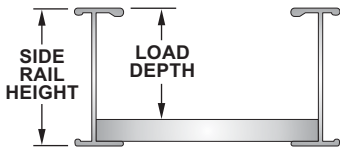
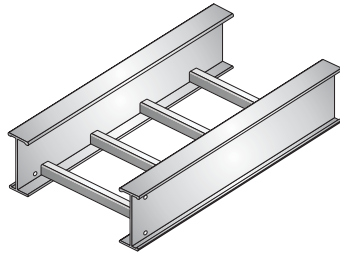


United Structural Products, LLC
560 Wharton Circle, Suite E
Atlanta, GA 30336

Phone: 404-696-8585
Fax: 404-696-8599
ustray.com



CABLE TRAY STRAIGHT SECTIONS - ALUMINUM



Cable Tray Cross-Section

- Extruded aluminum alloy 6063-T6
- Side rails are I-Beam profiles
- Rungs are 1-1/8" square tubes with open slot facing down
- Arc-welded construction
- U.L. Classified grounding
- U.L. Certified load capacities
- NEMA, CSA and NEC Compliant
- Necessary Splice Plates with hardware are included with all straight sections and fittings

• Made in the USA

SIDE RAIL HEIGHT	LOAD DEPTH	NEMA LOAD CLASS	NEMA SAFE LOAD LOAD - SPAN	CSA LOAD CLASS	SYSTEM NUMBER	FITTINGS		STANDARD TRAY LENGTH	U.L. AREA	AMP RATING
						CLASS	PREFIX			
4"	3"	12B	81 lbs/ft - 12' span	C	A412B	1	A41	12'	0.60 in ²	1000
		12C	100 lbs/ft - 12' span	D-3M	A412C	1	A41	12', 24'	0.60 in ²	1000
		20A	58 lbs/ft - 20' span	D-6M	A420A	2	A42	12', 20'	1.50 in ²	1600
		20B	85 lbs/ft - 20' span	E-6M	A420B	2	A42	20', 24'	1.50 in ²	1600
5"	4"	12B	78 lbs/ft - 12' span	C	A512B	1	A51	12'	1.00 in ²	1200
		20A	57 lbs/ft - 20' span	D-6M	A520A	2	A52	12', 20'	1.50 in ²	1600
		20C	115 lbs/ft - 20' span	E-6M	A520C	2	A52	20'	1.50 in ²	1600
6"	5"	12B	89 lbs/ft - 12' span	D-3M	A612B	1	A61	12'	1.00 in ²	1200
		12C	105 lbs/ft - 12' span	D-3M	A612C	1	A61	12'	1.00 in ²	1200
		20A	62 lbs/ft - 20' span	D-6M	A620A	2	A62	12', 20'	1.50 in ²	1600
		20B	80 lbs/ft - 20' span	E-6M	A620B	2	A62	20', 24'	1.50 in ²	1600
		20C	109 lbs/ft - 20' span	E-6M	A620C	2	A62	12', 20', 24'	2.00 in ²	2000
		20C+	104 lbs/ft - 24' span	E-6M	A624C	3	A63	20', 24'	2.00 in ²	2000
7"	6"	20C++	128 lbs/ft - 25' span	E-6M	A620D	3	A63	20', 25'	2.00 in ²	2000
		12C	100 lbs/ft - 12' span	D-3M	A712C	1	A71	12'	1.00 in ²	1200
		20C	108 lbs/ft - 20' span	E-6M	A720C	2	A72	20', 24'	2.00 in ²	2000
		20C+	111 lbs/ft - 24' span	E-6M	A720D	3	A73	20', 25'	2.00 in ²	2000
8"	7"	20C++	105 lbs/ft - 30' span	E-6M	A720E	3	A73	20', 30'	2.00 in ²	2000
		20C++	114 lbs/ft - 40' span	E-6M	A820E	4	A84	30', 40'	2.00 in ²	2000

Catalog Numbers for Straight Tray Sections

Example: **A620C - 09(*) - SL20 - 24 - S**

Non-standard lengths and widths are available; consult factory for lead times

CableTray System Number
Select from chart above

Bottom Type
06 - 6" Rung Spacing
09 - 9" Rung Spacing
12 - 12" Rung Spacing
VT - Ventilated/Trough
SF - Solid Flat Bottom
SFU - Solid Flat Bottom, Under Rungs

Optional Rungs and Bottoms
BLANK - Standard
Insert 2-Digit Bottom Code (See Below) to specify optional rungs and bottoms

Item Code
SL
Straight Length

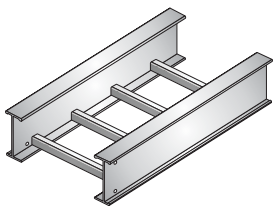
Length
10 - 10'-0"
12 - 12'-0"
20 - 20'-0"
24 - 24'-0"
25 - 25'-0"
30 - 30'-0"
40 - 40'-0"

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

Hardware Finish
G - Geomet Plated Steel
S - Stainless Steel 316



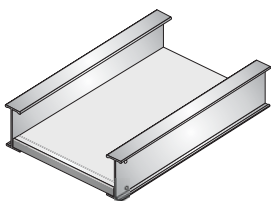
All USTray aluminum cable trays are classified by Underwriters Laboratories as suitable for use as equipment grounding conductors per NEC 392 and are certified by UL to meet all requirements of CSA Std. C22.2 No. 126. All NEMA and CSA safe load data is based on destruction load tests that were witnessed and certified to be accurate by Underwriters Laboratories.



Standard Ladders and Vented/Troughs

- 1-1/8" Square tubular rungs
- 6", 9", 12" Rung spacings
- 5" Rung spacing for troughs
- Rungs have large radius corners
- Optional rung designs available

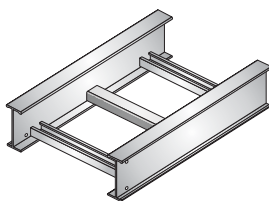
BOTTOM TYPE	RUNG SPACING
06	6" RUNG SPACING
09	9" RUNG SPACING
12	12" RUNG SPACING
VT	5" RUNG SPACING



Solid Bottoms

- Solid, 0.040" flat sheet on top of ladder rungs on 12" centers
- Bottoms can be located under rungs
- Bottoms can be located on top of and under rungs (double bottom)
- Heavier bottoms available

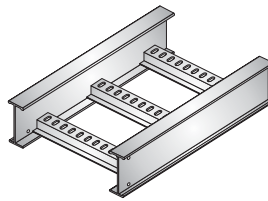
BOTTOM TYPE	BOTTOM LOCATION
SF	SOLID FLAT BOTTOM ON TOP OF RUNGS
SFU	SOLID FLAT BOTTOM UNDER RUNGS
SFD	BOTTOMS ON TOP AND UNDER RUNGS



Strut Rungs

- Strut profile accepts standard spring nuts with short springs for added cable clamping options
- Heavy-duty for extreme loads
- Extra wide 1-5/8" cable support
- Standard rung for 8" high trays

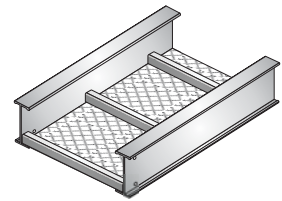
BOTTOM CODE	RUNG ORIENTATION
SA	SLOTS ALTERNATE FACING UP/DOWN
SD	SLOTS FACE DOWN
SU	SLOTS FACE UP



Marine Rungs (Slotted or Non-Slotted)

- Hat-shaped rungs have 0.31" x 0.75" round slots on 1" centers
- Accommodates stainless steel banding in marine applications
- Extra Wide 1-3/4" cable support
- Can be provided without slots

BOTTOM CODE	RUNG DESIGN
MR	MARINE RUNG (WITH SLOTS)
HR	HAT RUNG (NO SLOTS)



Expanded Metal Bottoms

- 1/2-0.081" Expanded, flattened aluminum sheet under rungs
- 0.25" x 1" Bottom openings
- Blocks birds, rodents, vandals
- Maintains open-air, ladder rating

BOTTOM CODE	BOTTOM DESIGN
EM	1/2-0.081" EXPANDED METAL UNDER LADDER RUNGS



CABLE TRAY STRAIGHT SECTIONS - ALUMINUM

SIDE RAIL HEIGHT	LOAD DEPTH	NEMA LOAD CLASS	CSA LOAD CLASS	SYSTEM NUMBER	SAFE LOAD DATA (Lbs/Ft Uniformly Distributed, 1.5 Safety Factor)																
					SUPPORT SPAN (feet)																
					6	8	10	12	14	16	18	20	22	24	25	26	28	30	35	40	
4"	3"	12B	C	A412B	324	182	117	81													
		12C	D-3M	A412C	400	225	144	100													
		20A	D-6M	A420A	644	363	232	161	118	90	72	58									
		20B	E-6M	A420B	649	531	340	236	173	132	105	85									
5"	4"	12B	C	A512B	312	176	112	78													
		20A	D-6M	A520A	633	356	228	158	116	89	70	57									
		20C	E-6M	A520C	649	649	460	319	234	179	142	115									
6"	5"	12B	D-3M	A612B	356	200	128	89													
		12C	D-3M	A612C	420	236	151	105													
		20A	D-6M	A620A	649	387	248	172	126	96	77	62									
		20B	E-6M	A620B	649	500	320	222	163	125	99	80									
		20C	E-6M	A620C	649	649	436	303	222	170	135	109									
		20C+	E-6M	A624C	649	649	600	416	306	234	185	150	124	104	96						
		20C++	E-6M	A620D	649	649	649	555	408	313	247	200	165	139	128						
7"	6"	12C	D-3M	A712C	400	225	144	100													
		20C	E-6M	A720C	649	649	432	300	220	169	133	108									
		20C+	E-6M	A720D	649	649	639	444	326	249	197	161	132	111							
		20C++	E-6M	A720E	649	649	649	649	482	369	291	236	195	164	151	139	120	105			
8"	7"	20C++	E-6M	A820E	800	800	800	800	800	712	562	456	376	316	292	269	232	203	149	114	

NEMA AND CSA SPAN/LOAD CLASSES

Span/Load Class Designations: Commonly called the Load Class, this defines the load-carrying capability of the tray for a specific support span distance. The design and cost of the cable tray is greatly affected by this designation. In order to determine the most appropriate and economical system, a class should be selected that reflects the actual total working load and support span for each application.

