# MAKING**CONNECTIONS**



Leader in Instrumentation & Electrical Supports



TechLine Mfg.'s primary goal is to be a world class manufacturer of instrument support and cable tray systems. We will continually design and provide industry with quality controlled innovative products and superior customer service. We will operate with the highest professional, ethical, safety, and quality standards. The management team will continually develop policies and procedures to ensure these objectives are met, while fostering a team culture where all employees work toward these common goals, maximize their individual potential, and share in the results.

Sincerely,

**Wendy D'Olive** 

President

TechLine Manufacturing

# **Experience The TechLine Advantage**

### **Fast Response to Customer Needs**

TechLine Mfg.'s quality products are typically distributed through select industrial suppliers who are able to respond to customer requirements in a professional and timely manner.

### **Quality Materials**

TechLine Mfg. incorporates quality materials from certified suppliers.

### **Modern Design**

TechLine Mfg.'s products are the result of continuous research and product development.

### Warranty

TechLine Mfg. warrants all its products to be free of defects, and that all components ordered will properly assemble to corresponding items.

### **Easy Installation**

A wide variety of standard fittings are available for TechLine tubing and cable tray, minimizing the need for field fabrication and special tools.

### **Choice of Materials**

TechLine Mfg. offers a variety of materials and coatings including: Aluminum, 304SS or 316SS, and a Hot-Dipped Galvanized finish meeting ASTM A123-89.

### **UL Classification**

TechLine Mfg. cable tray has been tested and is classified by Underwriters Laboratories. File number E249472.

### Made in the USA

TechLine Mfg. is a US manufacturer.



# Table of Contents

PERFORATED CHANNEL AND ANGLE TRAY	
Angle	
Channel	
Flatbar	6
FITTINGS	7
Angle Splice	8
Speed Splice	
90° Angle Speed Splice	
90° Short Radius Angle Elbows	
90° Long Radius Angle Elbows	
Channel Splice	13
90° Vertical Outside Channel Elbows	
90° Vertical Inside Channel Elbows	
Short and Long Radius Tee	
Short and Long Radius Channel Cross	
Flat Elbow, Splice, Tee and Cross	
CLAMPS	
Yoke, Single and Duplex Clamps	
Gang ClampsBundle Clamps	
·	
FASTENERS & ACCESSORIES	29
Fasteners	
U-bolts and All-Thread	
Hold Down Clamps	32
SNAP TRACK ALUMINUM CABLE TRAY SYSTEM	33
Snap Track System	-36
SNAP TRACK CABLE TRAY	27
Load Data	
2", 4", & 6" Width Tray	
·	
SNAP TRACK FITTINGS	
Patented Push Pin	
Thermal Expansion	
Reducing and Plane Adapters	
Adjustable Splice	
3" Radius Elbow	
6" Radius Elbow	
12" Radius Elbows	
24" Radius Elbows	50
36" Radius Elbows	
3", 6" & 12" Radius Tees	
24" & 36" Radius Tees	
3", 6" & 12" Cross	
24" & 36" Cross	
Exit Fittings (Waterfall, Downspout, Drop Tee)	
SNAP TRACK ACCESSORIES	
Covers	
Cover Clamps	
End Plates	
Thermal Expansion Guides	
Ladder Tray Transition	
Bulkhead Connector	
End of Tray Drop Out	
Edge Protector / Instrument Support Kit	
Wire Spool / Wire Spool Bracket	
Divider, Conduit Grommets	
Center Hole Grommet/Isolator Pad	74

SNAP TRACK GROUNDING AND BONDING ACCESSO		
Installation		
Grounding Clamps		
Bonding Jumpers		78
SNAP TRACK SUPPORTS		79
Required Support Locations		
Single Hanger Bracket		
Horizontal Wall/Universal Brackets		82
Strut Wall Mount Brackets		
Post Base Plates		
Hold Down Clamps		
Strut Supports and Hardware		86
INSTRUMENT STANDS & RACKS		87
Floor Stands - Single, Double, Triple and Multi-Rack		
Wall Mount Stands		
Vertical and Horizontal Cable Mount Stands		
Cable Mount Stands and Pipe Mount Stands		
Vertical and Horizontal Pipe Mount Stands Channel Floor Stands		
Capillary Spool and Mounting Flag		
Tech Mount Modular Stands		
Female Pipe and Square Tube Adapter		
Round and Square Leg U-bolt Mount Stands		
Female Adapter and Square Tube Rack Adapter		
Round Threaded Leg Extension,		
Square Leg and Elbow Module		
Medium-Duty ModRack		
Heavy-Duty ModRack		
Beam Mount		
Grating Fasteners		
Floor Stand Adapters	1	.07
CONDENSATE CHAMBERS/DISTRIBUTION MANIFO		
Condensate Chambers		
Distribution Manifolds		
Condensate Chambers/Manifold Photos	1	.14
STRUT PRODUCTS	1	15
Single Strut		
Double Strut		
Channel Spring Nut & Beam Clamp		
Square Washer and Angle Fitting		
Flat Elbow and Tee		
Window Type Beam Clamp Strut Post Base/Cushion Clamp		
Strut Clamps		
TECHLINE MFG. TERM & CONDITIONS	1	.24
SNAP TRACK MATERIAL TAKE-OFF WORKSHEET	1	25
CUSTOM PRODUCTS	1	26
INNOVATIVE PRODUCTS	1	.27

**NOTE:** All dimensions listed in this catalog are nominal dimensions. For exact dimensions, see modeling files located at www.techlinemfg.com.





