)

*Design load when used in pairs.
Safety Load Factor 5.0.

Beam Clamp

- Sold in pieces.
- Finishes available: SS4.



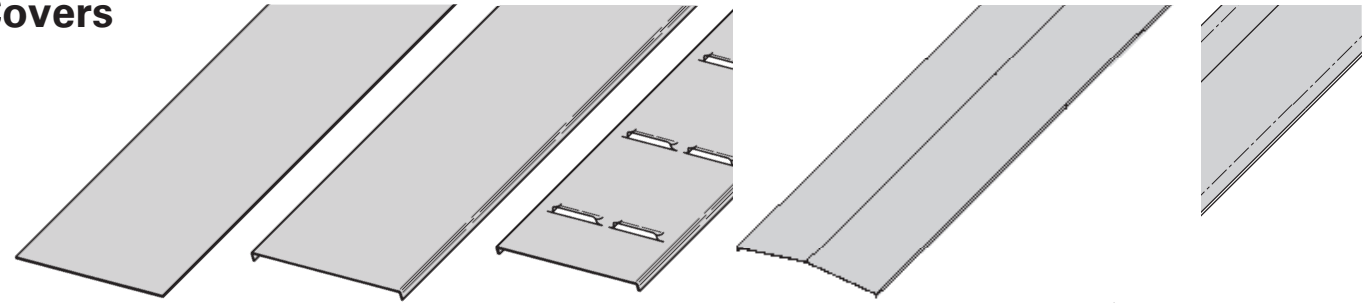
Description	Catalog No.	
	B212-1/4SS4	B212-3/8SS6
Design Load *	600 lbs. (2.67kN)	1000 lbs. (4.45 kN)
Max. Flange Thick	3/4" (19 mm)	1 1/8" (28.6 mm)
Mat'l. Thickness	1/4" (6.3 mm)	3/8" (9.5 mm)

*Design load when used in pairs.
Safety Load Factor 5.0.

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

All dimensions in parentheses are millimeters unless otherwise specified.

Covers



Solid Non-Flanged | Solid Flanged | Ventilated Flanged | Peaked Flanged | 2 to 3 Pitch Peaked Flanged (See page APP-4)

A full range of covers is available for straight sections and fittings.

Solid covers should be used when maximum enclosure of the cable is desired and no accumulation of heat is expected.

Ventilated covers provide an overhead cable shield yet allow heat to escape.

We recommends that covers be placed on vertical cable tray runs to a height of 6 ft. (1.83 m) to 8 ft. (2.44 m) above the floor to isolate both cables and personnel. **Flanged covers** have a 1/2 in. (13 mm) flange. Cover clamps are not included with the cover and must be ordered separately. All **peaked covers** are flanged. Standard peaked covers have 1/2" peak. Special purpose peaked covers, having a 2 to 3 pitch, provide additional slope and material thickness. The 2 to 3 pitch fitting covers are of multiple piece, welded construction.

Steel Cover Part Numbering

Prefix

Example: **80 2 SS4 - 24 - 144**

Cover Type
- 80 = Solid
- 81 = Ventilated
- 82 = Peaked

Detail
- 2 = Flanged Stainless Steel (all fittings)
- 3 = Flanged Steel (all straight sections)
- 4 = Non-Flanged Stainless Steel (80 & 81 type only)

Material
- SS4 = 304 Stainless Steel
- SS6 = 316 Stainless Steel

Tray Width
- 06 = 6"
- 09 = 9"
- 12 = 12"
- 18 = 18"
- 24 = 24"
- 30 = 30"
- 36 = 36"

Item Description
For Straight Section Cover:
- 144 = 12 ft. (3.66 m)
- 120 = 10 ft. (3.05 m)
- 72 = 6 ft. (1.83 m)
- 60 = 5 ft. (1.52 m)

For fitting covers: Insert suffix of fitting to be covered. See example below.

Examples of Catalog Numbers for Fitting Covers:

Horizontal Bend Cover

Prefix | Suffix

80 2 SS4 - 18 - 90 HB 24

- 24 = Radius
- HB = Fitting
- 90 = Angle
- 18 = Width
- SS4 = Material
- 2 = Detail
- 80 = Cover Type

Vertical Bend Cover

Prefix | Suffix

80 2 SS4 - 24 - 90 VO 24 - 4*

- 4* = Side Rail Height
- 24 = Radius
- VO = Fitting
- 90 = Angle
- 24 = Width
- SS4 = Material
- 2 = Detail
- 80 = Cover Type

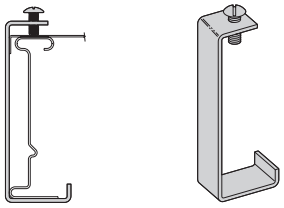
* Required for VO fittings only

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

All dimensions in parentheses are millimeters unless otherwise specified.

Standard Cover Clamp

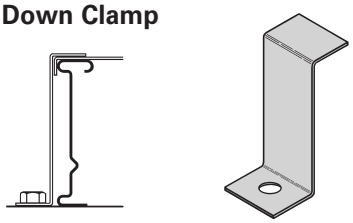
- For indoor service only.
- Screw included.
- Sold per piece.



Tray Type	Catalog No.	Side Rail Height in.	(mm)
Stainless Steel	**9SS6-9014**	4	(101)
	9SS6-9015	5	(127)
	9SS6-9016	6	(152)

Combination Cover and Hold Down Clamp

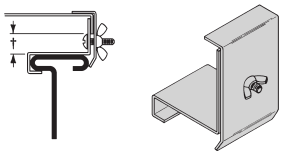
- Sold per piece.
- For indoor service only.
- (*) Insert SS4 or SS6.



Tray Type	Catalog No.	Side Rail Height in.	(mm)
Stainless Steel	**9(*)-9043**	4	(101)
	9(*)-9053	5	(127)
	9(*)-9063	6	(152)

Raised Cover Clamp

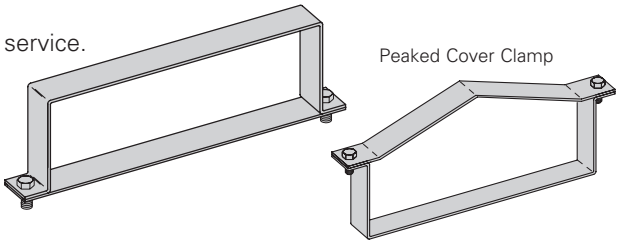
- For indoor service only.
- For use with flanged covers only.
  † Specify gap of 1", 2", 3" or 4".
- (*) Insert SS4 or SS6.



Tray Type	Catalog No.	Tray Type
● **9(*)-9115-†**	Series 3 & 4 Steel Straight Section	
● **9(*)-910†**	All Steel Fittings (Also Series 1 Steel Straight Sections)	

Heavy Duty Cover Clamp

- Recommended for outdoor service.
- (‡) Insert tray width
  † Add P to Catalog No. for peaked cover clamp.
- (*) Insert SS4 or SS6.



Peaked Cover Clamp

Catalog No.	Side Rail Height in.	mm
9(*)-(‡)-9044†	4	(101)
9(*)-(‡)-9054†	5	(127)
9(*)-(‡)-9064†	6	(152)

Quantity of Standard Cover Clamps Required

Notes:

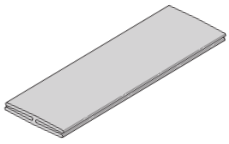
When using the Heavy Duty Cover Clamp, only on-half the number of clamps stated above is required.

Additional clamps may be necessary in extreme wind applications.

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.

Cover Joint Strip

- Used to join covers.
- Plastic.
- Only for use on flat covers
- Color - gray.
- (‡) Insert tray width.



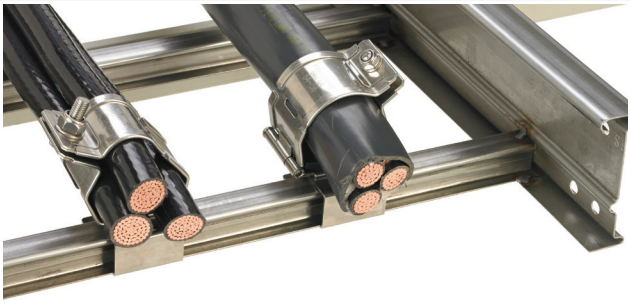
Catalog No.
● **99-9980-(‡)**

Cable Cleats

- For additional information, see pages N-1 to N-5 in this catalog.

Trefoil Cable Cleats

Single Cable Cleats



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

All dimensions in parentheses are millimeters unless otherwise specified.

Section 1- Acceptable Manufacturers

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

Section 2- Cable Tray Sections and Components

2.01 General: Except as otherwise indicated, provide metal 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.

2.02 Stainless Steel: Straight section and fitting side rails and rungs shall be made of AISI Type [304] [316] stainless steel. Transverse members (rungs) or corrugated bottoms shall be welded to the side rails with Type 316 stainless steel welding wire. Hardware shall be AISI Type 316 stainless steel.

2.03 Ladder Cable Trays shall consist of two longitudinal members (side rails) with transverse members (rungs) welded 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.

2.04 Cable tray loading depth shall be [3] [4] [5] inches per NEMA VE 1.

2.05 Straight sections shall be fabricated as I-beams. Straight sections shall be supplied in standard [12 foot] [24 foot] [10 foot (3 m)] [20 foot (6 m)] lengths.

2.06 Cable tray widths shall be [6] [9] [12] [18] [24] [30] [36] inches or as shown on drawings.

2.07 Splice plates shall be manufactured of high strength steel and be secured with 8 nuts and bolts per plate. The resistance of fixed splice connections between an adjacent section of tray shall not exceed 0.00033 ohm.

2.08 All fittings must have a minimum radius of [12] [24] [36] [48] inches.

Section 3- Loading Capacities and Testing

3.01 Cable tray shall be capable of carrying a uniformly distributed load of _____ lbs./ft. on a _____ ft. support span with a safety factor of 1.5 when supported as a simple span and tested per NEMA VE 1 5.2. In addition to the uniformly distributed load the cable tray shall support 200 lbs. concentrated load at mid-point of span. Load and safety factors specified are applicable to both the side rails and rung capacities. Cable tray shall be made to manufacturing tolerances as specified by NEMA.

3.02 Upon request, manufacturer shall provide test reports in accordance with the latest revision of NEMA VE 1 or CSA C22.2 No. 126.


WARNING!

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 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.

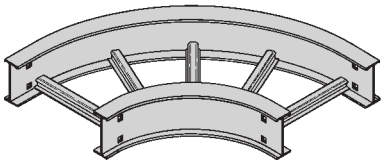
- Green = Fastest shipped items
- Black = Normal lead-time items
- Red = Normally long lead-time items

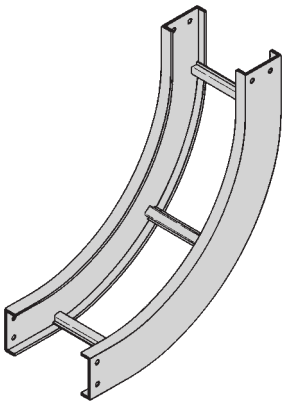
Example:

5	G	-	09	-	90	HB	24
●	●		●		●	●	●

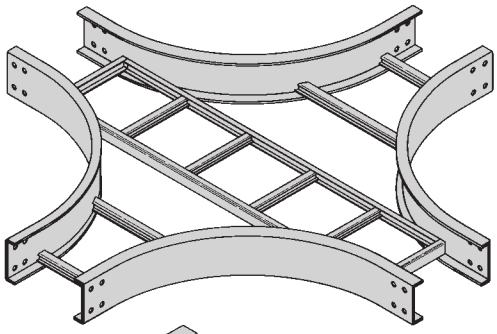
Part will have a long lead time because of the G material.

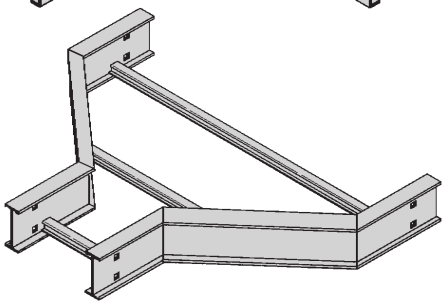
Changing the part number from G to A or P will change the coding to black and reduce lead time.