Concentrated Static Loads: Some applications may require the cable tray to support the weight of a single, dead object in addition to the cable loads. Specifications typically require this to be applied at the midpoint of the span between the tray supports, which is the worst-case location.

To incorporate this in the tray design the following formula can be used to convert the concentrated static load in pounds to an equivalent uniform load (W_e) in pounds per foot. That equivalent load can then be combined with the weight of cables, tray contents, and other loads that are also expressed in lbs/ft to determine the total Working Load.

$$W_e = \frac{2 \times (\text{concentrated static load, lbs})}{\text{support span length, ft}}$$

Note: This calculation is based on the load being applied at the center of the tray in the middle of a rung or bottom. If the specification requires the concentrated static load to be applied on top of one side rail, then the equivalent uniform load will be 2 times the result of this calculation.

Example: A cable tray is to be supported on 20' spans. It shall contain 50 lbs/ft of cables and support 15 lbs/ft of snow load. It is also required to support a 250 pound concentrated static load applied in the center of the tray width.

Using the calculation above, the concentrated static load is converted to an equivalent uniform load as follows: $2 \times 250 \text{ lbs} / 20 \text{ ft} = 25 \text{ lbs/ft}$

The Total Working Load will be the combination of all 3 loads, expressed in lbs/ft:

Cables	40 lbs/ft
Snow	+ 15 lbs/ft
Concentrated Load	+ 25 lbs/ft
Total Working Load:	80 lbs/ft

Refer to the chart on the right. With a support span of 20' and a total working load of 80 lbs/ft, a NEMA Class 20B tray rated at 75 lbs/ft will not be adequate. A NEMA Class 20C tray, rated at 100 lbs/ft, will be required.

SPAN/LOAD CLASS DESIGNATIONS Per NEMA STANDARD VE1 / CSA C22.2 No. 126

WORKING LOAD Lbs/Ft (Kg/M)	SUPPORT SPAN, Feet (Meters)					
	5 Ft. (1.5 M)	8 Ft. (2.4 M)	10 Ft. (3.0 M)	12 Ft. (3.6 M)	16 Ft. (4.9 M)	20 Ft. (6.0 M)
25 (37)	5AA	8AA	10AA	12AA		20AA
45 (67)						D*
50 (74)	5A	8A		12A	16A	20A
65 (97)			C			
75 (112)		8B		12B	16B	E* or 20B
100 (149)		8C		12C	16C	20C
120 (179)			D*			
200 (299)			E*			

* CSA Classes D and E are applicable to both 3.0 and 6.0 meter support spans. The appropriate support span should also be included when specifying these classes (example: D-3M).

Working Load: The total load supported by the cable tray, uniformly distributed. This will be the combined weight of all of the cables or tray contents, any environmental loads (snow, ice, dust) and any concentrated static loads.

Support Span: The maximum distance between the tray supports.

NEMA Load Classes: A number (support span in feet) combined with a letter (load capacity: A=50, B=75 and C=100 Lbs/Ft). Defined in the National Electrical Manufacturers Assoc. NEMA Standard VE1.

CSA Load Classes: A single letter (A,B,C,D,E) designates the support span and load capacity per Canadian Standards Association CSA Standard C22.2, No. 126.

CABLE TRAY FITTINGS - ALUMINUM

CLASS 1 FITTINGS	CLASS 2 FITTINGS	CLASS 3 FITTINGS	CLASS 4 FITTINGS
<ul style="list-style-type: none"> NEMA Class 12B & 12C Trays 1-1/8" Wide Side Rail Flanges 4-Bolt Connector Plates 3" Tangents 	<ul style="list-style-type: none"> NEMA Class 20A, 20B, 20C Trays 2" Wide Side Rail Flanges 4-Bolt Connector Plates 3" Tangents 	<ul style="list-style-type: none"> NEMA Classes beyond 20C 2-3/8" Wide Side Rail Flanges 8-Bolt Connector Plates 3" Tangents 	<ul style="list-style-type: none"> 8" High Long-Span System A820E 2-3/4" Wide Side Rail Flanges 8-Bolt Wrap-Around Connectors 3" Tangents

Material: All fittings are aluminum with arc-welded construction.

Side Rails: Fitting side rails are I-beams with overall dimensions similar to straight tray sections.

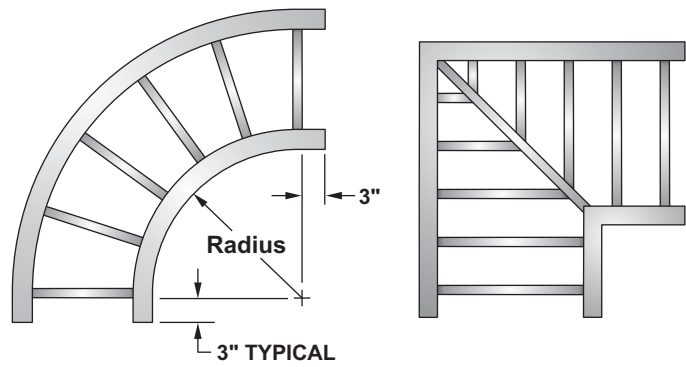
Rungs and Bottoms: Rung and Bottom designs are identical to similar straight cable tray sections.

Tangents: All fittings have 3" tangents (flats) at the end of all curved side rails to accommodate splice plate connectors.

Radius: Standard NEMA VE1 12", 24" and 36" available for all curved fittings. 48" radius and other custom designs are available, consult factory.

Square Corners: 90 Degree Horizontal Elbows, Horizontal Tees and Horizontal Crosses are available with square corners (0" Radius). The 6" through 18" square-corner fittings are designed to align with the centerline of 24" square panels of raised-floor systems.

Splice Plates: All elbows are supplied with one pair of standard splice plates with hardware at no charge. Wye fittings and tees include 2 pairs and crosses include 3 pairs with hardware at no charge.



Radius Fittings

Square-Corner Fittings

Catalog Numbers for Horizontal and Vertical Elbows, Standard Horizontal Tees and Crosses

Material A - Aluminum

Catalog Number Example: **A62 - 09 (*) - 90H24 - 36 - G**

Side Rail Height	Fitting Class	Bottom Type	Optional Rungs and Bottoms	Item Code	Radius	Width 1	Hardware Finish
4 - 4" High	1 - NEMA Classes 12B & 12C	06 - 6" Rung Spacing	BLANK - Standard Design, No Options	Insert 2 or 3-digit Item Code to specify Fitting type	12 - 12"	06 - 6"	G - Geomet Plated Steel
5 - 5" High	2 - NEMA Classes 20A, 20B & 20C	09 - 9" Rung Spacing	Insert 2-Digit Bottom Code (See Page 1) to specify optional rungs and bottoms		24 - 24"	09 - 9"	S - Stainless Steel Type 316
6 - 6" High	3 - NEMA Classes exceeding 20C	12 - 12" Rung Spacing			36 - 36"	12 - 12"	
7 - 7" High	4 - 8" High System A820E	VT - Ventilated/Trough			00 - Square Corners and Adjustable Elbows (HAE)	18 - 18"	
8 - 8" High		SF - Solid Flat Bottom			24 - 24"		
		SFU - Solid Flat Bottom, Under Rungs			30 - 30"		
					36 - 36"		

Catalog Numbers for Reducer Fittings, Reducing and Expanding Tees, Reducing Crosses

Material A - Aluminum

Catalog Number Example: **A73 - 09 (*) - HTR24 - 36 - 18 - S**

Side Rail Height	Fitting Class	Bottom Type	Optional Rungs and Bottoms	Item Code	Radius	Width W1	Width W2	Hardware Finish	
4 - 4" High	1 - NEMA Classes 12B & 12C	06 - 6" Rung Spacing	BLANK - Standard Design, No Options	Insert 2, 3 or 4-digit Item Code to specify Fitting type	12 - 12"	06 - 6"	06 - 6"	G - Geomet Plated Steel	
5 - 5" High	2 - NEMA Classes 20A, 20B & 20C	09 - 9" Rung Spacing	Insert 2-Digit Bottom Code (See Page 1) to specify optional rungs and bottoms		24 - 24"	09 - 9"	09 - 9"		S - Stainless Steel Type 316
6 - 6" High	3 - NEMA Classes exceeding 20C	12 - 12" Rung Spacing			36 - 36"	12 - 12"	12 - 12"		
7 - 7" High	4 - 8" High System A820E	VT - Ventilated/Trough			00 - Square Corners	18 - 18"	18 - 18"		
8 - 8" High		SF - Solid Flat Bottom		BLANK - Reducer Fittings	24 - 24"	24 - 24"			
		SFU - Solid Flat Bottom, Under Rungs			30 - 30"	30 - 30"			
					36 - 36"	36 - 36"			

HORIZONTAL ELBOWS

90° RADIUS SQUARE ITEM CODE 90H	60° ITEM CODE 60H	45° ITEM CODE 45H	30° ITEM CODE 30H
WYE - LEFT ITEM CODE HYL	WYE - RIGHT ITEM CODE HYR	WYE STRAIGHT ITEM CODE HYS	ADJUSTABLE ELBOW • No Radius • Max. 35 Degree Bend ITEM CODE HAE