# Perforated Channel and Angle Tray

### **Materials & Finishes:**

Hot-dipped Galvanized, Aluminum, Stainless Steel and others upon request.

### **Strength & Installation:**

Solid side rails for strength and maximum protection are standard.

Alternating round and square holes allow for easy installation and ventilation.

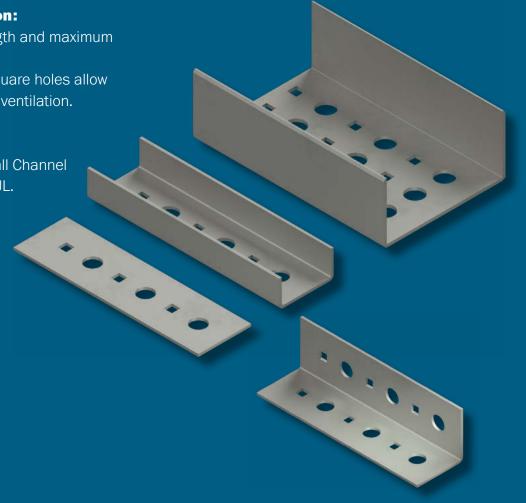
### **UL Classified:**

TechLine Mfg. 2" Sidewall Channel products are classified UL.

File number E249472.

Please specify UL

labeling at time of order.







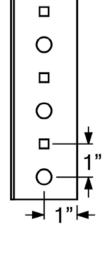
AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request,

minimum quantities required.





- $\bigcirc$  Round Holes = 9/16"
- Square Holes = 5/16"

### Splices and hardware sold separately.



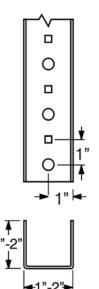


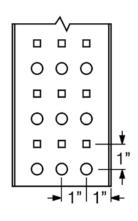
### **Channel**

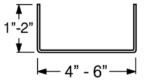


	( W	D	( L /	
Channel				Upon Request *
TLC-2-1-AL	2"	1"	20'	8 LBS
TLC-2-2-AL	2"	2"	20'	11 LBS
TLC-2-1-HDG	2"	1"	20'	26 LBS
TLC-2-2-HDG	2"	2"	20'	40 LBS
TLC-2-1-SS	2"	1"	20'	14 LBS
TLC-2-2-SS	2"	2"	20'	22 LBS
TLC-4-1-AL	4"	1"	20'	11 LBS
TLC-4-2-AL	4"	2"	20'	16 LBS
TLC-4-1-HDG	4"	1"	20'	36 LBS
TLC-4-2-HDG	4"	2"	20'	52 LBS
TLC-4-1-SS	4"	1"	20'	20 LBS
TLC-4-2-SS	4"	2"	20'	28 LBS
TLC-6-1-AL	6"	1"	20'	16 LBS
TLC-6-2-AL	6"	2"	20'	18 LBS
TLC-6-1-HDG	6"	1"	20'	52 LBS
TLC-6-2-HDG	6"	2"	20'	66 LBS
TLC-6-1-SS	6"	1"	20'	28 LBS
TLC-6-2-SS	6"	2"	20'	35 LBS

<sup>\*</sup>UL labeling available upon request from factory prior to ordering. UL Classification is only available in  $2\mbox{"}$  sidewall channel and fittings.







 $\bigcirc$  Round Holes = 9/16"

Square Holes = 5/16"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123

(12 Gauge Thickness)

6SS: 316 Stainless Steel

(16 Gauge Thickness) available on request, minimum

quantities required.

### Splices and hardware sold separately.

# Flat Bar



	W		
Flat Bar			
TLF-2-AL	2"	10'	2.5 LBS
TLF-2-HDG	2"	10'	7 LBS
TLF-2-SS	2"	10'	2 LBS
TLF-3-AL	3"	10'	3.5 LBS
TLF-3-HDG	3"	10'	10 LBS
TLF-3-SS	3"	10'	3 LBS
TLF-4-AL	4"	10'	5 LBS
TLF-4-HDG	4"	10'	12 LBS
TLF-4-SS	4"	10'	4 LBS
TLF-6-AL	6"	10'	8 LBS
TLF-6-HDG	6"	10'	19 LBS
TLF-6-SS	6"	10'	6 LBS

AL: Aluminum (12 Gauge Thickness)

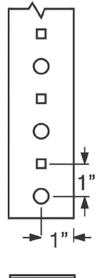
SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

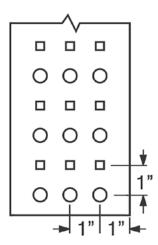
6SS: 316 Stainless Steel (16 Gauge Thickness) available on request,

minimum quantities required.

### Splices and hardware sold separately.







- Round Holes = 9/16"
- Square Holes = 5/16"





# Fittings

### **Materials & Finishes:**

Hot-dipped Galvanized, Aluminum, Stainless Steel and others upon request.

### **Strength & Protection:**

Solid bottom & side rails for maximum strength & protection

### **UL Classified:**

TechLine Mfg. 2" Sidewall Channel products are available with UL Classification. File number E249472. Please specify UL labeling when ordering.





### **Angle Splice**



Angle Splice			
TLAS-2-2-AL	2"	2"	1 LBS
TLAS-2-2-HDG	2"	2"	2 LBS
TLAS-2-2-SS	2"	2"	1 LBS
TLAS-3-3-AL	3"	3"	1 LBS
TLAS-3-3-HDG	3"	3"	2 LBS
TLAS-3-3-SS	3"	3"	1 LBS

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness) 6SS: 316 Stainless Steel (16 Gauge Thickness) available on

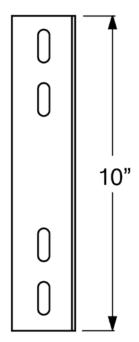
request, minimum quantities required.