Fittings engineered with 3" tangents for splicing integrity.





Fittings Part Numbering

Prefix

Example: **4 A - 24 - 90 HB 24** (9" rung spacing is standard)

Side Rail Height
- 4 = 4" (101)
- 5 = 5" (127)
- 6 = 6" (152)
- 7 = 7" (178)

Material
- A = Aluminum
- G =HDGAF
- P = Pre-Galvanized
- SS4 = 304 Stainless Steel
- SS6 = 316 Stainless Steel

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

Angle
- 30 = 30°
- 45 = 45°
- 60 = 60°
- 90 = 90°

Type
- HB = Horizontal Bend
- HT = Horizontal Tee
- HX = Horizontal Cross
- VI = Vertical Inside Bend
- VO = Vertical Outside Bend
- VT = Vertical Tee
- VTU = Vertical Tee, Up
- HYR = Horizontal Wye, Right
- HYL = Horizontal Wye, Left
- CSF = Cable Support Fitting
- LR = Left Reducer Fitting
- RR = Right Reducer Fitting
- SR = Straight Reducer Fitting

Radius
- 12 = 12" (305)
- 24 = 24" (609)
- 36 = 36" (914)
- 48 = 48" (1219)

See page APP-2 for 6" fittings with 9A-6006 and 9A-6007 splice plates.

For flat Solid Bottom: Available 6" and Wider

Prefix

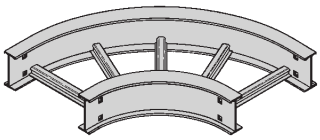
5PSB - 24 - 90HB24

Solid Bottom

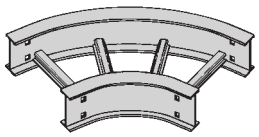
Note: Horizontal crosses and tees 30" or wider, with a radius of 36" or larger, will be of two-piece construction.

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

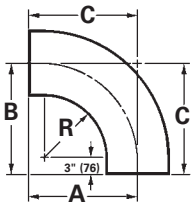
All dimensions in parentheses are millimeters unless otherwise specified.

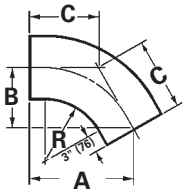


90˚ Horizontal Bend



60˚ Horizontal Bend





Horizontal Bend 90° 60° (HB)

1 pair splice plates with hardware included.

Bottoms manufactured:

- Ladder = 9" Rung Spacing
- VT & 04 = 4" Rung Spacing
- ST & SB = Flat sheet over 12" Rung Spacing

Bend Radius R	Tray Width	90˚ Horizontal Bend Dimensions							60˚ Horizontal Bend Dimensions							
		Catalog No.	A		B		C		Catalog No.	A		B		C		
in. (mm)	in. (mm)		in.	(mm)	in.	(mm)	in.	(mm)		in.	(mm)	in.	(mm)	in.	(mm)	
12 (305)	6 (152)	(Pre)-06-90HB12	18	(457)	18	(457)	18	(457)	(Pre)-06-60HB12	17 1/2	(445)	10 1/8	(257)	11 11/16	(297)	
	9 (228)	(Pre)-09-90HB12	19 1/2	(495)	19 1/2	(495)	19 1/2	(495)	(Pre)-09-60HB12	18 13/16	(478)	10 7/8	(276)	12 1/2	(318)	
	12 (305)	(Pre)-12-90HB12	21	(533)	21	(533)	21	(533)	(Pre)-12-60HB12	20 1/16	(510)	11 5/8	(295)	13 3/8	(340)	
	18 (457)	(Pre)-18-90HB12	24	(610)	24	(610)	24	(610)	(Pre)-18-60HB12	22 11/16	(576)	13 1/8	(333)	15 1/8	(384)	
	24 (609)	(Pre)-24-90HB12	27	(686)	27	(686)	27	(686)	(Pre)-24-60HB12	25 5/16	(643)	14 5/8	(372)	16 7/8	(429)	
	30 (762)	(Pre)-30-90HB12	30	(762)	30	(762)	30	(762)	(Pre)-30-60HB12	27 7/8	(708)	16 1/8	(410)	18 9/16	(472)	
	36 (914)	(Pre)-36-90HB12	33	(838)	33	(838)	33	(838)	(Pre)-36-60HB12	30 1/2	(775)	17 5/8	(448)	20 5/16	(516)	
	42 (1067)	(Pre)-42-90HB12	36	(914)	36	(914)	36	(914)	(Pre)-42-60HB12	33 1/16	840	19 1/8	(486)	22 1/16	(560)	
24 (610)	6 (152)	(Pre)-06-90HB24	30	(762)	30	(762)	30	(762)	(Pre)-06-60HB24	27 7/8	(708)	16 1/8	(410)	18 9/16	(472)	
	9 (228)	(Pre)-09-90HB24	31 1/2	(800)	31 1/2	(800)	31 1/2	(800)	(Pre)-09-60HB24	29 3/16	(741)	16 7/8	(429)	19 7/16	(494)	
	12 (305)	(Pre)-12-90HB24	33	(838)	33	(838)	33	(838)	(Pre)-12-60HB24	30 1/2	(775)	17 5/8	(448)	20 5/16	(516)	
	18 (457)	(Pre)-18-90HB24	36	(914)	36	(914)	36	(914)	(Pre)-18-60HB24	33 1/16	(708)	19 1/8	(486)	22 1/16	(560)	
	24 (609)	(Pre)-24-90HB24	39	(991)	39	(991)	39	(991)	(Pre)-24-60HB24	35 11/16	(907)	20 5/8	(524)	23 13/16	(605)	
	30 (762)	(Pre)-30-90HB24	42	(1067)	42	(1067)	42	(1067)	(Pre)-30-60HB24	38 1/4	(972)	22 1/8	(564)	25 1/2	(648)	
	36 (914)	(Pre)-36-90HB24	45	(1143)	45	(1143)	45	(1143)	(Pre)-36-60HB24	40 7/8	(1038)	23 5/8	(600)	27 1/4	(692)	
	42 (1067)	(Pre)-42-90HB24	48	(1219)	48	(1219)	48	(1219)	(Pre)-42-60HB24	43 1/2	(1105)	25 1/8	(638)	29	(737)	
36 (914)	6 (152)	(Pre)-06-90HB36	42	(1067)	42	(1067)	(1067)	(1067)	(Pre)-06-60HB36	38 1/4	(971)	22 1/8	(562)	25 1/2	(648)	
	9 (228)	(Pre)-09-90HB36	43 1/2	(1105)	43 1/2	(1105)	43 1/2	(1105)	(Pre)-09-60HB36	39 9/16	(1005)	22 7/8	(581)	26 3/8	(670)	
	12 (305)	(Pre)-12-90HB36	45	(1143)	45	(1143)	45	(1143)	(Pre)-12-60HB36	40 7/8	(1038)	23 5/8	(600)	27 1/4	(692)	
	18 (457)	(Pre)-18-90HB36	48	(1219)	48	(1219)	48	(1219)	(Pre)-18-60HB36	43 1/2	(1105)	25 1/8	(638)	29	(737)	
	24 (609)	(Pre)-24-90HB36	51	(1295)	51	(1295)	51	(1295)	(Pre)-24-60HB36	46 1/16	(1170)	26 5/8	(676)	30 11/16	(780)	
	30 (762)	(Pre)-30-90HB36	54	(1372)	54	(1372)	54	(1372)	(Pre)-30-60HB36	48 1/16	(1237)	28 1/8	(714)	32 7/16	(824)	
	36 (914)	(Pre)-36-90HB36	57	(1448)	57	(1448)	57	(1448)	(Pre)-36-60HB36	51 1/4	(1302)	29 5/8	(753)	34 3/16	(869)	
	42 (1067)	(Pre)-42-90HB36	60	(1524)	60	(1524)	60	(1524)	(Pre)-42-60HB36	53 7/8	(1368)	31 1/8	(791)	35 15/16	(913)	
48 (1220)	6 (152)	(Pre)-06-90HB48	54	(1372)	54	(1372)	54	(1372)	(Pre)-06-60HB48	48 1/16	(1221)	28 1/8	(715)	32 11/16	(830)	
	9 (228)	(Pre)-09-90HB48	55 1/2	(1410)	55 1/2	(1410)	55 1/2	(1410)	(Pre)-09-60HB48	49 15/16	(1268)	28 7/8	(734)	33 5/16	(846)	
	12 (305)	(Pre)-12-90HB48	57	(1448)	57	(1448)	57	(1448)	(Pre)-12-60HB48	51 1/4	(1302)	29 5/8	(753)	34 3/16	(869)	
	18 (457)	(Pre)-18-90HB48	60	(1524)	60	(1524)	60	(1524)	(Pre)-18-60HB48	53 7/8	(1368)	31 1/8	(737)	35 15/16	(913)	
	24 (609)	(Pre)-24-90HB48	63	(1600)	63	(1600)	63	(1600)	(Pre)-24-60HB48	56 7/16	(1434)	32 5/8	(829)	37 5/8	(956)	
	30 (762)	(Pre)-30-90HB48	66	(1676)	66	(1676)	66	(1676)	(Pre)-30-60HB48	59 1/16	(1500)	34 1/8	(867)	39 3/8	(1000)	
	36 (914)	(Pre)-36-90HB48	69	(1753)	69	(1753)	69	(1753)	(Pre)-36-60HB48	61 11/16	(1567)	35 5/8	(905)	41 1/8	(1045)	
	42 (1067)	(Pre)-42-90HB48	72	(1829)	72	(1829)	72	(1829)	(Pre)-42-60HB48	64 1/4	(1632)	37 1/8	(943)	42 13/16	(1087)	

(PRE) = Prefix. See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.

Manufacturing tolerances apply to all dimensions.

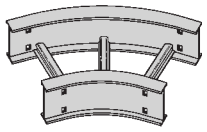
All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Bend 45° 30° (HB)

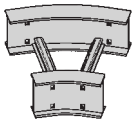
1 pair splice plates with hardware included.

Bottoms manufactured:

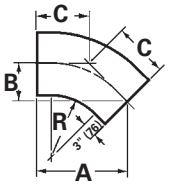
- Ladder = 9" Rung Spacing
- VT & 04 = 4" Rung Spacing
- ST & SB = Flat sheet over 12" Rung Spacing