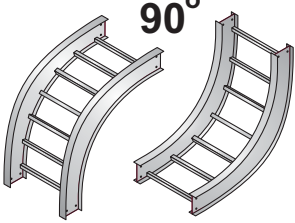
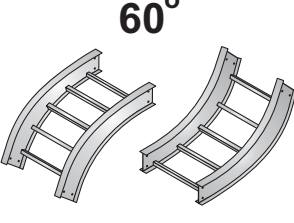
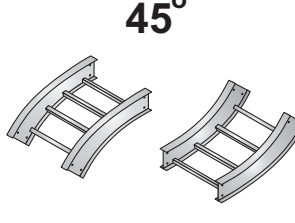
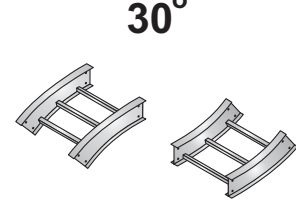
REDUCERS

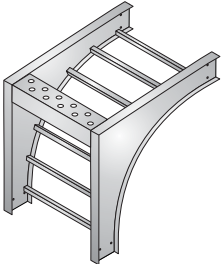
STRAIGHT STRAIGHT REDUCER ITEM CODE RS
LEFT-HAND LEFT-HAND REDUCER ITEM CODE RL
RIGHT-HAND RIGHT-HAND REDUCER ITEM CODE RR

TEES AND CROSSES

HORIZONTAL TEE RADIUS SQUARE <table border="1"> <tr> <td>STANDARD TEE W1 = W2 ITEM CODE HT</td> <td>REDUCING TEE W1 > W2 ITEM CODE HTR</td> <td>EXPANDING TEE W1 < W2 ITEM CODE HTE</td> </tr> </table>	STANDARD TEE W1 = W2 ITEM CODE HT	REDUCING TEE W1 > W2 ITEM CODE HTR	EXPANDING TEE W1 < W2 ITEM CODE HTE	VERTICAL TEE DOWN <table border="1"> <tr> <td>VERTICAL TEE DOWN ITEM CODE VTD</td> <td></td> </tr> </table>	VERTICAL TEE DOWN ITEM CODE VTD		DROPOUT TEE WITH VERTICAL RISER TAP <ul style="list-style-type: none"> • Horizontal Tee combined with vertical riser tap • Ideal for tight spaces • Dropout Tee Down (shown) - Tap turns down vertical • Dropout Tee Up (not shown) - Tap turns up vertical • Can be customized with special widths and radius <i>DROPOUT TEE DOWN</i>									
STANDARD TEE W1 = W2 ITEM CODE HT	REDUCING TEE W1 > W2 ITEM CODE HTR	EXPANDING TEE W1 < W2 ITEM CODE HTE														
VERTICAL TEE DOWN ITEM CODE VTD																
<table border="1"> <tr> <td>DROPOUT TEE TYPE</td> <td>STANDARD W1 = W2</td> <td>REDUCING W1 > W2</td> <td>EXPANDING W1 < W2</td> </tr> <tr> <td></td> <td colspan="3">ITEM CODE</td> </tr> <tr> <td>DOWN</td> <td>DTD</td> <td>DTDR</td> <td>DTDE</td> </tr> <tr> <td>UP</td> <td>DTU</td> <td>DTUR</td> <td>DTUE</td> </tr> </table>	DROPOUT TEE TYPE	STANDARD W1 = W2	REDUCING W1 > W2	EXPANDING W1 < W2		ITEM CODE			DOWN	DTD	DTDR	DTDE	UP	DTU	DTUR	DTUE
DROPOUT TEE TYPE	STANDARD W1 = W2	REDUCING W1 > W2	EXPANDING W1 < W2													
	ITEM CODE															
DOWN	DTD	DTDR	DTDE													
UP	DTU	DTUR	DTUE													
HORIZONTAL CROSS RADIUS SQUARE <table border="1"> <tr> <td>CROSS TYPE</td> <td>ITEM CODE</td> </tr> <tr> <td>STANDARD CROSS W1 = W2</td> <td>HC</td> </tr> <tr> <td>REDUCING CROSS W1 < W2</td> <td>HCR</td> </tr> </table>	CROSS TYPE	ITEM CODE	STANDARD CROSS W1 = W2	HC	REDUCING CROSS W1 < W2	HCR	VERTICAL CROSS <table border="1"> <tr> <td>VERTICAL CROSS ITEM CODE VC</td> </tr> </table>	VERTICAL CROSS ITEM CODE VC	DROPOUT CROSS WITH VERTICAL RISER TAPS <ul style="list-style-type: none"> • Horizontal Cross combined with two vertical riser taps • Ideal for tight spaces • Dropout Cross Down (shown) - Taps turns down vertical • Dropout Cross Up (not shown) - Taps turns up vertical • Can be customized with special widths and radius <i>DROPOUT CROSS DOWN</i>							
CROSS TYPE	ITEM CODE															
STANDARD CROSS W1 = W2	HC															
REDUCING CROSS W1 < W2	HCR															
VERTICAL CROSS ITEM CODE VC																
<table border="1"> <tr> <td>DROPOUT CROSS TYPE</td> <td>STANDARD W1 = W2</td> <td>REDUCING W1 > W2</td> <td>EXPANDING W1 < W2</td> </tr> <tr> <td></td> <td colspan="3">ITEM CODE</td> </tr> <tr> <td>DOWN</td> <td>DCD</td> <td>DCDR</td> <td>DCDE</td> </tr> <tr> <td>UP</td> <td>DCU</td> <td>DCUR</td> <td>DCUE</td> </tr> </table>	DROPOUT CROSS TYPE	STANDARD W1 = W2	REDUCING W1 > W2	EXPANDING W1 < W2		ITEM CODE			DOWN	DCD	DCDR	DCDE	UP	DCU	DCUR	DCUE
DROPOUT CROSS TYPE	STANDARD W1 = W2	REDUCING W1 > W2	EXPANDING W1 < W2													
	ITEM CODE															
DOWN	DCD	DCDR	DCDE													
UP	DCU	DCUR	DCUE													

VERTICAL ELBOWS

							
VERTICAL OUTSIDE	VERTICAL INSIDE	VERTICAL OUTSIDE	VERTICAL INSIDE	VERTICAL OUTSIDE	VERTICAL INSIDE	VERTICAL OUTSIDE	VERTICAL INSIDE
ITEM CODE	ITEM CODE	ITEM CODE	ITEM CODE	ITEM CODE	ITEM CODE	ITEM CODE	ITEM CODE
90VO	90VI	60VO	60VI	45VO	45VI	30VO	30VI



90° CABLE SUPPORT ELBOW (VERTICAL OUTSIDE)

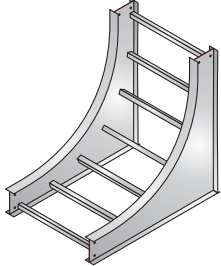
- Equivalent to standard 90° vertical outside elbow with additional bracing
- Square outer corners
- Angle brace on top with holes for 3/8" dia. fasteners
- Attach eye bolts or hooks to support Kellums cable grips and relieve tension in long vertical cable drops
- Also provides alternatives to support elbow from above

ITEM CODE
CSE

EYE BOLT KIT

- 3/8" Dia. x 5" Long Eye Bolt and (2) 3/8" Flanged Hex Nuts
- Stainless Steel
- Use in Cable Support Elbow to attach Kellums cable grips

CATALOG NO. EA.
F-EB-38-5-S

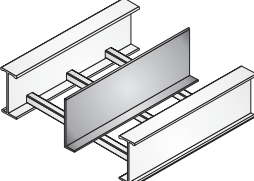
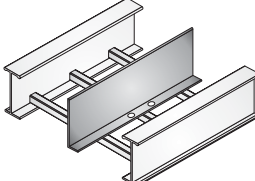
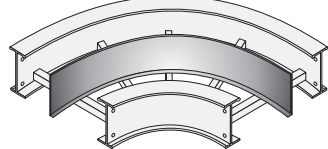
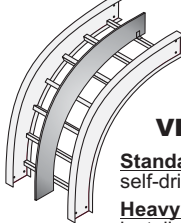


90° BOTTOM SUPPORT ELBOW (VERTICAL INSIDE)

- Equivalent to standard vertical inside elbow with additional bracing
- Square outer corners
- Provides alternatives to support the elbow from below

ITEM CODE
BSE

DIVIDERS

 <p>STRAIGHT</p> <p>Supplied with (4) #10 self-drilling, stainless steel screws</p>	 <p>STRAIGHT - HEAVY DUTY</p> <p>Includes holes for installation with U-Bolt Divider Clamps (ordered separately)</p>	 <p>HORIZONTAL FLEXIBLE</p> <p>Supplied with (3) #10 self-drilling, stainless steel screws</p>	 <p>VERTICAL ELBOW</p> <p>Standard: Supplied with (2) #10 self-drilling, stainless steel screws</p> <p>Heavy-Duty: Includes holes for installation with U-Bolt Divider Clamps (ordered separately)</p>
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Straight & Flexible Catalog Numbers:

Example: **DS - A6 - 12**

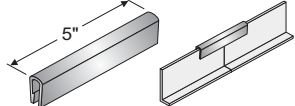
Item Code	Side Rail Height	Length
DS - Straight, Standard	4 - 4" High	Straight Sections: 10 - 10', 12 - 12'
DSH - Straight, Heavy Duty	5 - 5" High	12 - 12'
DSH - Straight, Heavy Duty	6 - 6" High	
DH - Horizontal, Flexible	7 - 7" High	Horizontal Flexible: 6 - 6'
DH - Horizontal, Flexible	8 - 8" High	

Vertical Elbow Divider Catalog Numbers:

Example: **DF - A6 - 45VO24**

Item Code	Side Rail Height	Elbow Item Code	Radius
DF - Vertical Elbow, Standard	4 - 4" High	90VO - 90° Vertical Outside	12 - 12"
	5 - 5" High	90VI - 90° Vertical Inside	24 - 24"
	6 - 6" High	60VO - 60° Vertical Outside	
	7 - 7" High	60VI - 60° Vertical Inside	36 - 36"
DFH - Vertical Elbow, Heavy Duty	8 - 8" High	45VO - 45° Vertical Outside	
		45VI - 45° Vertical Inside	
		30VO - 30° Vertical Outside	
		30VI - 30° Vertical Inside	