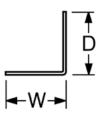
### Splices and hardware sold separately.

### **Installation Guideline:**

Minimum of four nuts, bolts and washers per connection. Fasteners sold separately.

### Fasteners see page 30.





Slotted Holes = 5/16"x1 1/4"





### **Speed Splice (Pinned Angle Splice)**



AL: Aluminum (12 Gauge Thickness)

### **Installation Guideline:**

Four push pins are included for connection. To assemble angle with this angle splice, insert the end of our extruded aluminum angle already installed, slide into the splice end with the edges of the angle inside the inward-C configuration of the splice, line up two 9/16" holes, and use two push pins to secure the angle into the splice. Make sure the push pins "click" to ensure that the plunger has gone through both angle and splice.

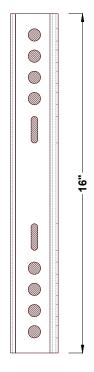
Repeat on other end to connect two lengths of angle.

### **Push Pin**

Patented push pins are provided for a secure attachment.









- Slotted Holes = 5/16"x1 1/4"
- Round Holes = 9/16"





### 90° Angle Speed Splice





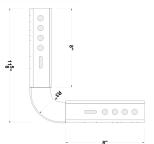


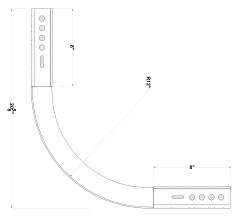
90° Outside Elbow 3" and 12" Radius						
TLPAOE-2-2-AL-3R-PINS	2"	2"	14"	2 LBS		
TLPAOE-2-2-AL-12R-PINS	2"	2"	23"	3 LBS		



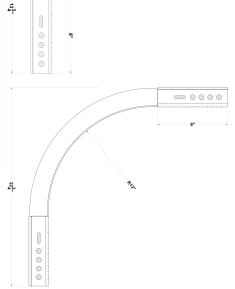
### **Push Pin**

Patented push pins are provided for a secure attachment.





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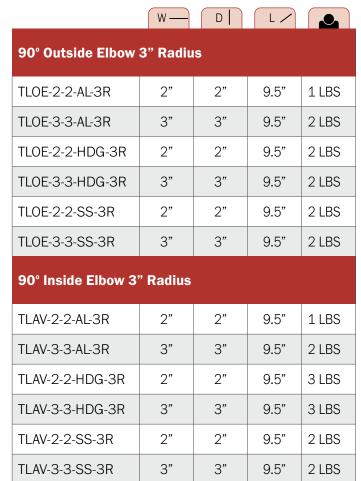
- Slotted Holes = 5/16"x1 1/4"
- O Round Holes = 9/16"





### 90° Short Radius Angle Elbows





AL: Aluminum (12 Gauge Thickness)

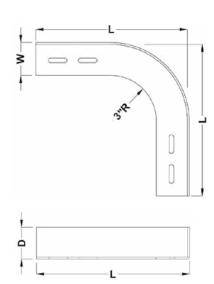
SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

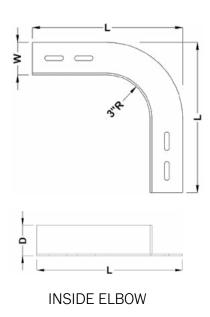
 $6SS: 316 \ Stainless \ Steel (16 \ Gauge \ Thickness)$  available on request,

minimum quantities required.

### Splices and hardware sold separately.



**OUTSIDE ELBOW** 



Slotted Holes = 5/16"x1 1/4"

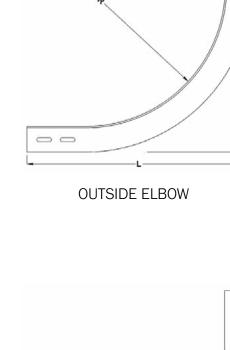




### 90° Long Radius Angle Elbows



	W —	D	L/				
90° Outside Elbow 12" Radius							
TLAOE-2-2-AL-12R	2"	2"	19"	2 LBS			
TLAOE-3-3-AL-12R	3"	3"	19"	2 LBS			
TLAOE-2-2-HDG-12R	2"	2"	19"	3 LBS			
TLAOE-3-3-HDG-12R	3"	3"	19"	5 LBS			
TLAOE-2-2-SS-12R	2"	2"	19"	5 LBS			
TLAOE-3-3-SS-12R	3"	3"	19"	5 LBS			
90° Inside Elbow 12" Radius							
TLAIE-2-2-AL-12R	2"	2"	19"	2 LBS			
TLAIE-3-3-AL-12R	3"	3"	19"	2 LBS			
TLAIE-2-2-HDG-12R	2"	2"	19"	4 LBS			
TLAIE-3-3-HDG-12R	3"	3"	19"	7 LBS			
TLAIE-2-2-SS-12R	2"	2"	19"	4 LBS			
TLAIE-3-3-SS-12R	3"	3"	19"	4 LBS			



AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness) 6SS: 316 Stainless Steel (16 Gauge Thickness) available on request,

minimum quantities required.