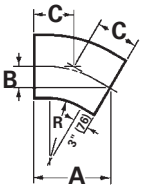


45˚ Horizontal Bend



30˚ Horizontal Bend





Bend Radius R		Tray Width		45˚ Horizontal Bend Dimensions								30˚ Horizontal Bend Dimensions							
				Catalog No.	A		B		C			Catalog No.	A		B		C		
in.	(mm)	in.	(mm)		in.	(mm)	in.	(mm)	in.	(mm)			in.	(mm)	in.	(mm)	in.	(mm)	
12	(305)	6	(152)	**(Pre)-06-45HB12**	15 3/4	(400)	6 1/2	(165)	9 3/16	(233)		**(Pre)-06-30HB12**	13 1/8	(333)	3 1/2	(89)	7	(179)	
		9	(228)	**(Pre)-09-45HB12**	16 13/16	(427)	6 15/16	(176)	9 13/16	(249)		**(Pre)-09-30HB12**	13 7/8	(352)	3 11/16	(94)	7 7/16	(189)	
		12	(305)	**(Pre)-12-45HB12**	17 7/8	(454)	7 3/8	(187)	10 7/16	(265)		**(Pre)-12-30HB12**	14 5/8	(372)	3 15/16	(100)	7 13/16	(198)	
		18	(457)	**(Pre)-18-45HB12**	20	(508)	8 1/4	(210)	11 11/16	(297)		**(Pre)-18-30HB12**	16 1/8	(410)	4 5/16	(135)	8 5/8	(219)	
		24	(609)	**(Pre)-24-45HB12**	22 1/16	(560)	9 1/8	(232)	12 15/16	(329)		**(Pre)-24-30HB12**	17 5/8	(448)	4 11/16	(119)	9 7/16	(240)	
		30	(762)	**(Pre)-30-45HB12**	24 3/16	(614)	10	(254)	14 3/16	(360)		**(Pre)-30-30HB12**	19 1/8	(486)	5 1/8	(130)	10 1/4	(260)	
		36	(914)	**(Pre)-36-45HB12**	26 5/16	(668)	10 15/16	(278)	15 7/16	(392)		**(Pre)-36-30HB12**	20 5/8	(524)	5 1/2	(140)	11 1/16	(281)	
		42	(1067)	**(Pre)-42-45HB12**	28 7/16	(722)	11 13/16	300	16 11/16	(424)		**(Pre)-42-30HB12**	22 1/8	(562)	5 15/16	(151)	11 13/16	(300)	
24	(610)	6	(152)	**(Pre)-06-45HB24**	24 3/16	(614)	10	(254)	14 3/16	(360)		**(Pre)-06-30HB24**	19 1/8	(486)	5 1/8	(130)	10 1/4	(260)	
		9	(228)	**(Pre)-09-45HB24**	25 1/4	(641)	10 1/2	(267)	14 13/16	(376)		**(Pre)-09-30HB24**	19 7/8	(505)	5 5/16	(135)	10 5/8	(270)	
		12	(305)	**(Pre)-12-45HB24**	26 5/16	(668)	10 15/16	(278)	15 7/16	(392)		**(Pre)-12-30HB24**	20 5/8	(524)	5 1/2	(140)	11 1/16	(281)	
		18	(457)	**(Pre)-18-45HB24**	28 7/16	(722)	11 13/16	(300)	16 11/16	(424)		**(Pre)-18-30HB24**	22 1/8	(562)	5 15/16	(151)	11 13/16	(300)	
		24	(609)	**(Pre)-24-45HB24**	30 9/16	(766)	12 11/16	(322)	17 15/16	(456)		**(Pre)-24-30HB24**	23 5/8	(600)	6 5/16	(160)	12 5/8	(321)	
		30	(762)	**(Pre)-30-45HB24**	32 11/16	(830)	13 9/16	(344)	19 1/8	(486)		**(Pre)-30-30HB24**	25 1/8	(638)	6 3/4	(172)	13 7/16	(341)	
		36	(914)	**(Pre)-36-45HB24**	34 13/16	(884)	14 7/16	(367)	20 3/8	(518)		**(Pre)-36-30HB24**	26 5/8	(676)	7 1/8	(181)	14 1/4	(362)	
		42	(1067)	**(Pre)-42-45HB24**	36 15/16	(938)	15 5/16	(389)	21 5/8	(549)		**(Pre)-42-30HB24**	28 1/8	(715)	7 1/2	(191)	15 1/16	(383)	
36	(914)	6	(152)	**(Pre)-06-45HB36**	32 11/16	(830)	13 9/16	(344)	19 1/8	(486)		**(Pre)-06-30HB36**	25 1/8	(638)	6 3/4	(171)	13 7/16	(341)	
		9	(228)	**(Pre)-09-45HB36**	33 3/4	(857)	14	(356)	19 3/4	(502)		**(Pre)-09-30HB36**	25 7/8	(657)	6 15/16	(176)	13 7/8	(352)	
		12	(305)	**(Pre)-12-45HB36**	34 13/16	(884)	14 7/16	(367)	20 3/8	(518)		**(Pre)-12-30HB36**	26 5/8	(676)	7 1/8	(181)	14 1/4	(362)	
		18	(457)	**(Pre)-18-45HB36**	36 15/16	(938)	15 5/16	(389)	21 5/8	(549)		**(Pre)-18-30HB36**	28 1/8	(715)	7 1/2	(191)	15 1/16	(383)	
		24	(609)	**(Pre)-24-45HB36**	39 1/16	(992)	16 3/16	(411)	22 7/8	(581)		**(Pre)-24-30HB36**	29 5/8	(753)	7 15/16	(202)	15 7/8	(403)	
		30	(762)	**(Pre)-30-45HB36**	41 3/16	(1046)	17 1/16	(433)	24 1/8	(613)		**(Pre)-30-30HB36**	31 1/8	(790)	8 5/16	(211)	16 11/16	(424)	
		36	(914)	**(Pre)-36-45HB36**	43 5/16	(1100)	17 15/16	(456)	25 3/8	(645)		**(Pre)-36-30HB36**	32 5/8	(829)	8 3/4	(222)	17 1/2	(445)	
		42	(1067)	**(Pre)-42-45HB36**	45 7/16	(1154)	18 13/16	(478)	26 5/8	(676)		**(Pre)-42-30HB36**	34 1/8	(867)	9 1/8	(232)	18 1/4	(464)	
48	(1220)	6	(152)	**(Pre)-06-45HB48**	41 3/16	(1046)	17 1/16	(433)	24 1/8	(613)		**(Pre)-06-30HB48**	31 1/8	(791)	8 5/16	(211)	16 11/16	(424)	
		9	(228)	**(Pre)-09-45HB48**	42 1/4	(1073)	17 1/2	(445)	24 3/4	(629)		**(Pre)-09-30HB48**	31 7/8	(810)	8 9/16	(218)	17 1/16	(433)	
		12	(305)	**(Pre)-12-45HB48**	43 5/16	(1100)	17 15/16	(456)	25 3/8	(645)		**(Pre)-12-30HB48**	32 5/8	(829)	8 3/4	(222)	17 1/2	(445)	
		18	(457)	**(Pre)-18-45HB48**	45 7/16	(1154)	18 13/16	(487)	26 5/8	(676)		**(Pre)-18-30HB48**	34 1/8	(867)	9 1/8	(232)	18 1/4	(464)	
		24	(609)	**(Pre)-24-45HB48**	47 9/16	(1208)	19 11/16	(500)	27 7/8	(708)		**(Pre)-24-30HB48**	35 5/8	(905)	9 9/16	(243)	19 1/16	(484)	
		30	(762)	**(Pre)-30-45HB48**	49 11/16	(1262)	20 9/16	(522)	29 1/8	(740)		**(Pre)-30-30HB48**	37 1/8	(943)	9 15/16	(252)	19 7/8	(505)	
		36	(914)	**(Pre)-36-45HB48**	51 13/16	(1316)	21 7/16	(545)	30 5/16	(770)		**(Pre)-36-30HB48**	38 5/8	(981)	10 5/16	(262)	20 11/16	(525)	
		42	(1067)	**(Pre)-42-45HB48**	54 15/16	(1395)	22 5/16	(567)	31 9/16	(802)		**(Pre)-42-30HB48**	40 1/8	(1019)	10 3/4	(273)	21 1/2	(546)	

(Pre) See page L-3 for catalog number prefix.

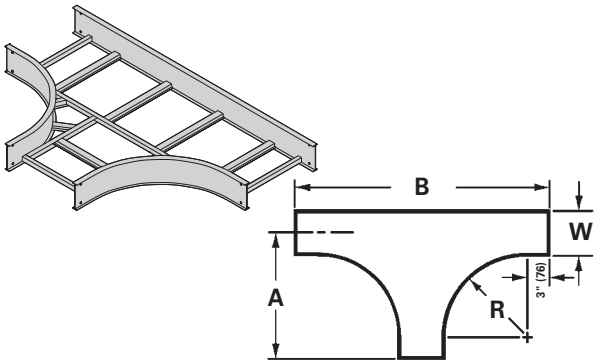
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.

Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

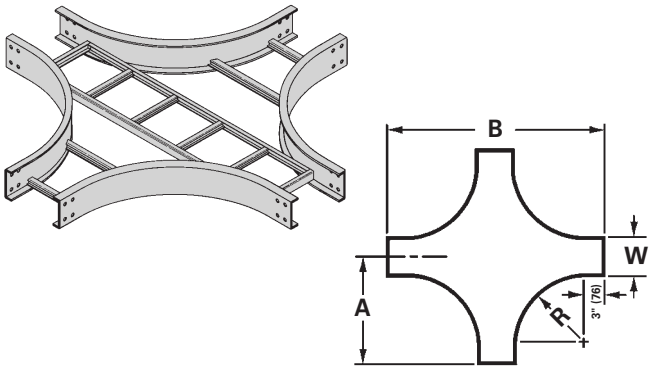
Horizontal Tee (HT)

2 pair splice plates with hardware included.



Horizontal Cross (HX)

3 pair splice plates with hardware included.



Bend Radius R in. (mm)	Tray Width in. (mm)	Horizontal Tee Catalog Number	Horizontal Tee Dimensions A in. (mm)	Horizontal Tee Dimensions B in. (mm)	Horizontal Cross Catalog Number	Horizontal Cross Dimensions A in. (mm)	Horizontal Cross Dimensions B in. (mm)
12 (305)	6 (152)	**(Prefix)-06-HT12**	18 (457)	36 (914)	**(Prefix)-06-HX12**	18 (457)	36 (914)
	9 (229)	**(Prefix)-09-HT12**	19½ (496)	39 (991)	**(Prefix)-09-HX12**	19½ (496)	39 (991)
	12 (305)	**(Prefix)-12-HT12**	21 (533)	42 (1067)	**(Prefix)-12-HX12**	21 (533)	42 (1067)
	18 (457)	**(Prefix)-18-HT12**	24 (609)	48 (1219)	**(Prefix)-18-HX12**	24 (609)	48 (1219)
	24 (609)	**(Prefix)-24-HT12**	27 (686)	54 (1372)	**(Prefix)-24-HX12**	27 (686)	54 (1372)
	30 (762)	**(Prefix)-30-HT12**	30 (762)	60 (1524)	**(Prefix)-30-HX12**	30 (762)	60 (1524)
	36 (914)	**(Prefix)-36-HT12**	33 (838)	66 (1676)	**(Prefix)-36-HX12**	33 (838)	66 (1676)
	42 (1067)	**(Prefix)-42-HT12**	36 914	72 (1829)	**(Prefix)-42-HX12**	36 914	72 (1829)
24 (610)	6 (152)	**(Prefix)-06-HT24**	30 (762)	60 (1524)	**(Prefix)-06-HX24**	30 (762)	60 (1524)
	9 (229)	**(Prefix)-09-HT24**	31½ (800)	63 (1600)	**(Prefix)-09-HX24**	31½ (800)	63 (1600)
	12 (305)	**(Prefix)-12-HT24**	33 (838)	66 (1676)	**(Prefix)-12-HX24**	33 (838)	66 (1676)
	18 (457)	**(Prefix)-18-HT24**	36 (914)	72 (1829)	**(Prefix)-18-HX24**	36 (914)	72 (1829)
	24 (609)	**(Prefix)-24-HT24**	39 (991)	78 (1982)	**(Prefix)-24-HX24**	39 (991)	78 (1982)
	30 (762)	**(Prefix)-30-HT24**	42 (1067)	84 (2134)	**(Prefix)-30-HX24**	42 (1067)	84 (2134)
	36 (914)	**(Prefix)-36-HT24**	45 (1143)	90 (2286)	**(Prefix)-36-HX24**	45 (1143)	90 (2286)
	42 (1067)	**(Prefix)-42-HT24**	48 (1219)	96 (2438)	**(Prefix)-42-HX24**	48 (1219)	96 (2438)
36 (914)	6 (152)	**(Prefix)-06-HT36**	42 (1067)	84 (2134)	**(Prefix)-06-HX36**	42 (1067)	84 (2134)
	9 (229)	**(Prefix)-09-HT36**	43½ (1105)	87 (2210)	**(Prefix)-09-HX36**	43½ (1105)	87 (2210)
	12 (305)	**(Prefix)-12-HT36**	45 (1143)	90 (2286)	**(Prefix)-12-HX36**	45 (1143)	90 (2286)
	18 (457)	**(Prefix)-18-HT36**	48 (1219)	96 (2438)	**(Prefix)-18-HX36**	48 (1219)	96 (2438)
	24 (609)	**(Prefix)-24-HT36**	51 (1295)	102 (2590)	**(Prefix)-24-HX36**	51 (1295)	102 (2590)
	30 (762)	**(Prefix)-30-HT36**	54 (1372)	108 (2744)	**(Prefix)-30-HX36**	54 (1372)	108 (2744)
	36 (914)	**(Prefix)-36-HT36**	57 (1448)	114 (2896)	**(Prefix)-36-HX36**	57 (1448)	114 (2896)
	42 (1067)	**(Prefix)-42-HT36**	60 (1524)	120 (3048)	**(Prefix)-42-HX36**	60 (1524)	120 (3048)
48 (1220)	6 (152)	**(Prefix)-06-HT48**	54 (1372)	108 (2744)	**(Prefix)-06-HX48**	54 (1372)	108 (2744)
	9 (229)	**(Prefix)-09-HT48**	55½ (1410)	111 (2820)	**(Prefix)-09-HX48**	55½ (1410)	111 (2820)
	12 (305)	**(Prefix)-12-HT48**	57 (1448)	114 (2896)	**(Prefix)-12-HX48**	57 (1448)	114 (2896)
	18 (457)	**(Prefix)-18-HT48**	60 (1524)	120 (3048)	**(Prefix)-18-HX48**	60 (1524)	120 (3048)
	24 (609)	**(Prefix)-24-HT48**	63 (1600)	126 (3200)	**(Prefix)-24-HX48**	63 (1600)	126 (3200)
	30 (762)	**(Prefix)-30-HT48**	66 (1676)	132 (3353)	**(Prefix)-30-HX48**	66 (1676)	132 (3353)
	36 (914)	**(Prefix)-36-HT48**	69 (1753)	138 (3535)	**(Prefix)-36-HX48**	69 (1753)	138 (3535)
	42 (1067)	**(Prefix)-42-HT48**	72 (1829)	144 (3658)	**(Prefix)-42-HX48**	72 (1829)	144 (3658)