DIVIDER SPLICE

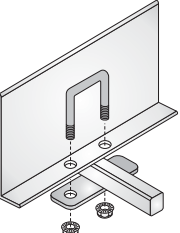


• Flexible PVC with internal metal clips

• Align and protect divider ends

CATALOG NO.	LENGTH
DVS-5	5"
DVS-(L)*	L* = Inches

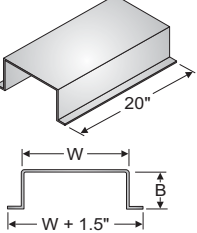
U-BOLT DIVIDER CLAMP KIT



- Heavy-duty for high winds
- Install on 36" - 48" centers (Same as tek screws in standard configuration)
- Includes U-Bolt, alum. plate and (2) 1/4" flanged hex nuts
- Bolt and nuts are type 316 Stainless Steel

CATALOG NO. EA.
DHC-A-S

CABLE BRIDGE FOR DIVIDED TEES AND CROSSES



- Provides support for vertical cable separation where cables cross in divided Horizontal Tees and Crosses
- Dimensions can be customized to meet specific project requirements
- Includes (6) #10 x 1" long self-drilling, stainless steel screws
- Standard height B is typically 1/2 of the tray interior load depth
- Standard length (L)* is typically 20"

CATALOG NO. EACH
CB - A(H)*-(W)*-(L)*

(H)* Insert tray side rail height in inches (4, 5, 6, 7, 8)

(W)* Insert Bridge width in inches (03, 4.5, 06, 09, 12, 15, 18, 24, 30)

(L)* Insert Bridge length in inches (05, 08, 12, 18, 20, 24, 27, 30, 36)

COVERS

Flat, Non-Flanged, Solid FNS COVER SYSTEM	Flat, Flanged, Solid FFS COVER SYSTEM	Flat, Non-Flanged, Ventilated FNV COVER SYSTEM	Flat, Flanged, Ventilated FFV COVER SYSTEM	Peaked 20°, Flanged, Solid PFS COVER SYSTEM
-------------------------------------------------------------------	---------------------------------------------------------------	------------------------------------------------------------------------	--------------------------------------------------------------------	---------------------------------------------------------------------

Straight Cover Catalog Numbers:

Example: **AC - FFS - SL12 - 24 - 125**

Material	Cover System	Item Code	Length	Width	Thickness
AC Aluminum Cover	FNS FFS FNV FFV PFS	SL Straight Length	Standard: 06 - 6'-0" 12 - 12'-0" Non-standard lengths are available; consult factory for lead times	06 - 6" 09 - 9" 12 - 12" 18 - 18" 24 - 24" 30 - 30" 36 - 36"	040 - 0.040" (Standard) Alternates: 063 - 0.063" 080 - 0.080" 090 - 0.090" 125 - 0.125" 188 - 0.188"

Fitting Cover Catalog Numbers:

Example: **AC - FFS - 90VO12 - 18 - 125 - 6**

Material	Cover System	Item Code	Radius	Width	Thickness	Side Rail Height
AC Aluminum Cover	FNS FFS FNV FFV PFS	Fitting Item Code Pages 4 & 5	00 - Square 12 - 12" 24 - 24" 36 - 36" OR Reducer Width W1	06 - 6" 09 - 9" 12 - 12" 18 - 18" 24 - 24" 30 - 30" 36 - 36" OR Reducer Width W2	040 - 0.040" (Standard) Alternates: 063 - 0.063" 080 - 0.080" 090 - 0.090" 125 - 0.125" 188 - 0.188"	For Outside Vertical Elbows Only; Leave Blank For All Other Fittings

COVER CONNECTORS

COVER CLAMPS
OUTDOOR OR VERTICAL USE

FLAT STRAP
 ITEM CODE
CFS

PEAKED STRAP
 ITEM CODE
CPS

ELEVATED COVER CLAMP
 ITEM CODE
CCE-(†)*

(†)* Specify Gap = 1", 2", 3", 4"

Cover Clamp Catalog Numbers:

Example: **CFS - A6 - 18 - S**

Item Code	Material	Side Rail Height	Width	Hardware Material
Clamp Item Code	A Aluminum	4 - 4" High 5 - 5" High 6 - 6" High 7 - 7" High 8 - 8" High	06 - 6" 09 - 9" 12 - 12" 18 - 18" 24 - 24" 30 - 30" 36 - 36"	S - Stainless Steel 316 (Standard Hardware Material)

COVER TYPE	RECOMMENDED QUANTITY OF COVER CONNECTORS	
	STANDARD CLIPS	CLAMPS
STRAIGHT SECTION 6'L	4	2
STRAIGHT SECTION 12'L	6	3
ELBOWS	4	2
TEES	6	3
CROSSES	8	4

COVER CLIPS
INDOOR AND HORIZONTAL USE

STANDARD COVER CLIP

- Indoor Use Only
- 18-8 Stainless Steel Clip and Screw

CATALOG NO. EACH
CCS-S

COVER SUPPORT BRACE

- Reinforces sagging Covers
- Install under covers on 24" to 36" centers
- Aluminum extrusion

CATALOG NO. EA. (W)* Insert nominal tray width in inches
CS-A-(W)*

ALUMINUM COVER JOINT STRIP

COVER	CATALOG NO. EA.
FLAT	CJF-(W)*
PEAKED	CJP-(W)*

(W)* Insert tray width in inches

F*=Fastener materials

G Steel, Geomet Plated
Z Steel, Zinc Plated
S Stainless Steel, Type 316

RAISED COVER CLIP

- Indoor Use Only
- Aluminum Clip
- (†)* Specify Gap = 1", 2", 3", 4"

FITTING CLASS	CATALOG NO. EACH
1	CCR-A(†)*-1-(F)*
2	CCR-A(†)*-2-(F)*
3	CCR-A(†)*-3-(F)*

(F)* Insert **Z** or **S**

SPICES AND CONNECTORS

STANDARD ITEM CODE SPS	EXPANSION ITEM CODE SPE	MID-SPAN ITEM CODE SPM	VERTICAL ADJUSTABLE ITEM CODE SPV	HORIZONTAL ADJUSTABLE ITEM CODE SPH	BOX CONNECTOR ITEM CODE SPB	SUPPORT HANGERS ITEM CODE SHH	 ITEM CODE SVH
-------------------------------------------------------	--------------------------------------------------------	-------------------------------------------------------	------------------------------------------------------------------	--------------------------------------------------------------------	------------------------------------------------------------	--------------------------------------------------------------	------------------------------------

All **Splice Plates** (except reducing) are supplied in pairs. Geomet-plated steel hardware is supplied with all splices and connectors. Type 316 stainless steel hardware is optional.

Standard Splice Plates are automatically included with all straight tray sections and fittings. Extras for field cuts or spares should be ordered separately.

Bonding Jumpers are required for use only with expansion connectors and at discontinuities in the tray system. **Bonding jumpers are not required for use with vertical or horizontal adjustable connectors.**

Splice Plate & Connector Catalog Numbers:

Example: **SPS - A7 - G4**

Item Code	Material	Side Rail Height	Hardware Finish	Hardware Quantity
Splice or Connector Item Code	Aluminum	4 - 4" High	G - Geomet	4 - (4) Screws per plate
		5 - 5" High	S - Stainless Steel 316	8 - (8) Screws per plate, Fitting Class 3 Only
		6 - 6" High		
		7 - 7" High		
		8 - 8" High		

OFFSET REDUCING

Supplied each, not in pairs

ITEM CODE
SPR-(†)*

(†)* Insert Reduction in inches (R) = 1.5, 3, 4.5, 6, 7.5, 9, 10.5, 12, 13.5, 15, 18, 21, 24, 27, or 30

STEP-DOWN (REDUCING HEIGHT)

- Transition between different side rail heights
- Step down from nominal side rail Height H_1 to H_2 (H)* = 4", 5", 6", 7" or 8"

ITEM CODE
SPD-(H₁)*(H₂)*

CONVERSION PLATE

- Holes on one side connect to USTray components
- No holes on opposite side for field modifications

ITEM CODE
SPC

BRANCH PIVOT CONNECTORS

- Transition between trays
- Adjustable to any angle
- Supplied in pairs with fasteners
- One pair required for each tray-to-tray connection
- Two pairs required to make transition shown in illustration

ITEM CODE
SPP

Side View

FLOOR SUPPORT BRACKETS

- Supports tray directly above floor
- Elevation (E)* as required, 36" Max.
- Tray connection hardware is included
- Floor connection hardware not included
- For applications with multiple tiers of trays stacked vertically, these brackets can be designed to stack on top of each other and share the same 9/16" dia. hole for the floor connection hardware
- Heavy-Duty aluminum material

CATALOG NO. (PAIR)
SPFS-A(H)*(E)*(F)*-2

(H)* Insert nominal tray side rail height
(E)* Insert required tray bottom elevation
(F)* Insert hardware material **G** or **S**

CONDUIT CONNECTOR PLATE FOR 6" HIGH, NEMA 20C TRAY SYSTEMS

- Reinforces the tray to permit field-drilled holes in the side rails for conduit connector bushings
- Install up to 6 places anywhere in each side rail of a 20' long tray section and still maintain NEMA 20C load rating
- Load tests per NEMA VE1 witnessed and certified accurate by U.L.
- The size of hole required for the conduit bushing shall be specified by customer (2.5" maximum diameter)
- This is a modified SPS splice plate connector that attaches with standard connector hardware

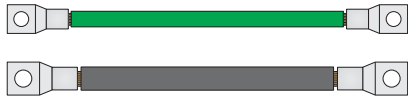
CATALOG NO. (EACH)
CCP-A6-(D)*(F)*4

(D)* Insert required bushing hole diameter
(F)* Insert hardware material **G** or **S**