### Splices and hardware sold separately.



**INSIDE ELBOW** 





### **Channel Splice**

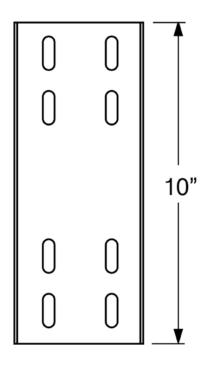


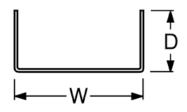
	( W	D	
Channel Splice			Upon Request *
TLCS-2-1-AL	2"	1"	1 LBS
TLCS-2-1-HDG	2"	1"	2 LBS
TLCS-2-1-SS	2"	1"	1 LBS
TLCS-2-2-AL	2"	2"	1 LBS
TLCS-2-2-HDG	2"	2"	2 LBS
TLCS-2-2-SS	2"	2"	1 LBS
TLCS-4-1-AL	4"	1"	1 LBS
TLCS-4-1-HDG	4"	1"	2 LBS
TLCS-4-1-SS	4"	1"	1 LBS
TLCS-4-2-AL	4"	2"	1 LBS
TLCS-4-2-HDG	4"	2"	3 LBS
TLCS-4-2-SS	4"	2"	2 LBS
TLCS-6-1-AL	6"	1"	1 LBS
TLCS-6-1-HDG	6"	1"	3 LBS
TLCS-6-1-SS	6"	1"	2 LBS
TLCS-6-2-AL	6"	2"	2 LBS
TLCS-6-2-HDG	6"	2"	3 LBS
TLCS-6-2-SS	6"	2"	2 LBS

### **Installation Guideline:**

Minimum of four nuts, bolts and washers per connection. Fasteners sold separately.

### Fasteners see page 30.





Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

### Splices and hardware sold separately.

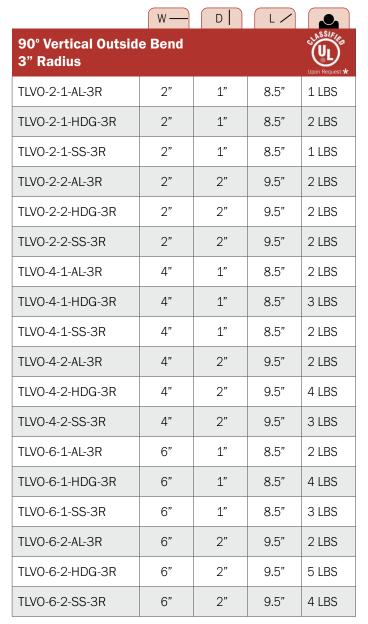
\*UL labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.

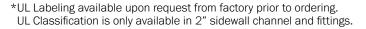


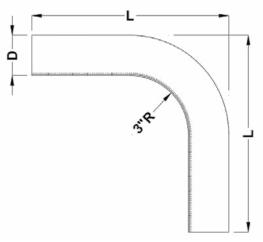


### 90° Vertical Outside Channel 3" Radius Elbows

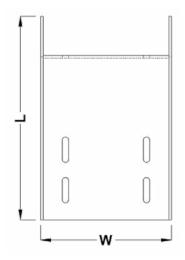








### SIDE VIEW



**END VIEW** 

Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12

Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.



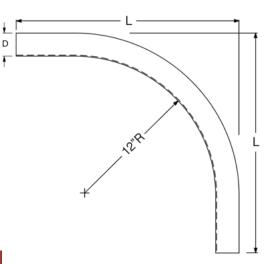


### 90° Vertical Outside Channel 12" Radius Elbows



	W —	D	L/	
90° Vertical Outsid 12" Radius	e Bend			Upon Request *
TLVO-2-1-AL-12R	2"	1"	18"	2 LBS
TLVO-2-1-HDG-12R	2"	1"	18"	4 LBS
TLVO-2-1-SS-12R	2"	1"	18"	3 LBS
TLVO-2-2-AL-12R	2"	2"	19"	3 LBS
TLVO-2-2-HDG-12R	2"	2"	19"	6 LBS
TLVO-2-2-SS-12R	2"	2"	19"	4 LBS
TLVO-4-1-AL-12R	4"	1"	18"	3 LBS
TLVO-4-1-HDG-12R	4"	1"	18"	6 LBS
TLVO-4-1-SS-12R	4"	1"	18"	4 LBS
TLVO-4-2-AL-12R	4"	2"	19"	3 LBS
TLVO-4-2-HDG-12R	4"	2"	19"	8 LBS
TLVO-4-2-SS-12R	4"	2"	19"	4 LBS
TLVO-6-1-AL-12R	6"	1"	18"	3 LBS
TLVO-6-1-HDG-12R	6"	1"	18"	8 LBS
TLVO-6-1-SS-12R	6"	1"	18"	4 LBS
TLVO-6-2-AL-12R	6"	2"	19"	4 LBS
TLVO-6-2-HDG-12R	6"	2"	19"	9 LBS
TLVO-6-2-SS-12R	6"	2"	19"	5 LBS

<sup>\*</sup>UL Labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.





**END VIEW** 

Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12

Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.