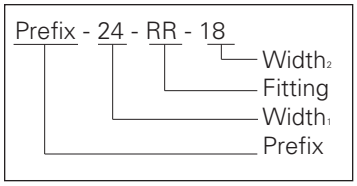
(PRE) = Prefix. See page L-3 for catalog number prefix.
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

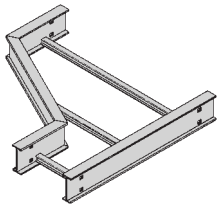
All dimensions in parentheses are millimeters unless otherwise specified.

Reducers (LR, SR, RR)

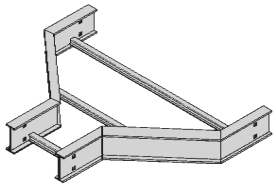
1 pair splice plates with hardware included.

Reducer Part Numbering

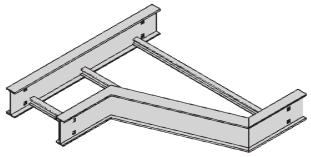




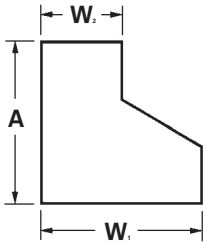
Left Reducer - LR

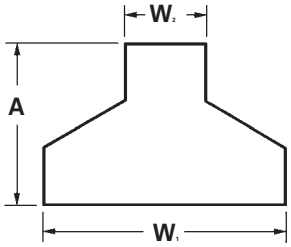


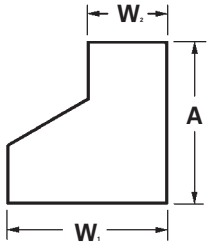
Straight Reducer SR



Right Reducer -RR



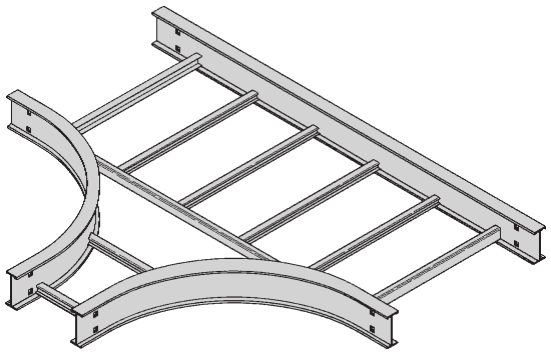




Tray Width				Left Hand Reducer			Straight Reducer			Right Hand Reducer		
W_1		W_2		Catalog No.	A		Catalog No.	A		Catalog No.	A	
in.	(mm)	in.	(mm)		in.	(mm)		in.	(mm)		in.	(mm)
9	(228)	6	(152)	**(Prefix)-09-LR06**	9 3/4	(248)	**(Prefix)-09-SR06**	8 15/16	(227)	**(Prefix)-09-RR06**	9 3/4	(248)
12	305	6	(152)	**(Prefix)-12-LR06**	11 1/2	(292)	**(Prefix)-12-SR06**	9 3/4	(248)	**(Prefix)-12-RR06**	11 1/2	(292)
		9	(228)	**(Prefix)-12-LR09**	9 3/4	(248)	**(Prefix)-12-SR09**	8 15/16	(227)	**(Prefix)-12-RR09**	9 3/4	(248)
18	(457)	6	(152)	**(Prefix)-18-LR06**	14 15/16	(379)	**(Prefix)-18-SR06**	11 1/2	(292)	**(Prefix)-18-RR06**	14 15/16	(379)
		9	(228)	**(Prefix)-18-LR09**	13 3/16	(340)	**(Prefix)-18-SR09**	10 5/8	(270)	**(Prefix)-18-RR09**	13 3/16	(340)
		12	(305)	**(Prefix)-18-LR12**	11 1/2	(292)	**(Prefix)-18-SR12**	9 3/4	(248)	**(Prefix)-18-RR12**	11 1/2	(292)
24	609	6	(152)	**(Prefix)-24-LR06**	18 3/8	(467)	**(Prefix)-24-SR06**	13 1/4	(336)	**(Prefix)-24-RR06**	18 3/8	(467)
		9	(228)	**(Prefix)-24-LR09**	16 11/16	(424)	**(Prefix)-24-SR09**	12 3/8	(314)	**(Prefix)-24-RR09**	16 11/16	(424)
		12	(305)	**(Prefix)-24-LR12**	14 15/16	(379)	**(Prefix)-24-SR12**	11 1/2	(292)	**(Prefix)-24-RR12**	14 15/16	(379)
		18	(457)	**(Prefix)-24-LR18**	11 1/2	(292)	**(Prefix)-24-SR18**	9 3/4	(248)	**(Prefix)-24-RR18**	11 1/2	(292)
30	(762)	6	(152)	**(Prefix)-30-LR06**	21 7/8	(555)	**(Prefix)-30-SR06**	14 15/16	(379)	**(Prefix)-30-RR06**	21 7/8	(555)
		9	(228)	**(Prefix)-30-LR09**	20 1/8	(511)	**(Prefix)-30-SR09**	14 1/8	(359)	**(Prefix)-30-RR09**	20 1/8	(511)
		12	(305)	**(Prefix)-30-LR12**	18 3/8	(467)	**(Prefix)-30-SR12**	13 1/4	(336)	**(Prefix)-30-RR12**	18 3/8	(467)
		18	(457)	**(Prefix)-30-LR18**	14 15/16	(379)	**(Prefix)-30-SR18**	11 1/2	(292)	**(Prefix)-30-RR18**	14 15/16	(379)
		24	(609)	**(Prefix)-30-LR24**	11 1/2	(292)	**(Prefix)-30-SR24**	9 3/4	(248)	**(Prefix)-30-RR24**	11 1/2	(292)
36	(914)	6	(152)	**(Prefix)-36-LR06**	25 5/16	(643)	**(Prefix)-36-SR06**	16 11/16	(424)	**(Prefix)-36-RR06**	25 5/16	(643)
		9	(228)	**(Prefix)-36-LR09**	23 9/16	(598)	**(Prefix)-36-SR09**	15 13/16	(402)	**(Prefix)-36-RR09**	23 9/16	(598)
		12	(305)	**(Prefix)-36-LR12**	21 7/8	(555)	**(Prefix)-36-SR12**	14 15/16	(379)	**(Prefix)-36-RR12**	21 7/8	(555)
		18	(457)	**(Prefix)-36-LR18**	18 3/8	(467)	**(Prefix)-36-SR18**	13 1/4	(336)	**(Prefix)-36-RR18**	18 3/8	(467)
		24	(609)	**(Prefix)-36-LR24**	14 15/16	(379)	**(Prefix)-36-SR24**	11 1/2	(292)	**(Prefix)-36-RR24**	14 15/16	(379)
		30	(762)	**(Prefix)-36-LR30**	11 1/2	(292)	**(Prefix)-36-SR30**	9 3/4	(248)	**(Prefix)-36-RR30**	11 1/2	(292)
42	(1067)	6	(152)	**(Prefix)-42-LR06**	28 3/4	(730)	**(Prefix)-42-SR06**	18 3/8	(467)	**(Prefix)-42-RR06**	28 3/4	(730)
		9	(228)	**(Prefix)-42-LR09**	27 1/16	(687)	**(Prefix)-42-SR09**	17 9/16	(446)	**(Prefix)-42-RR09**	27 1/16	(687)
		12	(305)	**(Prefix)-42-LR12**	25 5/16	(643)	**(Prefix)-42-SR12**	16 11/16	(424)	**(Prefix)-42-RR12**	25 5/16	(643)
		18	(457)	**(Prefix)-42-LR18**	21 7/8	(555)	**(Prefix)-42-SR18**	14 15/16	(379)	**(Prefix)-42-RR18**	21 7/8	(555)
		24	(609)	**(Prefix)-42-LR24**	18 3/8	(467)	**(Prefix)-42-SR24**	13 1/4	(336)	**(Prefix)-42-RR24**	18 3/8	(467)
		30	(762)	**(Prefix)-42-LR30**	14 15/16	(379)	**(Prefix)-42-SR30**	11 1/2	(292)	**(Prefix)-42-RR30**	14 15/16	(379)
		36	(914)	**(Prefix)-42-LR36**	11 1/2	(292)	**(Prefix)-42-SR36**	9 3/4	(248)	**(Prefix)-42-RR36**	11 1/2	(292)

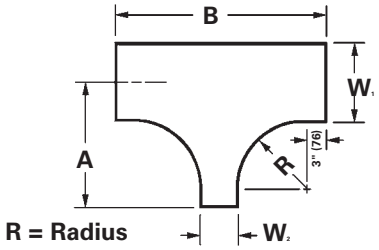
(Prefix) See page L-3 for catalog number prefix.
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.



Horizontal Reducing Tee (HT)

2 pair splice plates with hardware included.



Prefix - 36 - 18 HT 24

- Radius
- Fitting
- Width W_2
- Width W_1

To complete catalog number, insert fitting prefix.