UL CERTIFIED

BONDING AND GROUNDING

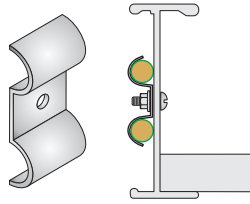
BONDING JUMPERS



- THHN Copper, Green Insulation, 16" Long
- 250 MCM is Black Welding Cable
- One-hole Lugs sized for 3/8" fasteners
- Fasteners ordered separately
- Consult factory for other sizes and lengths

CABLE SIZE	AMPERAGE NEC 250.122	CATALOG NO. EA.
#1	600	GBJ-C-600
1/O	800	GBJ-C-800
2/O	1000	GBJ-C-1000
3/O	1200	GBJ-C-1200
4/O	1600	GBJ-C-1600
250	2000	GBJ-C-2000

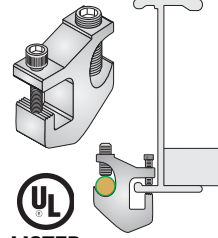
GROUND WIRE SUPPORT CLAMP



- For support only, does not bond
- Clamp is 316 stainless steel
- 1/4" Screw & flanged nut included
- Insert fastener finish (F)* = **Z** or **S**

WIRE SIZE	CATALOG NO. EA.
#1 thru 2/O	GWS-S-1-(F)*
3/O thru 250 MCM	GWS-S-2-(F)*
300 thru 500 MCM	GWS-S-3-(F)*

GROUND WIRE CLAMP

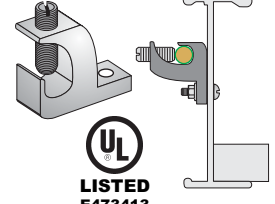


UL LISTED
E473413

- UL Listed for bonding
- No field-drilling req'd.
- #6 thru 250 MCM wire
- Aluminum clamp
- Zinc plated screws

CATALOG NO. EA.
GWC-A1-Z

GROUND WIRE LAY-IN LUG



UL LISTED
E473413

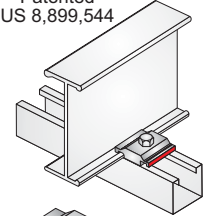
- UL Listed for bonding
- #6 thru 250 MCM wire
- Aluminum clamp
- Field-drilling is required
- Can be factory-welded to side rails as needed
- **UL Listed as welded assembly when welded**

CATALOG NO. EA.
GWL-A-Z

HOLD DOWN CLAMPS

HOLD DOWN CLAMP & EXPANSION GUIDE (SERIES 2, 3 & 4 TRAYS ONLY)

Patented
US 8,899,544



Red stripe faces out
Hold Down Clamp

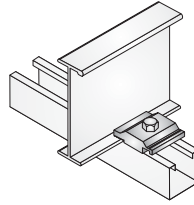


Green stripe faces out
Expansion Guide

- "Locks On" outside flange of Tray side rails, preventing movement in all directions
- Functions as Hold Down Clamp and Expansion Guide
- Colored stripes indicate use
- For use only with heavy-duty Trays - Series 2, 3 and 4
- Hole sized for 3/8" fasteners, ordered separately
- Hole sized for 1/2" fasteners is optional, consult factory
- Extruded Aluminum

CATALOG NO. EA.
HDH-A

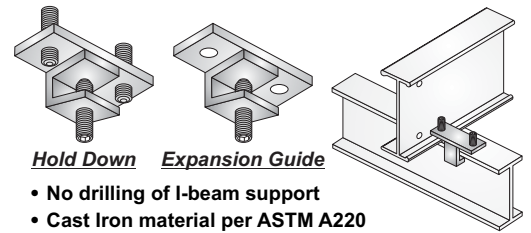
HOLD DOWN CLAMP & EXPANSION GUIDE (SERIES 1 TRAYS ONLY)



- Hole sized for 3/8" fasteners
- Hole sized for 1/4" fasteners is optional, consult factory
- Extruded Aluminum

CATALOG NO. EA.
HDL-A

HOLD DOWN CLAMP & EXPANSION GUIDE, I-BEAM



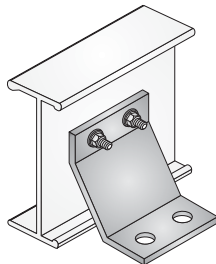
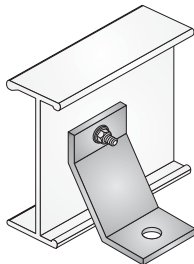
Hold Down Expansion Guide

- No drilling of I-beam support
- Cast Iron material per ASTM A220
- Hot-dip galv. after fab. per ASTM A-123
- 1/2" Dia. fasteners included

(F)* Insert **G** or **S**

	CATALOG NO. EA.
Hold Down Clamp	HHB-H-(F)*
Expansion Guide	HEB-H-(F)*

HOLD DOWN BRACKETS 2 HOLES 4 HOLES

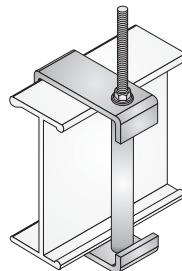


- Aluminum
- 3/8" tray attachment hardware included
- 1/2" support attachment hardware not included

	CATALOG NO. EA.
2 HOLES	HBT-A-(F)*
4 HOLES	HBF-A-(F)*

(F)* Insert **G** or **S**

HANGER ROD CLAMP



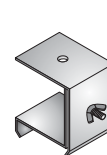
- Zinc plated steel
- Use with 1/2" threaded rod
- Order 1/2" threaded rod and hex nuts separately

CATALOG NO. EACH
HRC-Z(H)*-(C)*

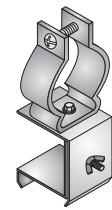
(H)* Insert tray height in inches

(C)* Insert Fitting Class = 1, 2 or 3

CONDUIT ATTACHMENT BRACKET & CLAMP



Bracket



Bracket + Clamp

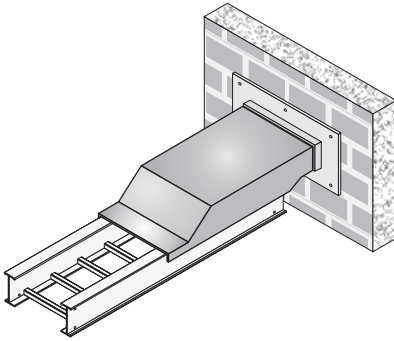
- Aluminum Bracket
- *Specify conduit type (D)* = R for Rigid, E for EMT
- *Specify conduit size in inches (†)* = .5, .75, 1, 1.25, 1.5, 2, 2.5, 3, or 4
- *Specify Tray Fitting Class (C)* = 1, 2, 3 or 4

	CATALOG NO. EACH
Bracket Only	CAB-(C)*-(F)*
Clamp + Bracket	CAC-(D†)*-(C)*-(F)*

(F)* Insert **Z** or **S** for clamp & fastener material

ACCESSORIES

RAIN HOOD FOR WALL PENETRATION SLEEVE



- Cover attaches to Wall Penetration Sleeve
- Top of outdoor tray attaches to bottom of sleeve to create downhill "Drip Loop" in cables and prevent water from seeping into building
- Aluminum materials
- Fasteners are stainless steel type 316
- Rain Hood attaches independently of tray and sleeve assembly

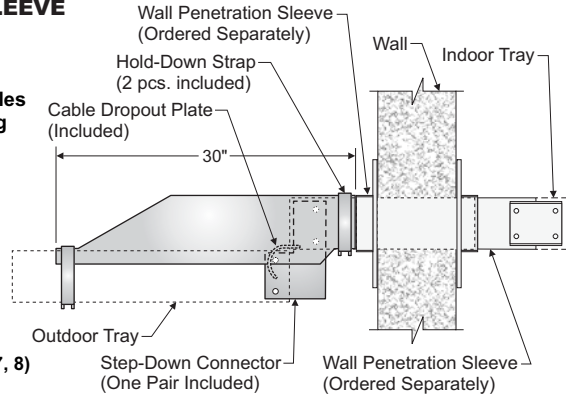
CATALOG NUMBER EACH

RHP-A(H)*-(C)*-(W)*S

(H)* Insert tray side rail height in inches (4, 5, 6, 7, 8)

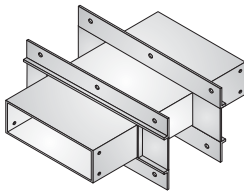
(C)* Insert tray fitting class 1, 2, 3 or 4

(W)* Insert tray width in inches (06, 09, 12, 18, 24, 30, 36)



Rain Hood Side View

WALL PENETRATION SLEEVE



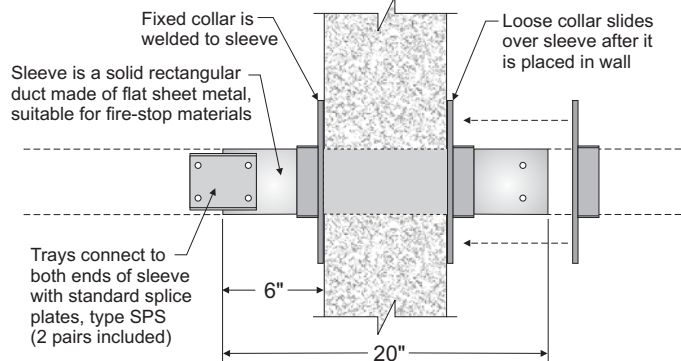
- Steel; Mill-Galv. or Hot-Dip Galvanized
- 2 pairs of splice plates and 3/8" tray attachment hardware included

CATALOG NO. EACH

WPS-(M)*-(H)*-(W)*-(F)*

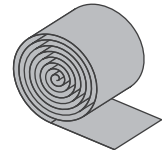
(M)* Insert **H** or **M** (W)* Insert tray width

(H)* Insert tray height (F)* Insert **G** or **S**



Wall Sleeve Side View

NEOPRENE

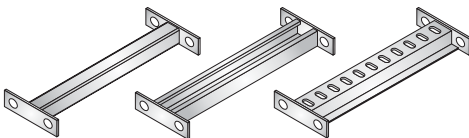


- 1/8" x 2"
- 25' Roll
- Good isolator
- Other sizes available

CATALOG NO.