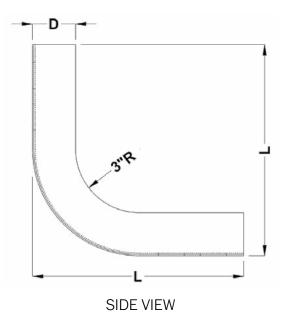


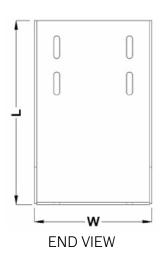
### **Vertical Inside Channel 3" Radius Elbows**



	W —	D	L/	
90° Vertical Inside 3" Radius	Bend			Upon Request *
TLVI-2-1-AL-3R	2"	1"	7.5"	1 LBS
TLVI-2-1-HDG-3R	2"	1"	7.5"	2 LBS
TLVI-2-1-SS-3R	2"	1"	7.5"	1 LBS
TLVI-2-2-AL-3R	2"	2"	7.5"	2 LBS
TLVI-2-2-HDG-3R	2"	2"	7.5"	2 LBS
TLVI-2-2-SS-3R	2"	2"	7.5"	2 LBS
TLVI-4-1-AL-3R	4"	1"	7.5"	2 LBS
TLVI-4-1-HDG-3R	4"	1"	7.5"	3 LBS
TLVI-4-1-SS-3R	4"	1"	7.5"	2 LBS
TLVI-4-2-AL-3R	4"	2"	7.5"	2 LBS
TLVI-4-2-HDG-3R	4"	2"	7.5"	4 LBS
TLVI-4-2-SS-3R	4"	2"	7.5"	3 LBS
TLVI-6-1-AL-3R	6"	1"	7.5"	2 LBS
TLVI-6-1-HDG-3R	6"	1"	7.5"	4 LBS
TLVI-6-1-SS-3R	6"	1"	7.5"	3 LBS
TLVI-6-2-AL-3R	6"	2"	7.5"	2 LBS
TLVI-6-2-HDG-3R	6"	2"	7.5"	5 LBS
TLVI-6-2-SS-3R	6"	2"	7.5"	4 LBS

<sup>\*</sup>UL Labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.





Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness) SS: 304 Stainless Steel (16 Gauge Thickness) HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.



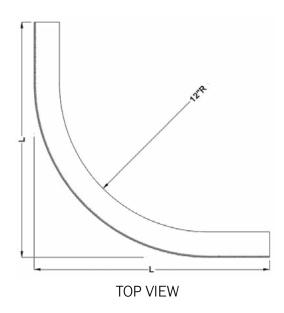


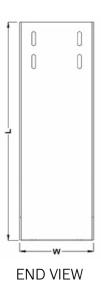
### **Vertical Inside Channel 12" Radius Elbows**



	W —	D	L/		
90° Vertical Inside Bend 12" Radius					
TLVI-2-1-AL-12R	2"	1"	19"	2 LBS	
TLVI-2-1-HDG-12R	2"	1"	19"	4 LBS	
TLVI-2-1-SS-12R	2"	1"	19"	3 LBS	
TLVI-2-2-AL-12R	2"	2"	19"	3 LBS	
TLVI-2-2-HDG-12R	2"	2"	19"	6 LBS	
TLVI-2-2-SS-12R	2"	2"	19"	3 LBS	
TLVI-4-1-AL-12R	4"	1"	19"	3 LBS	
TLVI-4-1-HDG-12R	4"	1"	19"	6 LBS	
TLVI-4-1-SS-12R	4"	1"	19"	4 LBS	
TLVI-4-2-AL-12R	4"	2"	19"	3 LBS	
TLVI-4-2-HDG-12R	4"	2"	19"	8 LBS	
TLVI-4-2-SS-12R	4"	2"	19"	5 LBS	
TLVI-6-1-AL-12R	6"	1"	19"	4 LBS	
TLVI-6-1-HDG-12R	6"	1"	19"	8 LBS	
TLVI-6-1-SS-12R	6"	1"	19"	5 LBS	
TLVI-6-2-AL-12R	6"	2"	19"	4 LBS	
TLVI-6-2-HDG-12R	6"	2"	19"	10 LBS	
TLVI-6-2-SS-12R	6"	2"	19"	6 LBS	

<sup>\*</sup>UL Labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.





Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness) SS: 304 Stainless Steel (16 Gauge Thickness) HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Larger radius available upon request.

Splices and hardware sold separately.

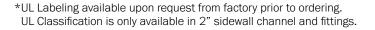


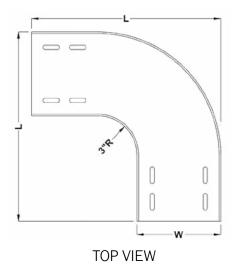


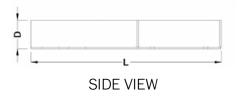
### **Horizontal Channel 3" Radius Elbows**



	W —	D		
90° Horizontal Ben 3" Radius	d			Upon Request *
TLHE-2-1-AL-3R	2"	1"	9.75"	1 LBS
TLHE-2-1-HDG-3R	2"	1"	9.75"	3 LBS
TLHE-2-1-SS-3R	2"	1"	9.75"	2 LBS
TLHE-2-2-AL-3R	2"	2"	9.75"	2 LBS
TLHE-2-2-HDG-3R	2"	2"	9.75"	4 LBS
TLHE-2-2-SS-3R	2"	2"	9.75"	3 LBS
TLHE-4-1-AL-3R	4"	1"	11.75"	2 LBS
TLHE-4-1-HDG-3R	4"	1"	11.75"	4 LBS
TLHE-4-1-SS-3R	4"	1"	11.75"	3 LBS
TLHE-4-2-AL-3R	4"	2"	11.75"	2 LBS
TLHE-4-2-HDG-3R	4"	2"	11.75"	5 LBS
TLHE-4-2-SS-3R	4"	2"	11.75"	3 LBS
TLHE-6-1-AL-3R	6"	1"	13.75"	3 LBS
TLHE-6-1-HDG-3R	6"	1"	13.75"	5 LBS
TLHE-6-1-SS-3R	6"	1"	13.75"	4 LBS
TLHE-6-2-AL-3R	6"	2"	13.75"	3 LBS
TLHE-6-2-HDG-3R	6"	2"	13.75"	6 LBS
TLHE-6-2-SS-3R	6"	2"	13.75"	4 LBS







Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12

Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.