Tray Width		* Insert Radius (12", 24", 36", or 48")	12" Radius		24" Radius		36" Radius		48" Radius	
W1	W2	Catalog No.	A	B	A	B	A	B	A	B
in. mm	in. mm		in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm	in. mm
9 (228)	6 (152)	**(Prefix)-09-06-HT***	19½ (496)	36 (914)	31½ (800)	60 (1524)	43 (1092)	84 (2134)	55½ (1410)	108 (2743)
12 (305)	6 (152)	**(Prefix)-12-06-HT***	21 (533)	36 (914)	33 (838)	60 (1524)	45 (1143)	84 (2134)	57 (1448)	108 (2743)
	9 (228)	**(Prefix)-12-09-HT***	21 (533)	39 (991)	33 (838)	63 (1600)	45 (1143)	87 (2210)	57 (1448)	111 (2819)
18 (457)	6 (152)	**(Prefix)-18-06-HT***	24 (609)	36 (914)	36 (914)	60 (1524)	48 (1143)	84 (2134)	60 (1524)	108 (2743)
	9 (228)	**(Prefix)-18-09-HT***	24 (609)	39 (991)	36 (914)	63 (1600)	48 (1219)	87 (2210)	60 (1524)	111 (2819)
	12 (305)	**(Prefix)-18-12-HT***	24 (609)	42 (1067)	36 (914)	66 (1676)	48 (1219)	90 (2286)	60 (1524)	114 (2895)
24 (609)	6 (152)	**(Prefix)-24-06-HT***	27 (686)	36 (914)	39 (991)	60 (1524)	51 (1295)	84 (2134)	63 (1600)	108 (2743)
	9 (228)	**(Prefix)-24-09-HT***	27 (686)	39 (991)	39 (991)	63 (1600)	51 (1295)	87 (2210)	63 (1600)	111 (2819)
	12 (305)	**(Prefix)-24-12-HT***	27 (686)	42 (1067)	39 (991)	66 (1676)	51 (1295)	90 (2286)	63 (1600)	114 (2895)
	18 (457)	**(Prefix)-24-18-HT***	27 (686)	48 (1219)	39 (991)	72 (1829)	51 (1295)	96 (2438)	63 (1600)	120 (3048)
30 (762)	6 (152)	**(Prefix)-30-06-HT***	30 (762)	36 (914)	42 (1067)	60 (1524)	54 (1372)	84 (2134)	66 (1676)	108 (2743)
	9 (228)	**(Prefix)-30-09-HT***	30 (762)	39 (991)	42 (1067)	63 (1600)	54 (1372)	87 (2210)	66 (1676)	111 (2819)
	12 (305)	**(Prefix)-30-12-HT***	30 (762)	42 (1067)	42 (1067)	66 (1676)	54 (1372)	90 (2286)	66 (1676)	114 (2895)
	18 (457)	**(Prefix)-30-18-HT***	30 (762)	48 (1219)	42 (1067)	72 (1829)	54 (1372)	96 (2438)	66 (1676)	120 (3048)
	24 (609)	**(Prefix)-30-24-HT***	30 (762)	54 (1372)	42 (1067)	78 (1981)	54 (1372)	102 (2591)	66 (1676)	126 (3200)
36 (914)	6 (152)	**(Prefix)-30-06-HT***	33 (838)	36 (914)	45 (1143)	60 (1524)	57 (1448)	84 (2134)	69 (1753)	108 (2743)
	9 (228)	**(Prefix)-36-09-HT***	33 (838)	39 (991)	45 (1143)	63 (1600)	57 (1448)	87 (2210)	69 (1753)	111 (2819)
	12 (305)	**(Prefix)-36-12-HT***	33 (838)	42 (1067)	45 (1143)	66 (1676)	57 (1448)	90 (2286)	69 (1753)	114 (2895)
	18 (457)	**(Prefix)-36-18-HT***	33 (838)	48 (1219)	45 (1143)	72 (1829)	57 (1448)	96 (2438)	69 (1753)	120 (3048)
	24 (609)	**(Prefix)-36-24-HT***	33 (838)	54 (1372)	45 (1143)	78 (1981)	57 (1448)	102 (2591)	69 (1753)	126 (3200)
	30 (762)	**(Prefix)-36-30-HT***	33 (838)	60 (1524)	45 (1143)	84 (2134)	57 (1448)	108 (2743)	69 (1753)	132 (3353)
42 (1067)	6 (152)	**(Prefix)-42-06-HT***	36 (914)	36 (914)	48 (1219)	60 (1524)	60 (1524)	84 (2134)	72 (1829)	108 (2743)
	9 (228)	**(Prefix)-42-09-HT***	36 (914)	39 (991)	48 (1219)	63 (1600)	60 (1524)	87 (2210)	72 (1829)	111 (2819)
	12 (305)	**(Prefix)-42-12-HT***	36 (914)	42 (1067)	48 (1219)	66 (1676)	60 (1524)	90 (2286)	72 (1829)	114 (2895)
	18 (457)	**(Prefix)-42-18-HT***	36 (914)	48 (1219)	48 (1219)	72 (1829)	60 (1524)	96 (2438)	72 (1829)	120 (3048)
	24 (609)	**(Prefix)-42-24-HT***	36 (914)	54 (1372)	48 (1219)	78 (1981)	60 (1524)	102 (2591)	72 (1829)	126 (3200)
	30 (762)	**(Prefix)-42-30-HT***	36 (914)	60 (1524)	48 (1219)	84 (2134)	60 (1524)	108 (2743)	72 (1829)	132 (3353)
	36 (914)	**(Prefix)-42-36-HT***	36 (914)	66 (1676)	48 (1219)	90 (2286)	60 (1524)	114 (2895)	72 (1829)	138 (3505)

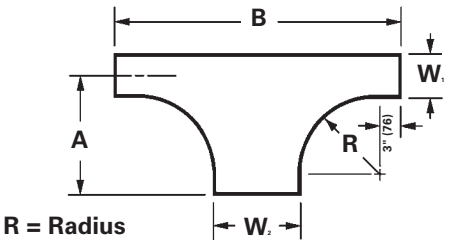
(Prefix) See page L-3 for catalog number prefix.

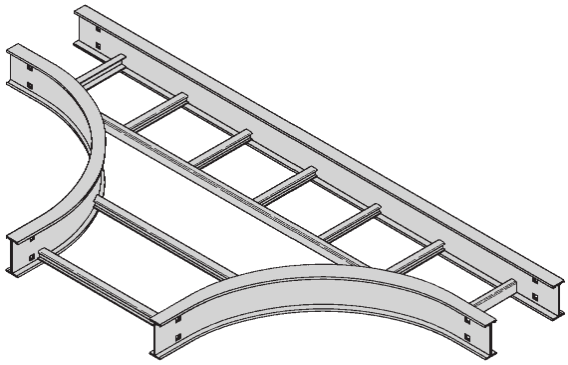
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Expanding Tee (HT)

2 pair splice plates with hardware included.





Prefix - 09 - 30 HT 12

- Radius
- Fitting
- Width W_2
- Width W_1

To complete catalog number, insert fitting prefix.

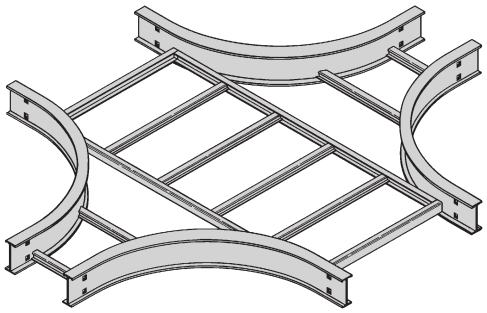
Tray Width W1 in.	Tray Width W1 mm	Tray Width W2 in.	Tray Width W2 mm	* Insert Radius (12", 24", 36", or 48") Catalog No.	12" Radius A in.	12" Radius A mm	12" Radius B in.	12" Radius B mm	24" Radius A in.	24" Radius A mm	24" Radius B in.	24" Radius B mm	36" Radius A in.	36" Radius A mm	36" Radius B in.	36" Radius B mm	48" Radius A in.	48" Radius A mm	48" Radius B in.	48" Radius B mm
6	(152)	9	228	(Prefix)-06-09-HT*	18	(457)	39	(991)	30	(762)	63	(1600)	42	(1067)	87	(2210)	54	(1372)	111	2819
		12	(305)	(Prefix)-06-12-HT*	18	(457)	42	(1067)	30	(762)	66	(1676)	42	(1067)	90	(2286)	54	(1372)	114	(2895)
		18	(457)	(Prefix)-06-18-HT*	18	457)	48	(1219)	30	(762)	72	(1829)	42	(1067)	96	(2438)	54	(1372)	120	(3048)
		24	(609)	(Prefix)-06-24-HT*	18	(457)	54	(1372)	30	(762)	78	(1981)	42	(1067)	102	(2591)	54	(1372)	126	(3200)
		30	(762)	(Prefix)-06-30-HT*	18	(457)	60	(1524)	30	(762)	84	(2134)	42	(1067)	108	(2743)	54	(1372)	132	(3353)
		36	(914)	(Prefix)-06-36-HT*	18	(457)	66	(1676)	30	(762)	90	(2286)	42	(1067)	114	(2895)	54	(1372)	138	(3503)
		42	(1067)	(Prefix)-06-42-HT*	18	(457)	72	(1829)	30	(762)	96	(2438)	42	(1067)	120	(3048)	54	(1372)	144	(3658)
9	(228)	12	(305)	(Prefix)-09-12-HT*	19½	(496)	42	(1067)	31½	(800)	66	(1676)	43½	(1105)	90	(2286)	55½	(1410)	114	(2895)
		18	(457)	(Prefix)-09-18-HT*	19½	(496)	48	(1219)	31½	(800)	72	(1829)	43½	(1105)	96	(2438)	55½	(1410)	120	(3048)
		24	(609)	(Prefix)-09-24-HT*	19½	(496)	54	(1372)	31½	(800)	78	(1981)	43½	(1105)	102	(2591)	55½	(1410)	126	(3200)
		30	(762)	(Prefix)-09-30-HT*	19½	(496)	60	(1524)	31½	(800)	84	(2134)	43½	(1105)	108	(2743)	55½	(1410)	132	(3353)
		36	(914)	(Prefix)-09-36-HT*	19½	(496)	66	(1676)	31½	(800)	90	(2286)	43½	(1105)	114	(2895)	55½	(1410)	138	(3503)
		42	(1067)	(Prefix)-09-42-HT*	19½	(496)	72	(1829)	31½	(800)	96	(2438)	43½	(1105)	120	(3048)	55½	(1410)	144	(3658)
12	(305)	18	(457)	(Prefix)-12-18-HT*	21	(533)	48	(1219)	33	(838)	72	(1829)	45	(1143)	96	(2438)	57	(1448)	120	(3048)
		24	(609)	(Prefix)-12-24-HT*	21	(533)	54	(1372)	33	(838)	78	(1981)	45	(1143)	102	(2591)	57	(1448)	126	(3200)
		30	(762)	(Prefix)-12-30-HT*	21	(533)	60	(1524)	33	(838)	84	(2134)	45	(1143)	108	(2743)	57	(1448)	132	(3353)
		36	(914)	(Prefix)-12-36-HT*	21	(533)	66	(1676)	33	(838)	90	(2286)	45	(1143)	114	(2895)	57	(1448)	138	(3503)
		42	(1067)	(Prefix)-12-42-HT*	21	(533)	72	(1829)	33	(838)	96	(2438)	45	(1143)	120	(3048)	57	(1448)	144	(3658)
18	(457)	24	(609)	(Prefix)-18-24-HT*	24	(609)	54	(1372)	36	(914)	78	(1981)	48	(1219)	102	(2591)	60	(1524)	126	(3200)
		30	(762)	(Prefix)-18-30-HT*	24	(609)	60	(1524)	36	(914)	84	(2134)	48	(1219)	108	(2743)	60	(1524)	132	(3353)
		36	(914)	(Prefix)-18-36-HT*	24	(609)	66	(1676)	36	(914)	90	(2286)	48	(1219)	114	(2895)	60	(1524)	138	(3503)
		42	(1067)	(Prefix)-18-42-HT*	24	(609)	72	(1829)	36	(914)	96	(2438)	48	(1219)	120	(3048)	60	(1524)	144	(3658)
24	(609)	30	(762)	(Prefix)-24-30-HT*	27	(686)	60	(1524)	39	(991)	84	(2134)	51	(1295)	108	(2743)	63	(1600)	132	(3353)
		36	(914)	(Prefix)-24-36-HT*	27	(686)	66	(1676)	39	(991)	90	(2286)	51	(1295)	114	(2895)	63	(1600)	138	(3503)
		42	(1067)	(Prefix)-24-42-HT*	27	(686)	72	(1829)	39	(991)	96	(2438)	51	(1295)	120	(3048)	63	(1600)	144	(3658)
30	(762)	36	(914)	(Prefix)-30-36-HT*	30	(762)	66	(1676)	42	(1067)	90	(2286)	54	(1372)	114	(2895)	66	(1676)	138	(3503)
		42	(1067)	(Prefix)-30-42-HT*	30	(762)	72	(1829)	42	(1067)	96	(2438)	54	(1372)	120	(3048)	66	(1676)	144	(3658)
36	(914)	42	(1067)	(Prefix)-36-42-HT*	33	(838)	72	(1829)	45	(1143)	96	(2438)	57	(1448)	120	(3048)	69	(1753)	144	(3658)

(Prefix) See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.