NR-18-2

REPLACEMENT RUNGS



- Replace damaged rungs in field
- Add to support heavy point loads
- Installation hardware included

CATALOG NO. EACH

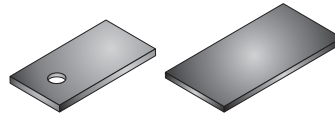
Ladder **RRL-A-(W)*-(F)***

Strut Profile **RRS-A-(W)*-(F)***

Marine Slotted **RRM-A-(W)*-(F)***

(W)* Insert tray width (F)* Insert **G** or **S**

NYLON PADS



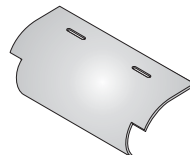
- 1/8" Thick Black Nylon
- U.V. Rated for Outdoor Use

CATALOG NO. (EA.)

3" x 6" Solid **NP-36**

3" x 2" with 1/2" Hole **NP-32-12**

LADDER CABLE DROPOUT



- 3" Radius
- Aluminum
- 1/4" Fasteners included

CATALOG NO. EACH

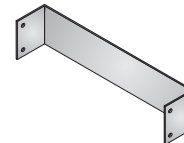
LD-A-(C)*-(W)*-(F)*

(C)* Insert tray fitting class: 1, 2, 3 or 4

(W)* Insert tray width

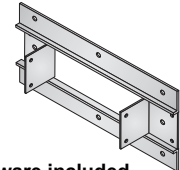
(F)* Insert **Z** or **S**

BLIND END PLATE



- Aluminum
- 3/8" tray attach. hardware included

BOX CONNECTOR, FRAME-TYPE



CATALOG NO. EACH

Blind End (Ladder) **BE-A(H)*-(W)*-(F)***

Blind End (Solid-Btm) **BE-A(H)*-(W)*-(F)*-SB**

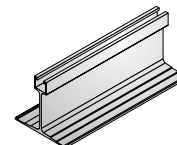
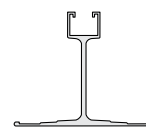
Box Conn. **BC-A(H)*-(W)*-(F)***

(H)* Insert tray height

(W)* Insert tray width

(F)* Insert **G** or **S**

ROOF BLOCK SUPPORT



(W)* Insert Block width in inches

- Solid aluminum
- 6" High support
- 7" Wide base
- Heavy-duty
- Strut profile on top
- Cut to any length
- Neoprene and adhesive bases available

CATALOG NO. EA.

RB-A-(W)*

(M)* = Part materials

H Steel, Hot-Dip Galv. After Fab. (ASTM A123)

M Steel, Mill-Galvanized (ASTM A653)

S Stainless Steel, Type 316

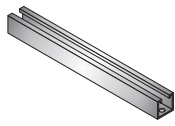
(F)* = Fastener materials

G Steel, Geomet Plated

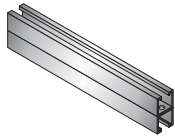
Z Steel, Zinc Plated

S Stainless Steel, Type 316

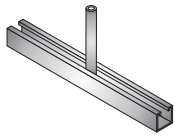
HANGER CHANNELS


 HANGER CHANNEL,
SINGLE STRUT

CATALOG NO. EA.

HCS-(M)*-(W)*

 HANGER CHANNEL,
DOUBLE STRUT

CATALOG NO. EA.

HCD-(M)*-(W)*

 HANGER CHANNEL,
CENTER-HUNG

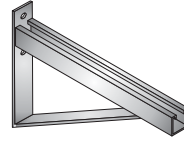
CATALOG NO. EA.

HCC-H-(W)*

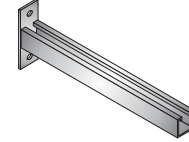
- All hanger channels made from 1-5/8" deep x 12 Ga. steel struts
- (M)* Insert material: **M** = Mill Galvanized; **H** = Hot-Dip Galvanized
- (W)* Insert channel width in inches: Single & double use nominal tray width + 12". For center-hung channel use tray width + 6"

WALL BRACKETS

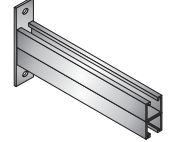
Material: Steel, Hot-Dip Galvanized After Fabrication Per ASTM A-123


 WALL BRACKET,
HEAVY DUTY

CATALOG NO. EA.

WBH-H-(W)*

 WALL BRACKET,
SINGLE CHANNEL

CATALOG NO. EA.

WBS-H-(W)*

 WALL BRACKET,
DOUBLE CHANNEL

CATALOG NO. EA.

WBD-H-(W)*

- Wall brackets, heavy duty made from 1" deep x 12 Ga. steel strut
- Wall brackets, single & double made from 1-5/8" deep x 12 Ga. steel struts
- (W)* Insert bracket width in inches: Use nominal tray width + 6"

SUPPORT HARDWARE KITS

SUPPORT TYPE	DUTY	CATALOG NO. EACH	Light-Duty Hold Down Clip	Heavy-Duty Hold Down Clamp	Hex Bolt 1-1/2" Long	Spring Nut	1-1/2" Square Washer	Flanged Hex Nut
	Light	SKTL-A-(Z or S)-(38 or 12)	2		2 (1/4")	2 (1/4")	4 (3/8" or 1/2")	4 (3/8" or 1/2")
	Heavy	SKTH-A-(Z or S)-(38 or 12)		2	2 (3/8")	2 (3/8")	4 (3/8" or 1/2")	4 (3/8" or 1/2")
	Light	SKCL-A-(Z or S)-(38 or 12)	2		2 (1/4")	2 (1/4")	1 (3/8" or 1/2")	2 (3/8" or 1/2")
	Heavy	SKCH-A-(Z or S)-(38 or 12)		2	2 (3/8")	2 (3/8")	1 (3/8" or 1/2")	2 (3/8" or 1/2")
	Light	SKWL-A-(Z or S)	2		2 (1/4")	2 (1/4")		
	Heavy	SKWH-A-(Z or S)		2	2 (3/8")	2 (3/8")		

38 = 3/8", **12** = 1/2" Hardware for use with 3/8" or 1/2" threaded rod

Chart above shows quantities of each item included in kits, supplied in plastic bags.

FASTENERS & HARDWARE

TYPE	SIZE	USE	CATALOG NO. EA.	TYPE	SIZE	USE	CATALOG NO. EA.
	3/8" x 3/4"	A,D,F,L	F-RNS-38-34-(G or S)		1/4" x 6'	C	F-THR-14-72-(Z or S)
					3/8" x 12'		F-THR-38-144-(Z or S)
1/2" x 12'	F-THR-12-144-(Z or S)						
	1/4"	B,E,G,J,M,N	F-FHN-14-(Z or S)		1/4" x 6"	N-4"High	F-THS-14-6-(Z or S)
	3/8"	A,C,D,F,H,L	F-FHN-38-(G or S)		1/4" x 7"	N-5"High	F-THS-14-7-(Z or S)
	1/2"	C,H	F-FHN-12-(Z or S)		1/4" x 8"	N-6"High	F-THS-14-8-(Z or S)
	3/8"	K	F-SHN-38-(Z or S)	1/4" x 9"	N-7"High	F-THS-14-9-(Z or S)	
	1/2"		F-SHN-12-(Z or S)				
	3/8"	D	F-LHN-38- S		1/4"	C	F-RCN-14-(Z or S)
					3/8"		F-RCN-38-(Z or S)
1/2"	F-RCN-12-(Z or S)						
	1/4"	E	F-RFW-14-(Z or S)		1/4"	C,G	F-CNS-14-(Z or S)
	3/8"	D	F-FRW-38- S		3/8"	C,H	F-CNS-38-(Z or S)
	1/2"		F-FRW-12-(Z or S)		1/2"	C,H	F-CNS-12-(Z or S)
	1/4" x 1-1/2"	G	F-HHB-14-15-(Z or S)		1/4"	G	F-CNW-14-(Z or S)
	3/8" x 1-1/2"	H	F-HHB-38-15-(Z or S)		3/8"	H	F-CNW-38-(Z or S)
	1/2" x 1-1/2"	H, L	F-HHB-12-15-(Z or S)		1/2"	H	F-CNW-12-(Z or S)
	1/4" x 1-1/2"	E	F-SRS-14-15-(Z or S)		1/4" Hole	C	F-SCW-14-(Z or S)
	3/8" x 3/4"	D	F-PRS-38-34- S		3/8" Hole	C	F-SCW-38-(Z or S)
	3/8" x 1-1/2"	K	F-SRS-38-15-(Z or S)		1/2" Hole	C	F-SCW-12-(Z or S)
	1/4" x 3/4"	B,M	F-SNC-14-34-(Z or S)		1/4" Rod	C-650 lbs	F-HBC-14-(Z or S)
	1/4" x 5"	N-4"High	F-SNC-14-5- Z		3/8" Rod	C-1100 lbs	F-HBC-38-(Z or S)
	1/4" x 6"	N-5"High	F-SNC-14-6- Z		1/2" Rod	C-1600 lbs	F-HBC-12-(Z or S)
	1/4" x 7"	N-6"High	F-SNC-14-7- Z				
1/4" x 8"	N-7"High	F-SNC-14-8- Z		Self-Drilling Screw #10 x 1"	P	F-SDS-10-1- S	

Fastener materials

- G** Steel, Geomet Plated
- Z** Steel, Zinc Plated
- S** Stainless Steel, Type 316

Fastener Uses

- (A) Splice plates & tray connectors
- (B) Flat & peaked strap cover clamps
- (C) Trapeze hangers & supports
- (D) Expansion connectors