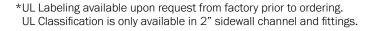


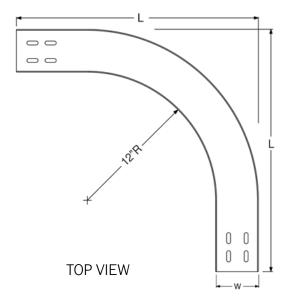


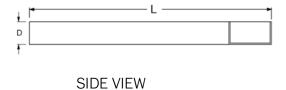
### **Horizontal Channel 12" Radius Elbows**



	W	D		
90° Horizontal Ben 12" Radius	d			ULD Upon Request *
TLHE-2-1-AL-12R	2"	1"	18"	2 LBS
TLHE-2-1-HDG-12R	2"	1"	18"	5 LBS
TLHE-2-1-SS-12R	2"	1"	18"	3 LBS
TLHE-2-2-AL-12R	2"	2"	19"	3 LBS
TLHE-2-2-HDG-12R	2"	2"	19"	7 LBS
TLHE-2-2-SS-12R	2"	2"	19"	4 LBS
TLHE-4-1-AL-12R	4"	1"	18"	3 LBS
TLHE-4-1-HDG-12R	4"	1"	18"	7 LBS
TLHE-4-1-SS-12R	4"	1"	18"	4 LBS
TLHE-4-2-AL-12R	4"	2"	19"	4 LBS
TLHE-4-2-HDG-12R	4"	2"	19"	9 LBS
TLHE-4-2-SS-12R	4"	2"	19"	5 LBS
TLHE-6-1-AL-12R	6"	1"	18"	4 LBS
TLHE-6-1-HDG-12R	6"	1"	18"	10 LBS
TLHE-6-1-SS-12R	6"	1"	18"	5 LBS
TLHE-6-2-AL-12R	6"	2"	19"	5 LBS
TLHE-6-2-HDG-12R	6"	2"	19"	11 LBS
TLHE-6-2-SS-12R	6"	2"	19"	6 LBS







Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)
SS: 304 Stainless Steel (16 Gauge Thickness)
HDG: Hot-Dipped Galvanized, ASTM A-123 (12
Gauge Thickness)
6SS: 316 Stainless Steel (16 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.

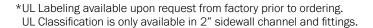


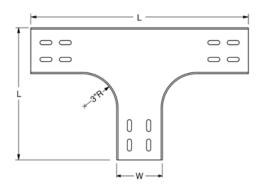


### **Channel Tee 3" Radius**

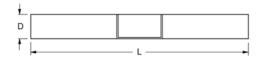


	W —	DI	LH	LI	
3" Radius Tee					Upon Request *
TLCT-2-1-AL-3R	2"	1"	17.25"	10.25"	1 LBS
TLCT-2-1-HDG-3R	2"	1"	17.25"	10.25"	3 LBS
TLCT-2-1-SS-3R	2"	1"	17.25"	10.25"	2 LBS
TLCT-2-2-AL-3R	2"	2"	17.25"	10.25"	2 LBS
TLCT-2-2-HDG-3R	2"	2"	17.25"	10.25"	5 LBS
TLCT-2-2-SS-3R	2"	2"	17.25"	10.25"	3 LBS
TLCT-4-1-AL-3R	4"	1"	19.25"	12.25"	3 LBS
TLCT-4-1-HDG-3R	4"	1"	19.25"	12.25"	5 LBS
TLCT-4-1-SS-3R	4"	1"	19.25"	12.25"	3 LBS
TLCT-4-2-AL-3R	4"	2"	19.25"	12.25"	3 LBS
TLCT-4-2-HDG-3R	4"	2"	19.25"	12.25"	6 LBS
TLCT-4-2-SS-3R	4"	2"	19.25"	12.25"	4 LBS
TLCT-6-1-AL-3R	6"	1"	21.25"	14.25"	2 LBS
TLCT-6-1-HDG-3R	6"	1"	21.25"	14.25"	6 LBS
TLCT-6-1-SS-3R	6"	1"	21.25"	14.25"	4 LBS
TLCT-6-2-AL-3R	6"	2"	21.25"	14.25"	4 LBS
TLCT-6-2-HDG-3R	6"	2"	21.25"	14.25"	8 LBS
TLCT-6-2-SS-3R	6"	2"	21.25"	14.25"	5 LBS





**TOP VIEW** 



**END VIEW** 

Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness) SS: 304 Stainless Steel (16 Gauge Thickness) HDG: Hot-Dipped Galvanized, ASTM A-123 (12 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.