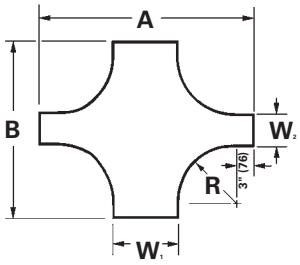
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.



Horizontal Expanding/Reducing Cross (HX)

3 pair splice plates with hardware included.



Prefix - 36 - 18 HX 24

- Radius
- Fitting
- Width W_2
- Width W_1

To complete catalog number, insert fitting prefix.

Tray Width W1 in.	Tray Width W1 mm	Tray Width W2 in.	Tray Width W2 mm	* Insert Radius (12", 24", 36", or 48") Catalog No.	12" Radius A in.	12" Radius A mm	12" Radius B in.	12" Radius B mm	24" Radius A in.	24" Radius A mm	24" Radius B in.	24" Radius B mm	36" Radius A in.	36" Radius A mm	36" Radius B in.	36" Radius B mm	48" Radius A in.	48" Radius A mm	48" Radius B in.	48" Radius B mm
9	(228)	6	(152)	**(Prefix)-09-06-HX***	39	(991)	36	(914)	63	1600	60	(1524)	87	(2210)	84	(2134)	111	2819	108	(2743)
12	(305)	6	(152)	**(Prefix)-12-06-HX***	42	(1067)	36	(914)	66	(1676)	60	(1524)	90	(2286)	84	(2134)	114	(2895)	108	(2743)
		9	(228)	**(Prefix)-12-09-HX***	42	(1067)	39	(991)	66	(1676)	63	(1600)	90	(2286)	87	(2210)	114	(2895)	111	(2819)
18	(457)	6	(152)	**(Prefix)-18-06-HX***	48	(1219)	36	(914)	72	(1829)	60	(1524)	96	(2438)	84	(2134)	120	(3048)	108	(2743)
		9	(228)	**(Prefix)-18-09-HX***	48	(1219)	39	(991)	72	(1829)	63	(1600)	96	(2438)	87	(2210)	120	(3048)	111	(2819)
		12	(305)	**(Prefix)-18-12-HX***	48	(1219)	42	(1067)	72	(1829)	66	(1676)	96	(2438)	90	(2286)	120	(3048)	114	(2895)
24	(609)	6	(152)	**(Prefix)-24-06-HX***	54	(1372)	36	(914)	78	(1981)	60	(1524)	102	(2591)	84	(2134)	126	(3200)	108	(2743)
		9	(228)	**(Prefix)-24-09-HX***	54	(1372)	39	(991)	78	(1981)	63	(1600)	102	(2591)	87	(2210)	126	(3200)	111	(2819)
		12	(305)	**(Prefix)-24-12-HX***	54	(1372)	42	(1067)	78	(1981)	66	(1676)	102	(2591)	90	(2286)	126	(3200)	114	(2895)
		18	(457)	**(Prefix)-24-18-HX***	54	(1372)	48	(1219)	78	(1981)	72	(1829)	102	(2591)	96	(2438)	126	(3200)	120	(3048)
30	(762)	6	(152)	**(Prefix)-30-06-HX***	60	(1524)	36	(914)	84	(2134)	60	(1524)	108	(2743)	84	(2134)	132	(3353)	108	(2743)
		9	(228)	**(Prefix)-30-09-HX***	60	(1524)	39	(991)	84	(2134)	63	(1600)	108	(2743)	87	(2210)	132	(3353)	111	(2819)
		12	(305)	**(Prefix)-30-12-HX***	60	(1524)	42	(1067)	84	(2134)	66	(1676)	108	(2743)	90	(2286)	132	(3353)	114	(2895)
		18	(457)	**(Prefix)-30-18-HX***	60	(1524)	48	(1219)	84	(2134)	72	(1829)	108	(2743)	96	(2438)	132	(3353)	120	(3048)
		24	(609)	**(Prefix)-30-24-HX***	60	(1524)	54	(1372)	84	(2134)	78	(1981)	108	(2743)	102	(2591)	132	(3353)	126	(3200)
36	(914)	6	(152)	**(Prefix)-30-06-HX***	66	(1676)	36	(914)	90	(2286)	60	(1524)	114	(2895)	84	(2134)	138	(3505)	108	(2743)
		9	(228)	**(Prefix)-36-09-HX***	66	(1676)	39	(991)	90	(2286)	63	(1600)	114	(2895)	87	(2210)	138	(3505)	111	(2819)
		12	(305)	**(Prefix)-36-12-HX***	66	(1676)	42	(1067)	90	(2286)	66	(1676)	114	(2895)	90	(2286)	138	(3505)	114	(2895)
		18	(457)	**(Prefix)-36-18-HX***	66	(1676)	48	(1219)	90	(2286)	72	(1829)	114	(2895)	96	(2438)	138	(3505)	120	(3048)
		24	(609)	**(Prefix)-36-24-HX***	66	(1676)	54	(1372)	90	(2286)	78	(1981)	114	(2895)	102	(2591)	138	(3505)	126	(3200)
		30	(762)	**(Prefix)-36-30-HX***	66	(1676)	60	(1524)	90	(2286)	84	(2134)	114	(2895)	108	(2743)	138	(3505)	132	(3353)
42	(1067)	6	(152)	**(Prefix)-42-06-HX***	72	(1829)	36	(914)	96	(2438)	60	(1524)	120	(3048)	84	(2134)	144	(3658)	108	(2743)
		9	(228)	**(Prefix)-42-09-HX***	72	(1829)	39	(991)	96	(2438)	63	(1600)	120	(3048)	87	(2210)	144	(3658)	111	(2819)
		12	(305)	**(Prefix)-42-12-HX***	72	(1829)	42	(1067)	96	(2438)	66	(1676)	120	(3048)	90	(2286)	144	(3658)	114	(2895)
		18	(457)	**(Prefix)-42-18-HX***	72	(1829)	48	(1219)	96	(2438)	72	(1829)	120	(3048)	96	(2438)	144	(3658)	120	(3048)
		24	(609)	**(Prefix)-42-24-HX***	72	(1829)	54	(1372)	96	(2438)	78	(1981)	120	(3048)	102	(2591)	144	(3658)	126	(3200)
		30	(762)	**(Prefix)-42-30-HX***	72	(1829)	60	(1524)	96	(2438)	84	(2134)	120	(3048)	108	(2743)	144	(3658)	132	(3353)
		36	(914)	**(Prefix)-42-36-HX***	72	(1829)	66	(1676)	96	(2438)	90	(2286)	120	(3048)	114	(2895)	144	(3658)	138	(3505)

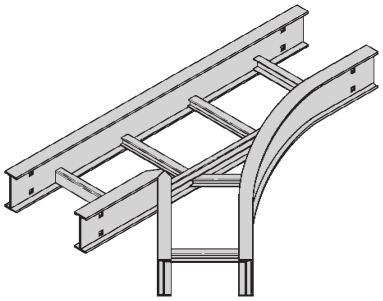
(Prefix) See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

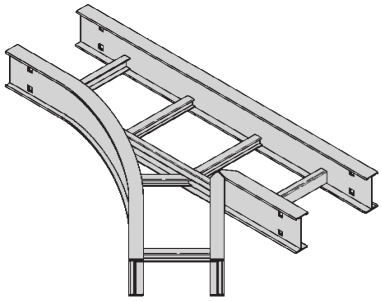
All dimensions in parentheses are millimeters unless otherwise specified.

Horizontal Wye (HYL, HYR)

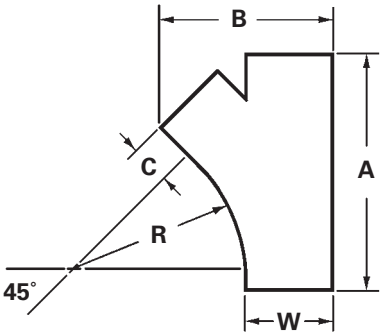
2 pair splice plates with hardware included.

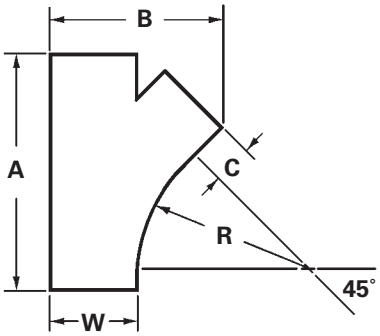


Left Hand Wye - HYL



Right Hand Wye - HYR





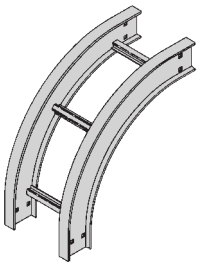
R = Radius

Bend Radius in.	mm	Tray Width in.	mm	Left Hand Wye Catalog No.	Right Hand Wye Catalog No.	A in.	A mm	B in.	B mm	C in.	C mm
24	(609)	6	(152)	**(Prefix)-06-HYL**	**(Prefix)-06-HYR**	$28^{7}/_{16}$	(722)	$15^{3}/_{16}$	(386)	$3^{1}/_{16}$	(77)
		9	(228)	**(Prefix)-09-HYL**	**(Prefix)-09-HYR**	$32^{11}/_{16}$	(831)	$20^{5}/_{16}$	(516)	$6^{1}/_{16}$	(154)
		12	(305)	**(Prefix)-12-HYL**	**(Prefix)-12-HYR**	$36^{15}/_{16}$	(938)	$25^{7}/_{16}$	(646)	$9^{1}/_{16}$	(231)
		18	(457)	**(Prefix)-18-HYL**	**(Prefix)-18-HYR**	$45^{3}/_{8}$	(1153)	$35^{13}/_{16}$	(910)	$15^{1}/_{16}$	(383)
		24	(609)	**(Prefix)-24-HYL**	**(Prefix)-24-HYR**	$53^{7}/_{8}$	(1368)	$45^{15}/_{16}$	(1167)	$21^{1}/_{16}$	(535)
		30	(762)	**(Prefix)-30-HYL**	**(Prefix)-30-HYR**	$62^{3}/_{8}$	(1585)	$56^{3}/_{16}$	(1427)	$27^{1}/_{16}$	(688)
		36	(914)	**(Prefix)-36-HYL**	**(Prefix)-36-HYR**	$70^{7}/_{8}$	(1800)	$66^{7}/_{16}$	(1687)	$33^{1}/_{16}$	(840)
		42	(1067)	**(Prefix)-42-HYL**	**(Prefix)-42-HYR**	$79^{3}/_{8}$	(2016)	$76^{5}/_{8}$	(1946)	$39^{1}/_{16}$	(992)

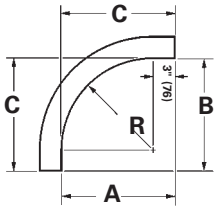
(Prefix) See page L-3 for catalog number prefix.

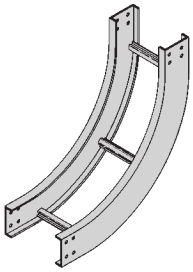
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

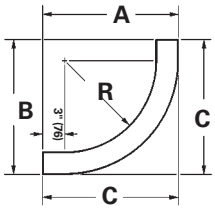


90˚ Vertical Outside - VO





90˚ Vertical Inside - VI



Vertical Bend 90˚ (VO, VI)

1 pair splice plates with hardware included.