(E) Cable dropouts

(F) Blind ends

(G) Hold down clamp - HDL

(H) Hold down clamp - HDH

(J) Ground wire support clamps

(K) Bonding jumpers

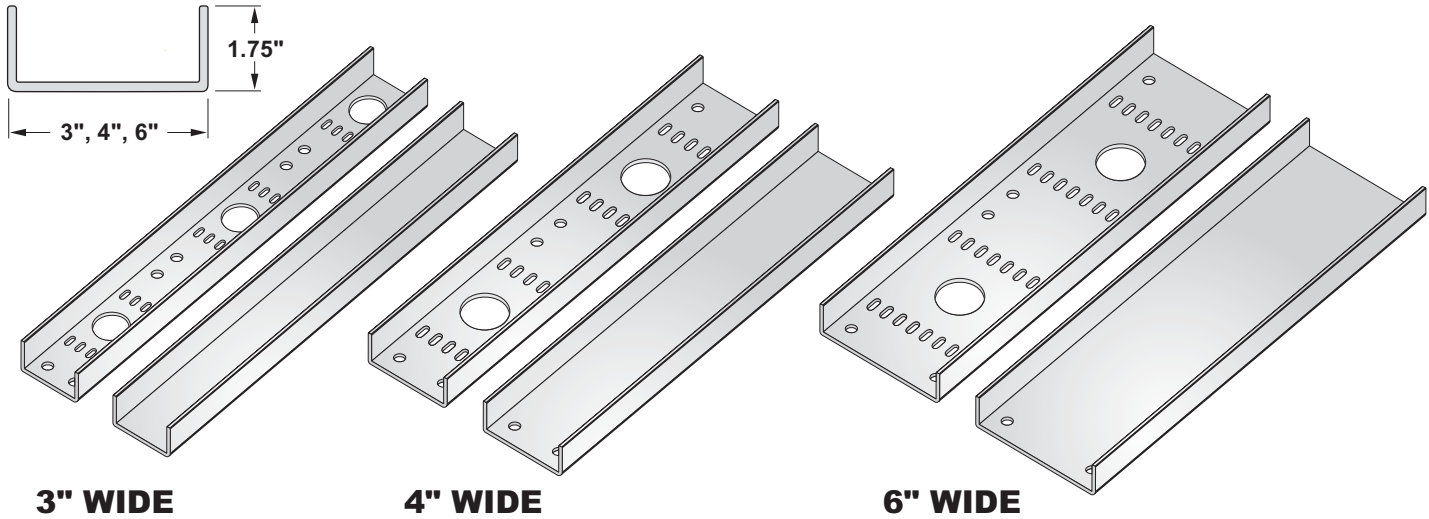
(L) Hold down brackets

(M) Conduit clamp brackets

(N) Channel & elevated cover clamps

(P) Dividers

CABLE CHANNEL STRAIGHT SECTIONS - ALUMINUM



- Extruded aluminum alloy 6063-T6
- Ventilated and Solid designs
- Ventilated have large holes for cable drops and slots for cable ties
- Ventilated have holes for splice plates that repeat on 12" centers to simplify field modifications
- U.L. Classified grounding
- U.L. Certified load capacities
- NEMA, CSA and NEC Compliant
- Necessary Splice Plates with hardware are included with all straight sections and fittings

CABLE CHANNEL STRAIGHT SECTIONS							SAFE LOAD DATA (Lbs/Ft, 1.5 Safety Factor)				
WIDTH	DEPTH	DESIGN	SYSTEM NUMBER	STANDARD LENGTH	U.L. AREA	AMP RATING	NEMA LOAD CLASS	SUPPORT SPAN (feet)			
								6	8	10	12
3"	1.75"	SOLID	ACHS	12'	0.40 in ²	600	5A	40	22	14	10
		VENTED	ACHV	12'	0.40 in ²	600	5A	40	22	14	10
4"	1.75"	SOLID	ACHS	12'	0.60 in ²	1,000	8AA	48	27	17	12
		VENTED	ACHV	12'	0.40 in ²	600	8AA	48	27	17	12
6"	1.75"	SOLID	ACHS	12'	0.60 in ²	1,000	8AA	48	27	17	12
		VENTED	ACHV	12'	0.60 in ²	1,000	8AA	48	27	17	12

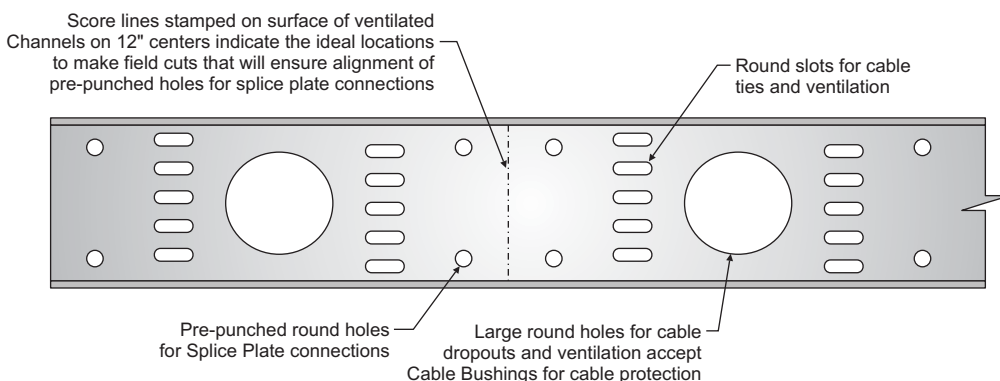
CLASSIFIED
UL US

All USTray aluminum channels are classified by Underwriters Laboratories as suitable for use as equipment grounding conductors per NEC 392 and are certified by UL to meet all requirements of CSA Std. C22.2 No. 126. All NEMA and CSA safe load data is based on destruction load tests that were witnessed and certified to be accurate by Underwriters Laboratories.

Catalog Numbers for Straight Channel Sections

Example: **ACHV - 175 - SL12 - 04 - S**

- Channel System Number**
ACHV - Ventilated
ACHS - Solid
- Channel Depth**
175 - 1-3/4"
- Item Code**
SL
Straight Length
- Length**
10 - 10'-0"
12 - 12'-0"
- Width**
03 - 3"
04 - 4"
06 - 6"
- Hardware Finish**
G - Geomet Plated Steel
S - Stainless Steel 316



Channel Hole Pattern Details (Pattern Repeats on 12" Centers)

CABLE BUSHING

- Provides protection for cables
- Snaps into large holes in ventilated channels
- Black plastic

CHANNEL WIDTH	CATALOG NO. (EACH)
3"	SB-P-1.25
4" & 6"	SB-P-2

CHANNEL FITTINGS

Material: All channel fittings are aluminum alloy 5052 with arc-welded construction.

Channel Bottoms: Fittings are available in solid and ventilated designs.

Tangents: All fittings have 3" tangents (flats) at the end of all curved side rails to accommodate splice plate connectors.

Radius: Standard 12", 24" and 36" radius are available for all fittings. 48" radius and other custom designs are also available, consult factory.

Splice Plates: All elbows are supplied with one standard splice plate with hardware at no charge. Tee fittings include 2 and crosses include 3 connectors with hardware at no charge.

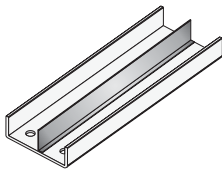
Catalog Numbers for Channel Fittings

Example: **ACHV - 175 - 90H24 - 04 - S**

Channel System Number ACHV - Ventilated ACHS - Solid	Channel Depth 175 - 1-3/4"	Item Code Insert 2, 3, or 4-digit Item Code to specify Fitting type	Radius 12 - 12" 24 - 24" 36 - 36"	Width 03 - 3" 04 - 4" 06 - 6"	Hardware Finish G - Geomet Plated Steel S - Stainless Steel 316
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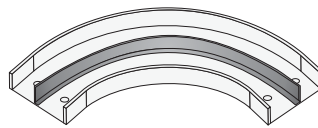
<p>90°</p> <p>HORIZONTAL ITEM CODE 90H</p>	<p>60°</p> <p>HORIZONTAL ITEM CODE 60H</p>	<p>45°</p> <p>HORIZONTAL ITEM CODE 45H</p>	<p>30°</p> <p>HORIZONTAL ITEM CODE 30H</p>	<p>TEE</p> <p>HORIZONTAL ITEM CODE HT</p>	<p>CROSS</p> <p>HORIZONTAL ITEM CODE HC</p>
<p>90°</p> <p>VERTICAL OUTSIDE ITEM CODE 90VO</p>	<p>90°</p> <p>VERTICAL INSIDE ITEM CODE 90VI</p>	<p>60°</p> <p>VERTICAL OUTSIDE ITEM CODE 60VO</p>	<p>60°</p> <p>VERTICAL INSIDE ITEM CODE 60VI</p>	<p>45°</p> <p>VERTICAL OUTSIDE ITEM CODE 45VO</p>	<p>45°</p> <p>VERTICAL INSIDE ITEM CODE 45VI</p>
<p>30°</p> <p>VERTICAL OUTSIDE ITEM CODE 30VO</p>	<p>30°</p> <p>VERTICAL INSIDE ITEM CODE 30VI</p>				

CHANNEL DIVIDERS



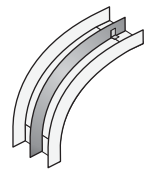
STRAIGHT

Supplied with (4) #10 self-drilling, stainless steel screws



HORIZONTAL FLEXIBLE

Supplied with (3) #10 self-drilling, stainless steel screws



VERTICAL ELBOW

Supplied with (2) #10 self-drilling, stainless steel screws

Straight & Flexible Catalog Numbers:

Example: **DSC - A 175 - 12**

Item Code DSC - Straight DHC - Horizontal Flexible	Channel Height 175 - 1-3/4"	Length Straight Sections: 10 - 10' 12 - 12' Horizontal Flexible: 6 - 6'
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Vertical Elbow Divider Catalog Numbers:

Example: **DFC - A 175 - 45VO24**

Item Code DFC Vertical Elbow	Channel Height 175 - 1-3/4"	Elbow Item Code 90VO - 90° Vertical Outside 90VI - 90° Vertical Inside 60VO - 60° Vertical Outside 60VI - 60° Vertical Inside 45VO - 45° Vertical Outside 45VI - 45° Vertical Inside 30VO - 30° Vertical Outside 30VI - 30° Vertical Inside	Radius 12 - 12" 24 - 24" 36 - 36"
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DIVIDER SPLICE

• Flexible PVC with internal metal clips
• Align and protect divider ends

CATALOG NO.	LENGTH
DVS-5	5"
DVS-(L)*	L* = Inches

CHANNEL SPLICES AND CONNECTORS

STANDARD ITEM CODE SPW	EXPANSION S Only ITEM CODE SPE	VERTICAL ADJUSTABLE ITEM CODE SPV	HORIZONTAL ADJUSTABLE ITEM CODE For odd angle bends up to 90° SPH	BOX CONNECTOR ITEM CODE SPB	CHANNEL-TO-CHANNEL AND TRAY-TO-CHANNEL ITEM CODE CTC
-------------------------------------------------------	-------------------------------------------------------------------------	------------------------------------------------------------------	--------------------------------------------------------------------------------------------------	------------------------------------------------------------	-------------------------------------------------------------------------------------

All Splice Plates for Channel are supplied in single units, not in pairs. Geomet-plated steel hardware is supplied with all splices and connectors. Type 316 stainless steel hardware is optional.