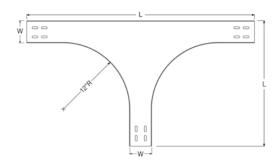




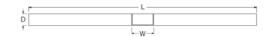
### **Channel Tee 12" Radius**



	W —	D	Lн	LI	
12" Radius Tee					Upon Request *
TLCT-2-1-AL-12R	2"	1"	36.25"	21.25"	3 LBS
TLCT-2-1-HDG-12R	2"	1"	36.25"	21.25"	8 LBS
TLCT-2-1-SS-12R	2"	1"	36.25"	21.25"	7 LBS
TLCT-2-2-AL-12R	2"	2"	36.25"	21.25"	4 LBS
TLCT-2-2-HDG-12R	2"	2"	36.25"	21.25"	12 LBS
TLCT-2-2-SS-12R	2"	2"	36.25"	21.25"	8 LBS
TLCT-4-1-AL-12R	4"	1"	38.25"	23.25"	4 LBS
TLCT-4-1-HDG-12R	4"	1"	38.25"	23.25"	10 LBS
TLCT-4-1-SS-12R	4"	1"	38.25"	23.25"	10 LBS
TLCT-4-2-AL-12R	4"	2"	38.25"	23.25"	6 LBS
TLCT-4-2-HDG-12R	4"	2"	38.25"	23.25"	16 LBS
TLCT-4-2-SS-12R	4"	2"	38.25"	23.25"	11 LBS
TLCT-6-1-AL-12R	6"	1"	40.25"	25.25"	6 LBS
TLCT-6-1-HDG-12R	6"	1"	40.25"	25.25"	17 LBS
TLCT-6-1-SS-12R	6"	1"	40.25"	25.25"	12 LBS
TLCT-6-2-AL-12R	6"	2"	40.25"	25.25"	10 LBS
TLCT-6-2-HDG-12R	6"	2"	40.25"	25.25"	19 LBS
TLCT-6-2-SS-12R	6"	2"	40.25"	25.25"	14 LBS



**TOP VIEW** 



**END VIEW** 

Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)
SS: 304 Stainless Steel (16 Gauge Thickness)
HDG: Hot-Dipped Galvanized, ASTM A-123 (12
Gauge Thickness)
6SS: 316 Stainless Steel (16 Gauge
Thickness) available on request, minimum
quantities required.

### Splices and hardware sold separately.

<sup>\*</sup>UL Labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.



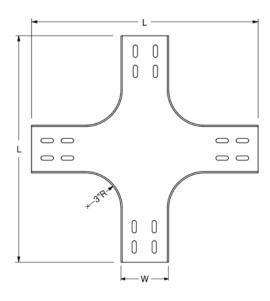


### **Channel Cross 3" Radius**

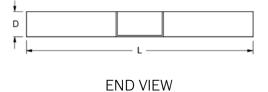


	W —	DI	Ан	LI	
3" Radius Cross					Upon Request *
TLCC-2-1-AL-3R	2"	1"	17.25"	17.25"	2 LBS
TLCC-2-1-HDG-3R	2"	1"	17.25"	17.25"	5 LBS
TLCC-2-1-SS-3R	2"	1"	17.25"	17.25"	3 LBS
TLCC-2-2-AL-3R	2"	2"	17.25"	17.25"	2 LBS
TLCC-2-2-HDG-3R	2"	2"	17.25"	17.25"	7 LBS
TLCC-2-2-SS-3R	2"	2"	17.25"	17.25"	3 LBS
TLCC-4-1-AL-3R	4"	1"	19.25"	19.25"	3 LBS
TLCC-4-1-HDG-3R	4"	1"	19.25"	19.25"	6 LBS
TLCC-4-1-SS-3R	4"	1"	19.25"	19.25"	5 LBS
TLCC-4-2-AL-3R	4"	2"	19.25"	19.25"	3 LBS
TLCC-4-2-HDG-3R	4"	2"	19.25"	19.25"	9 LBS
TLCC-4-2-SS-3R	4"	2"	19.25"	19.25"	5 LBS
TLCC-6-1-AL-3R	6"	1"	21.25"	21.25"	4 LBS
TLCC-6-1-HDG-3R	6"	1"	21.25"	21.25"	7 LBS
TLCC-6-1-SS-3R	6"	1"	21.25"	21.25"	6 LBS
TLCC-6-2-AL-3R	6"	2"	21.25"	21.25"	4 LBS
TLCC-6-2-HDG-3R	6"	2"	21.25"	21.25"	12 LBS
TLCC-6-2-SS-3R	6"	2"	21.25"	21.25"	6 LBS

<sup>\*</sup>UL Labeling available upon request from factory prior to ordering. UL Classification is only available in 2" sidewall channel and fittings.



**TOP VIEW** 





AL: Aluminum (12 Gauge Thickness) SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123