Bend Radius R	Tray Width Insert	(*) Insert "VO" for Vert. Outside Bend "VI" for Vert. Inside Bend Catalog No.	VO Side Rail Height 4" - 7"			VI Side Rail Height											
						4"			5"			6"			7"		
			in./(mm)			in./(mm)			in./(mm)			in./(mm)			in./(mm)		
in./(mm)	in. (mm)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
12 (305)	6 (152)	(Prefix)-06-90(*)12	15 (381)	15 (381)	15 (381)	19 (483)	19 (483)	19 (483)	20 (508)	20 (508)	20 (508)	21 (533)	21 (533)	21 (533)	22 (559)	22 (559)	22 (559)
	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															
	36 (914)	(Prefix)-36-90(*)12															
	42 (1067)	(Prefix)-42-90(*)12															
24 (609)	6 (152)	(Prefix)-06-90(*)24	27 (686)	27 (686)	27 (686)	31 (787)	31 (787)	31 (787)	32 (813)	32 (813)	32 (813)	33 (838)	33 (838)	33 (838)	34 (864)	34 (864)	34 (864)
	9 (228)	(Prefix)-09-90(*)24															
	12 (305)	(Prefix)-12-90(*)24															
	18 (457)	(Prefix)-18-90(*)24															
	24 (609)	(Prefix)-24-90(*)24															
	30 (762	(Prefix)-30-90(*)24															
	36 (914)	(Prefix)-36-90(*)24															
	42 (1067)	(Prefix)-42-90(*)24															
36 (914)	6 (152)	(Prefix)-06-90(*)36	39 (991)	39 (991)	39 (991)	43 (1092)	43 (1092)	43 (1092)	44 (1118)	44 (1118)	44 (1118)	45 (1143)	45 (1143)	45 (1143)	46 (1168)	46 (1168)	46 (1168)
	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															
	42 (1067)	(Prefix)-42-90(*)36															
48 (1219)	6 (152)	(Prefix)-06-90(*)48	51 (1295)	51 (1295)	51 (1295)	55 (1397)	55 (1397)	55 (1397)	56 (1422)	56 (1422)	56 (1422)	57 (1448)	57 (1448)	57 (1448)	58 (1473)	58 (1473)	58 (1473)
	9 (228)	(Prefix)-09-90(*)48															
	12 (305)	(Prefix)-12-90(*)48															
	18 (457)	(Prefix)-18-90(*)48															
	24 (609)	(Prefix)-24-90(*)48															
	30 (762	(Prefix)-30-90(*)48															
	36 (914)	(Prefix)-36-90(*)48															
	42 (1067)	(Prefix)-42-90(*)48															

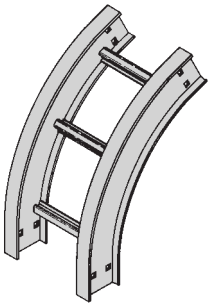
(Prefix) See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

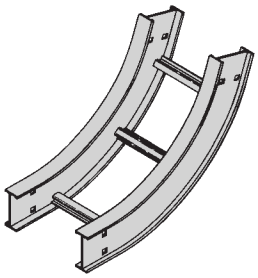
All dimensions in parentheses are millimeters unless otherwise specified.

Vertical Bend 60˚ (VO, VI)

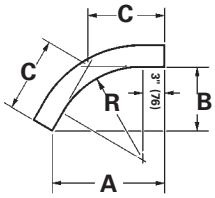
1 pair splice plates with hardware included.

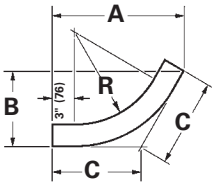


60˚ Vertical Outside - VO



60˚ Vertical Inside - VI





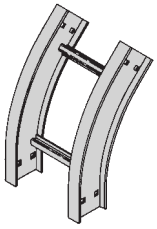
Bend Radius R	Tray Width Insert	(*) Insert "VO" for Vert. Outside Bend "VI" for Vert. Inside Bend Catalog No.	VO Side Rail Height 4" - 7"			VI Side Rail Height											
			4"			5"			6"			7"					
			in./(mm)			in./(mm)			in./(mm)			in./(mm)					
in./(mm)	in. (mm)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
12 (305)	6 (152)	(Prefix)-06-60(*)12	14 7/8 (378)	8 5/8 (219)	9 15/16 (253)	18 3/8 (467)	10 7/8 (270)	12 1/4 (311)	19 1/4 (489)	11 1/8 (283)	12 13/16 (326)	20 1/16 (510)	11 5/8 (296)	13 3/8 (340)	21 15/16 (557)	12 1/8 (308)	14 (356)
	9 (228)	(Prefix)-09-60(*)12															
	12 (305)	(Prefix)-12-60(*)12															
	18 (457)	(Prefix)-18-60(*)12															
	24 (609)	(Prefix)-24-60(*)12															
	30 (762)	(Prefix)-30-60(*)12															
	36 (914)	(Prefix)-36-60(*)12															
	42 (1067)	(Prefix)-42-60(*)12															
24 (609)	6 (152)	(Prefix)-06-60(*)24	25 5/16 (643)	14 5/8 (372)	16 7/8 (428)	28 3/4 (730)	16 5/8 (422)	19 3/16 (488)	29 5/8 (753)	17 1/8 (435)	19 3/4 (502)	30 1/2 (775)	17 5/8 (448)	20 5/16 (516)	31 3/8 (797)	18 1/8 (461)	20 7/8 (530)
	9 (228)	(Prefix)-09-60(*)24															
	12 (305)	(Prefix)-12-60(*)24															
	18 (457)	(Prefix)-18-60(*)24															
	24 (609)	(Prefix)-24-60(*)24															
	30 (762	(Prefix)-30-60(*)24															
	36 (914)	(Prefix)-36-60(*)24															
	42 (1067)	(Prefix)-42-60(*)24															
36 (914)	6 (152)	(Prefix)-06-60(*)36	35 11/16 (907)	20 5/8 (524)	23 13/16 (605)	39 1/8 (994)	22 5/8 (575)	26 1/8 (663)	40 (1016)	23 1/8 (587)	26 11/16 (687)	40 7/8 (1038)	23 5/8 (600)	27 1/4 (692)	41 3/4 (1060)	24 1/8 (613)	27 13/16 (706)
	9 (228)	(Prefix)-09-60(*)36															
	12 (305)	(Prefix)-12-60(*)36															
	18 (457)	(Prefix)-18-60(*)36															
	24 (609)	(Prefix)-24-60(*)36															
	30 (762	(Prefix)-30-60(*)36															
	36 (914)	(Prefix)-36-60(*)36															
	42 (1067)	(Prefix)-42-60(*)36															
48 (1219)	6 (152)	(Prefix)-06-60(*)48	46 1/16 (1170)	26 5/8 (676)	30 11/16 (780)	49 9/16 (1259)	28 5/8 (727)	33 (838)	50 3/8 (1280)	29 1/8 (740)	33 5/8 (854)	51 1/4 (1302)	29 5/8 (753)	34 3/16 (868)	52 1/8 (1324)	30 1/8 (765)	34 3/4 (883)
	9 (228)	(Prefix)-09-60(*)48															
	12 (305)	(Prefix)-12-60(*)48															
	18 (457)	(Prefix)-18-60(*)48															
	24 (609)	(Prefix)-24-60(*)48															
	30 (762	(Prefix)-30-60(*)48															
	36 (914)	(Prefix)-36-60(*)48															
	42 (1067)	(Prefix)-42-60(*)48															

(Prefix) See page L-3 for catalog number prefix.

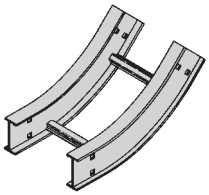
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.

Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.



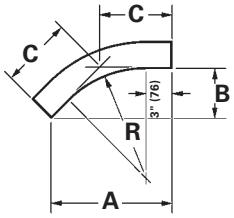
45˚ Vertical Outside -VO

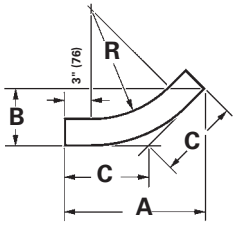


45˚ Vertical Inside -VI

Vertical Bend 45˚ (VO, VI)

1 pair splice plates with hardware included.





Bend Radius R	Tray Width Insert	(*) Insert "VO" for Vert. Outside Bend "VI" for Vert. Inside Bend	VO Side Rail Height 4" - 7"			VI Side Rail Height											
						4"			5"			6"			7"		
			in./(mm)			in./(mm)			in./(mm)			in./(mm)			in./(mm)		
in./(mm)	in. (mm)	Catalog No.	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
12 (305)	6 (152)	(Prefix)-06-45(*)12	13 5/8 (346)	5 5/8 (143)	8 (203)	16 7/16 (417)	6 13/16 (173)	9 5/8 (245)	17 1/8 (435)	7 1/8 (181)	10 1/16 (256)	17 7/8 (454)	7 3/8 (188)	10 7/16 (265)	18 9/16 (471)	7 11/16 (195)	10 7/8 (2176)
	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															
	42 (1067)	(Prefix)-42-45(*)12															
24 (609)	6 (152)	(Prefix)-06-45(*)24	22 1/16 (561)	9 1/8 (232)	12 15/16 (329)	24 15/16 (634)	10 5/16 (262)	14 5/8 (372)	25 5/8 (651)	10 5/8 (270)	15 (381)	26 5/16 (668)	10 15/16 (278)	15 7/16 (392)	27 1/16 (687)	11 3/16 (284)	15 13/16 (402)
	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															
	42 (1067)	(Prefix)-42-45(*)24															
36 (914)	6 (152)	(Prefix)-06-45(*)36	30 9/16 (776)	12 11/16 (323)	17 15/16 (456)	33 3/8 (848)	13 13/16 (351)	19 9/16 (497)	34 1/8 (867)	14 1/8 (359)	20 (508)	34 13/16 (885)	14 7/16 (367)	20 3/8 (518)	35 1/2 (902)	14 11/16 (284)	20 13/16 (402)
	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															
	42 (1067)	(Prefix)-42-45(*)36															
48 (1219)	6 (152)	(Prefix)-06-45(*)48	39 1/16 (992)	16 3/16 (411)	22 7/8 (581)	41 7/8 (1064)	17 3/8 (441)	24 9/16 (624)	42 5/8 (1083)	17 5/8 (448)	24 15/16 (633)	43 5/16 (1100)	17 15/16 (456)	25 3/8 (645)	44 (1118)	18 1/4 (464)	25 13/16 (656)
	9 (228)	(Prefix)-09-45(*)48															
	12 (305)	(Prefix)-12-45(*)48															
	18 (457)	(Prefix)-18-45(*)48															
	24 (609)	(Prefix)-24-45(*)48															
	30 (762	(Prefix)-30-45(*)48															
	36 (914)	(Prefix)-36-45(*)48															
	42 (1067)	(Prefix)-42-45(*)48															

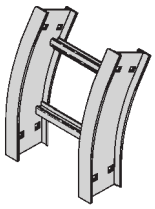
(Prefix) See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

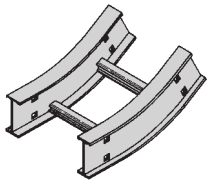
All dimensions in parentheses are millimeters unless otherwise specified.

Vertical Bend 30˚ (VO, VI)

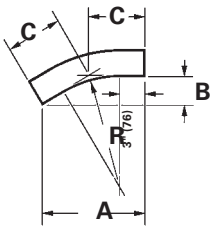
1 pair splice plates with hardware included.