Standard Splice Plates are automatically included with all straight Channel sections and fittings. Extras for field cuts or spares should be ordered separately.

Bonding Jumpers are required for use only with expansion connectors and at discontinuities in the tray system. Bonding jumpers are not required for use with vertical or horizontal adjustable connectors.

Splice Plate & Connector Catalog Numbers:

Example: **SPW - AC4 - G4**

Item Code	Material	Channel Width	Hardware Finish	Hardware Quantity
Splice or Connector Item Code	AC			
	Aluminum	3 - 3" Wide	G - Geomet	4 - 4 Screws per plate
	Channel	4 - 4" Wide	S - Stainless Steel 316	
		6 - 6" Wide		

REDUCING SPLICES

WIDTHS	CATALOG NO. EACH
4" TO 3"	SPR-AC43-(F)*4
6" TO 3"	SPR-AC63-(F)*4
6" TO 4"	SPR-AC64-(F)*4

(F)* Insert **G** or **S**

CHANNEL COVERS

Flat, Flanged, Solid

FFS
COVER SYSTEM

Flat, Flanged, Ventilated

FFV
COVER SYSTEM

Peaked 20°, Flanged, Solid

PFS
COVER SYSTEM

Straight Cover Catalog Numbers:

Example: **ACC - FFS - SL12 - 04 - 040**

Material	Cover System	Item Code	Length	Width	Thickness
ACC	FFS	SL	Standard:	03 - 3"	040 - 0.040"
Aluminum Channel Cover	FFV	Straight Length	10 - 10'-0"	04 - 4"	(Standard)
	PFS		12 - 12'-0"	06 - 6"	Alternates:
			Non-standard lengths are available; consult factory for lead times		063 - 0.063"
					080 - 0.080"
					090 - 0.090"
					125 - 0.125"
					188 - 0.188"

Fitting Cover Catalog Numbers:

Example: **ACC - FFS - 90VO12 - 06 - 040**

Material	Cover System	Item Code	Radius	Width	Thickness
ACC	FFS	90VO12	12 - 12"	03 - 3"	Blank - 0.040"
Aluminum Channel Cover	FFV	Fitting Item Code	24 - 24"	04 - 4"	(Standard)
	PFS		36 - 36"	06 - 6"	Alternates:
			Pages 1 & 2		063 - 0.063"
					080 - 0.080"
					090 - 0.090"
					125 - 0.125"
					188 - 0.188"

COVER CLAMPS - FLAT COVERS

WIDTH	CATALOG NO. EACH
3"	CFS-AC-03-S
4"	CFS-AC-04-S
6"	CFS-AC-06-S

- Aluminum with 1/4" Dia. Stainless Steel Fasteners
- Suitable for Outdoor and Vertical Use

COVER CLAMPS - PEAKED COVERS

WIDTH	CATALOG NO. EACH
3"	CPS-AC-03-S
4"	CPS-AC-04-S
6"	CPS-AC-06-S

- Aluminum with 1/4" Dia. Stainless Steel Fasteners
- Suitable for Outdoor and Vertical Use

COMBINATION COVER CLAMP & HOLD-DOWN

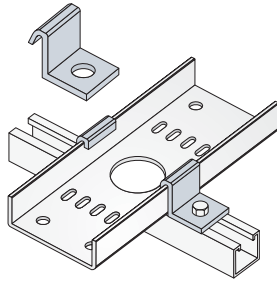
CATALOG NO. EA.
HDC-AC

- Hole sized for 1/2" fasteners
- Fasteners ordered separately

*Optional: For hole sized for 1/4" or 3/8" fasteners, insert catalog no. suffix "-14" or "-38".

CHANNEL ACCESSORIES

SUPPORT CLAMPS

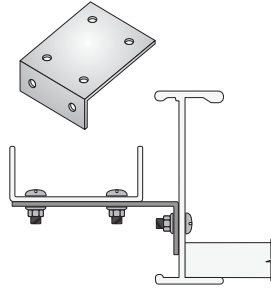


- Hole sized for 1/2" fasteners
- Fasteners ordered separately

CLAMP TYPE	CAT. NO. EACH
HOLD DOWN CLAMP	HDZ-AC
EXPANSION GUIDE CLAMP	HDE-AC

*Optional: For hole sized for 1/4" or 3/8" fasteners, insert catalog number suffix "-14" or "-38".

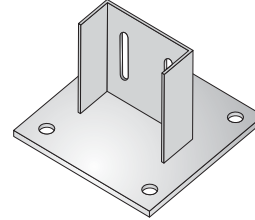
MOUNTING BRACKET



- Aluminum
- Fasteners Included

WIDTH	CATALOG NO. EACH
3"	CMB-AC3-(F)*
4"	CMB-AC4-(F)*
6"	CMB-AC6-(F)*

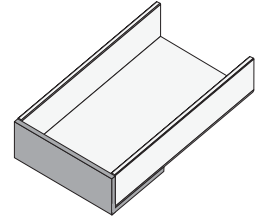
FLOOR BASE PLATE



- Aluminum
- Fasteners included for Channel attachment only

WIDTH	CATALOG NO. EACH
3"	CFB-AC3-(F)*
4"	CFB-AC4-(F)*
6"	CFB-AC6-(F)*

BLIND END

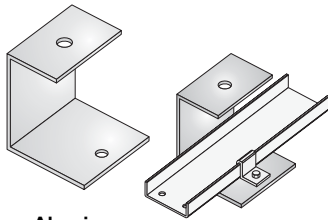


- Aluminum
- Fasteners Included

WIDTH	CATALOG NO. EACH
3"	BE-AC3-(F)*
4"	BE-AC4-(F)*
6"	BE-AC6-(F)*

(F)* Insert Fastener Material: **G** Steel, Geomet Plated or **S** Stainless Steel, Type 316

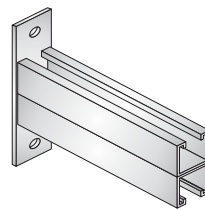
SINGLE HANGER AND WALL BRACKET



- Aluminum
- Hang from 1/2" Threaded Rod or Mount on Wall
- Fasteners, Clamps and Rods Not Included

CHANNEL WIDTH	CATALOG NO. (EACH)
3" & 4"	ACHS-A-03-04
6"	ACHS-A-06

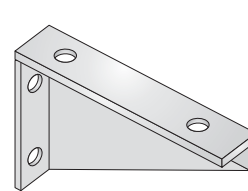
STRUT BRACKET



- Aluminum
- 8" Wide for 3" & 4" Channels
- 10" Wide for 6" Channels
- No Fasteners Included

CHANNEL WIDTH	CATALOG NO. (EACH)
3" & 4"	WBSC-A-08
6"	WBSC-A-10

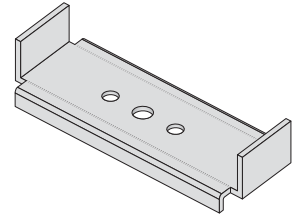
WALL BRACKET



- Aluminum
- 8" Wide for 3" & 4" Channels
- 10" Wide for 6" Channels
- No Fasteners Included

CHANNEL WIDTH	CATALOG NO. (EACH)
3" & 4"	WBC-A-08
6"	WBC-A-10

DOUBLE HANGER

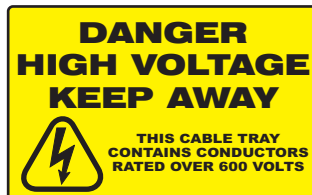


- Aluminum
- Hang from 1/2" Threaded Rod
- Fasteners, Clamps and Rods Not Included

WIDTH	CATALOG NO. EACH
3"	ACHD-A-03
4"	ACHD-A-04
6"	ACHD-A-06

LABELS AND SIGNS FOR TRAYS AND CHANNELS

HIGH VOLTAGE LABEL



- Required by NEC 392.18.H on cable trays containing conductors rated over 600 volts
- 3-3/8" x 5-3/8", Rated for outdoor use
- 0.002" Polyester with adhesive backing

CATALOG NO. EACH
HVL-35

PLASTIC WARNING SIGN



- Warning text per NEMA VE1/CSA C22.2 No. 126, Section 6.1.2.f
- 3-7/8" x 11-3/8" x 1/16" Rigid, engraved plastic, outdoor rated
- Heavy-duty adhesive backing (3M 468 MP/200MP Adhesive)
- For tray, channel straight sections; Factory-application available

CATALOG NO. EACH
PWS-411



The management system of United Structural Products, LLC is Certified to ISO 9001-2015.



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