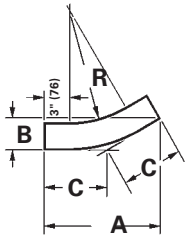


30˚ Vertical Outside -VO



30˚ Vertical Inside -VI





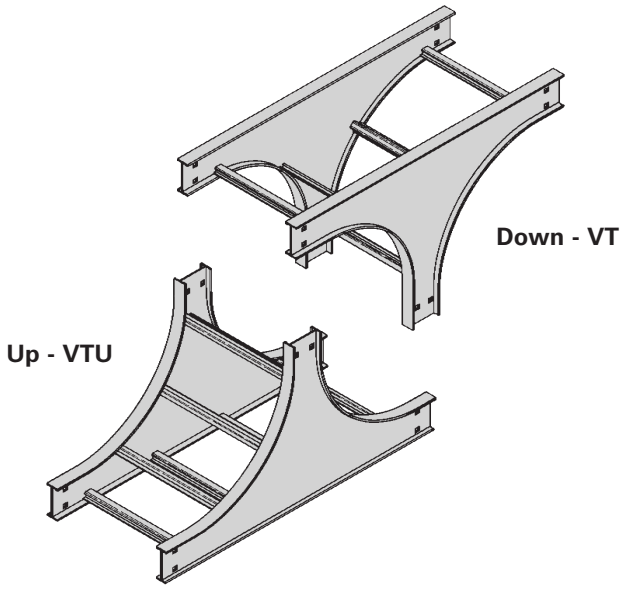
Bend Radius R	Tray Width Insert	(*) Insert "VO" for Vert. Outside Bend "VI" for Vert. Inside Bend Catalog No.	VO Side Rail Height 4" - 7"			VI Side Rail Height											
						4"			5"			6"			7"		
			in./(mm)			in./(mm)			in./(mm)			in./(mm)			in./(mm)		
in./(mm)	in. (mm)		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
12 (305)	6 (152)	(Prefix)-06-30(*)12	11 5/8 (296)	3 1/8 (79)	6 3/16 (157)	13 5/8 (346)	3 5/8 (92)	7 5/16 (186)	14 1/8 (359)	3 3/4 (95)	7 9/16 (192)	14 5/8 (372)	3 15/16 (100)	7 13/16 (199)	15 1/8 (384)	4 1/16 (103)	8 1/16 (205)
	9 (228)	(Prefix)-09-30(*)12															
	12 (305)	(Prefix)-12-30(*)12															
	18 (457)	(Prefix)-18-30(*)12															
	24 (609)	(Prefix)-24-30(*)12															
	30 (762)	(Prefix)-30-30(*)12															
	36 (914)	(Prefix)-36-30(*)12															
	42 (1067)	(Prefix)-42-30(*)12															
24 (609)	6 (152)	(Prefix)-06-30(*)24	17 5/8 (448)	4 11/16 (120)	9 7/16 (240)	19 5/8 (499)	5 1/4 (133)	10 1/2 (267)	20 1/8 (511	5 3/8 (137)	10 3/4 (273)	20 5/8 (524)	5 1/2 (140)	11 1/16 (282)	21 1/8 (537)	5 5/8 (143)	11 5/16 (287)
	9 (228)	(Prefix)-09-30(*)24															
	12 (305)	(Prefix)-12-30(*)24															
	18 (457)	(Prefix)-18-30(*)24															
	24 (609)	(Prefix)-24-30(*)24															
	30 (762	(Prefix)-30-30(*)24															
	36 (914)	(Prefix)-36-30(*)24															
	42 (1067)	(Prefix)-42-30(*)24															
36 (914)	6 (152)	(Prefix)-06-30(*)36	23 5/8 (600)	6 5/16 (160)	12 5/8 (321)	25 5/8 (651)	6 7/8 (174)	13 11/16 (348)	26 1/8 (663)	7 (175)	14 (356)	26 5/8 (676)	7 1/8 (181)	14 1/4 (362)	27 1/8 (689)	7 1/4 (184)	14 1/2 (287)
	9 (228)	(Prefix)-09-30(*)36															
	12 (305)	(Prefix)-12-30(*)36															
	18 (457)	(Prefix)-18-30(*)36															
	24 (609)	(Prefix)-24-30(*)36															
	30 (762	(Prefix)-30-30(*)36															
	36 (914)	(Prefix)-36-30(*)36															
	42 (1067)	(Prefix)-42-30(*)36															
48 (1219)	6 (152)	(Prefix)-06-30(*)48	29 5/8 (753)	7 15/16 (202)	15 7/8 (403)	31 5/8 (803)	8 7/16 (214)	16 15/16 (430)	32 1/8 (816)	8 5/8 (219)	17 3/16 (437)	32 5/8 (829)	8 3/4 (222)	17 1/2 (445)	33 1/8 (842)	8 7/8 (226)	17 3/4 (451)
	9 (228)	(Prefix)-09-30(*)48															
	12 (305)	(Prefix)-12-30(*)48															
	18 (457)	(Prefix)-18-30(*)48															
	24 (609)	(Prefix)-24-30(*)48															
	30 (762	(Prefix)-30-30(*)48															
	36 (914)	(Prefix)-36-30(*)48															
	42 (1067)	(Prefix)-42-30(*)48															

(Prefix) See page L-3 for catalog number prefix.

Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.

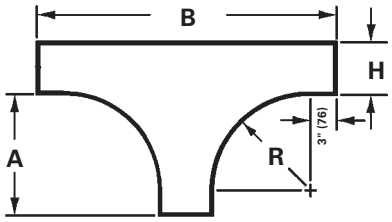
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.



Vertical Tee Up/Down (VTU/VT)

2 pair splice plates with hardware included.



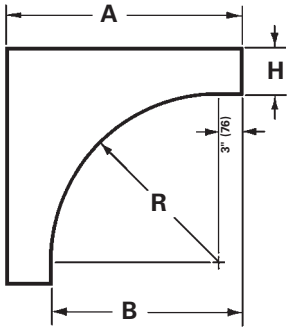
Bend Radius R in./(mm)	Tray Width in.	Tray Width mm	Vertical Tee Down Catalog No.	Vertical Tee Up Catalog No.	Side Rail Height "H" 4" A in./(mm)	4" B in./(mm)	5" A in./(mm)	5" B in./(mm)	6" A in./(mm)	6" B in./(mm)	7" A in./(mm)	7" B in./(mm)
12 (305)	6	(152)	(Prefix)-06-VT12	(Prefix)-06-VTU12	15 (381)	34 (846)	15 (381)	35 (889)	15 (381)	36 (914)	15 (381)	37 (940)
	9	(228)	(Prefix)-09-VT12	(Prefix)-09-VTU12								
	12	(305)	(Prefix)-12-VT12	(Prefix)-12-VTU12								
	18	(457)	(Prefix)-18-VT12	(Prefix)-18-VTU12								
	24	(609)	(Prefix)-24-VT12	(Prefix)-24-VTU12								
	30	(762)	(Prefix)-30-VT12	(Prefix)-30-VTU12								
	36	(914)	(Prefix)-36-VT12	(Prefix)-36-VTU12								
	42	(1067)	(Prefix)-42-VT12	(Prefix)-42-VTU12								
24 (609)	6	(152)	(Prefix)-06-VT24	(Prefix)-06-VTU24	27 (6867)	58 (1473)	27 (686)	59 (1498)	27 (686)	60 (1524)	27 (686)	61 (1549)
	9	(228)	(Prefix)-09-VT24	(Prefix)-09-VTU24								
	12	(305)	(Prefix)-12-VT24	(Prefix)-12-VTU24								
	18	(457)	(Prefix)-18-VT24	(Prefix)-18-VTU24								
	24	(609)	(Prefix)-24-VT24	(Prefix)-24-VTU24								
	30	(762)	(Prefix)-30-VT24	(Prefix)-30-VTU24								
	36	(914)	(Prefix)-36-VT24	(Prefix)-36-VTU24								
	42	(1067)	(Prefix)-42-VT24	(Prefix)-42-VTU24								
36 (914)	6	(152)	(Prefix)-06-VT36	(Prefix)-06-VTU36	39 (991)	82 (2083)	39 (991)	83 (2108)	39 (991)	84 (2134)	39 (991)	85 (2159)
	9	(228)	(Prefix)-09-VT36	(Prefix)-09-VTU36								
	12	(305)	(Prefix)-12-VT36	(Prefix)-12-VTU36								
	18	(457)	(Prefix)-18-VT36	(Prefix)-18-VTU36								
	24	(609)	(Prefix)-24-VT36	(Prefix)-24-VTU36								
	30	(762)	(Prefix)-30-VT36	(Prefix)-30-VTU36								
	36	(914)	(Prefix)-36-VT36	(Prefix)-36-VTU36								
	42	(1067)	(Prefix)-42-VT36	(Prefix)-42-VTU36								
48 (1219)	6	(152)	(Prefix)-06-VT48	(Prefix)-06-VTU48	51 (1295)	106 (2692)	51 (1295)	107 (2718)	51 (1295)	108 (2743)	51 (1295)	109 (2769)
	9	(228)	(Prefix)-09-VT48	(Prefix)-09-VTU48								
	12	(305)	(Prefix)-12-VT48	(Prefix)-12-VTU48								
	18	(457)	(Prefix)-18-VT48	(Prefix)-18-VTU48								
	24	(609)	(Prefix)-24-VT48	(Prefix)-24-VTU48								
	30	(762)	(Prefix)-30-VT48	(Prefix)-30-VTU48								
	36	(914)	(Prefix)-36-VT48	(Prefix)-36-VTU48								
	42	(1067)	(Prefix)-42-VT48	(Prefix)-42-VTU48								

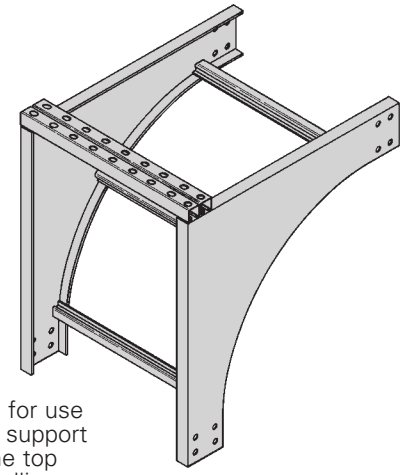
(Prefix) See page L-3 for catalog number prefix.
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.

Cable Support Fittings (CSF)

1 pair splice plates with hardware included.





This fitting is recommended for use at the top of vertical runs to support the weight of the cables. The top cross brace is drilled for installing eyebolts, ordered separately.

Bend Radius R in./(mm)	Tray Width in.	Tray Width mm	Catalog No.	Side Rail Height "H" 4" A in./(mm)	4" B in./(mm)	5" A in./(mm)	5" B in./(mm)	6" A in./(mm)	6" B in./(mm)	7" A in./(mm)	7" B in./(mm)
12 (305)	6	152	**(Prefix)-06-CSF12**	19 (483)	15 (381)	20 (508)	15 (381)	21 (533)	15 (381)	22 (559)	15 (381)
	9	228	**(Prefix)-09-CSF12**								
	12	305	**(Prefix)-12-CSF12**								
	18	457	**(Prefix)-18-CSF12**								
	24	609	**(Prefix)-24-CSF12**								
	30	762	**(Prefix)-30-CSF12**								
	36	914	**(Prefix)-36-CSF12**								
	42	1067	**(Prefix)-42-CSF12**								
24 (609)	6	152	**(Prefix)-06-CSF24**	31 (787)	27 (686)	32 (813)	27 (686)	33 (838)	27 (686)	34 (864)	27 (686)
	9	228	**(Prefix)-09-CSF24**								
	12	305	**(Prefix)-12-CSF24**								
	18	457	**(Prefix)-18-CSF24**								
	24	609	**(Prefix)-24-CSF24**								
	30	762	**(Prefix)-30-CSF24**								
	36	914	**(Prefix)-36-CSF24**								
	42	1067	**(Prefix)-42-CSF24**								
36 (914)	6	152	**(Prefix)-06-CSF36**	43 (1092)	39 (991)	44 (1118)	39 (991)	45 (1143)	39 (991)	46 (1168)	39 (991)
	9	228	**(Prefix)-09-CSF36**								
	12	305	**(Prefix)-12-CSF36**								
	18	457	**(Prefix)-18-CSF36**								
	24	609	**(Prefix)-24-CSF36**								
	30	762	**(Prefix)-30-CSF36**								
	36	914	**(Prefix)-36-CSF36**								
	42	1067	**(Prefix)-42-CSF36**								
48 (1219)	6	152	**(Prefix)-06-CSF48**	55 (1397)	51 (1295)	56 (1422)	51 (1295)	57 (1448)	51 (1295)	58 (1473)	51 (1295)
	9	228	**(Prefix)-09-CSF48**								
	12	305	**(Prefix)-12-CSF48**								
	18	457	**(Prefix)-18-CSF48**								
	24	609	**(Prefix)-24-CSF48**								
	30	762	**(Prefix)-30-CSF48**								
	36	914	**(Prefix)-36-CSF48**								
	42	1067	**(Prefix)-42-CSF48**								

(Prefix) See page L-3 for catalog number prefix.
Width dimensions are to inside wall. For aluminum fittings add 1.5 inches (38mm) for total outside width.
Manufacturing tolerances apply to all dimensions.

All dimensions in parentheses are millimeters unless otherwise specified.