(12 Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

### Splices and hardware sold separately.

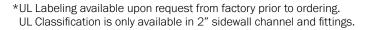


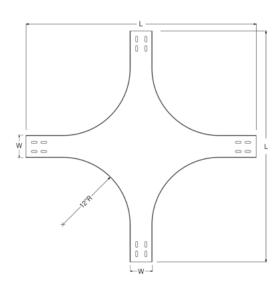


### **Channel Cross 12" Radius**

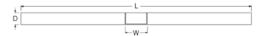


	W —	DI	Ан	LI	
12" Radius Cross					Upon Request *
TLCC-2-1-AL-12R	2"	1"	36.25"	36.25"	4 LBS
TLCC-2-1-HDG-12R	2"	1"	36.25"	36.25"	10 LBS
TLCC-2-1-SS-12R	2"	1"	36.25"	36.25"	8 LBS
TLCC-2-2-AL-12R	2"	2"	36.25"	36.25"	5 LBS
TLCC-2-2-HDG-12R	2"	2"	36.25"	36.25"	13 LBS
TLCC-2-2-SS-12R	2"	2"	36.25"	36.25"	10 LBS
TLCC-4-1-AL-12R	4"	1"	38.25"	38.25"	5 LBS
TLCC-4-1-HDG-12R	4"	1"	38.25"	38.25"	12 LBS
TLCC-4-1-SS-12R	4"	1"	38.25"	38.25"	12 LBS
TLCC-4-2-AL-12R	4"	2"	38.25"	38.25"	8 LBS
TLCC-4-2-HDG-12R	4"	2"	38.25"	38.25"	18 LBS
TLCC-4-2-SS-12R	4"	2"	38.25"	38.25"	13 LBS
TLCC-6-1-AL-12R	6"	1"	40.25"	40.25"	8 LBS
TLCC-6-1-HDG-12R	6"	1"	40.25"	40.25"	19 LBS
TLCC-6-1-SS-12R	6"	1"	40.25"	40.25"	14 LBS
TLCC-6-2-AL-12R	6"	2"	40.25"	40.25"	12 LBS
TLCC-6-2-HDG-12R	6"	2"	40.25"	40.25"	21 LBS
TLCC-6-2-SS-12R	6"	2"	40.25"	40.25"	16 LBS





**TOP VIEW** 



SIDE VIEW

Slotted Holes = 5/16"x1 1/4"

AL: Aluminum (12 Gauge Thickness)

SS: 304 Stainless Steel (16 Gauge Thickness)

HDG: Hot-Dipped Galvanized, ASTM A-123 (12

Gauge Thickness)

6SS: 316 Stainless Steel (16 Gauge Thickness) available on request, minimum quantities required.

Splices and hardware sold separately.

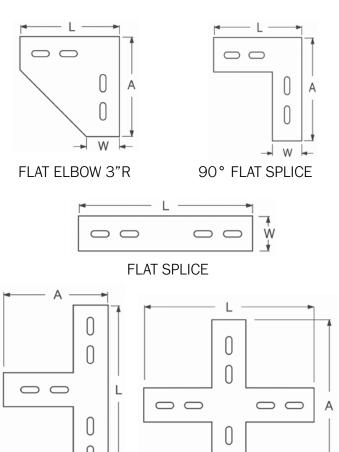




### Flat Elbow, Splice, Tee & Cross



	W	AI	LH			
Flat Elbow 3" Radius						
TLLS- 2-F <u>*</u> * 3R	2"	6"	6"			
TLLS- 3-F 3R	3"	6"	6"			
Flat Splice						
TLFS-2	2"	-	10"			
TLFS-3	3"	-	10"			
TLFS-4	4"	-	10"			
TLFS-6	6"	-	10"			
90° Flat Splice						
TLLS-2	2"	6"	6"			
TLLS-3	3"	7"	7"			
TLLS-4	4"	8"	8"			
TLLS-6	6"	10"	10"			
Flat Tee Splice						
TLTS-2	2"	6"	10"			
TLTS-3	3"	7"	11"			
TLTS-4	4"	8"	12"			
TLTS-6	6"	10"	14"			
Flat Cross Splice						
TLXS-2	2"	10"	10"			
TLXS-3	3"	11"	11"			
TLXS-4	4"	12"	12"			
TLXS-6	6"	14"	14"			



FLAT TEE SPLICE

FLAT CROSS SPLICE

W -

Slotted Holes = 5/16" x 1 1/4"

\*\* Select appropriate suffix for material finishes: TLFS-2- AL

AL: Aluminum (12 Gauge Thickness) HDG: Hot-Dipped Galvanized, ASTM A-123

(12 Gauge Thickness)

4SS: 304 Stainless Steel (16 Gauge Thickness)

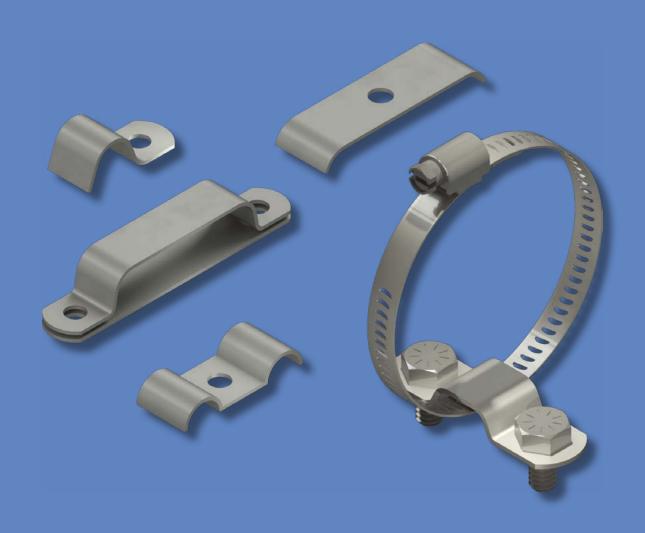
Note: Contact factory for additional materials or finishes.

### Splices and hardware sold separately.



# Techline® MFG.

# Clamps



# Tubing Clamps

### **Yoke, Single & Duplex Clamps**

Part Number	Tube OD	Number of Tubes
Yoke Clamps		
TLY4-2	1/4"	2
TLY4-3	1/4"	2 thru 4
TLY6-2	3/8"	2
TLY6-3	3/8"	2 thru 4
TLY8-2	1/2"	2
TLY8-3	1/2"	2 thru 4
TLY12-2	3/4"	2
TLY4-10	variable sizes	multiple
TLY8-10	variable sizes	multiple



TLY6-3 fits 2" Wide Channel and Angle. TLY4-10 fits 4"-6" Wide Channel. TLY8-10 fits 6" Wide Channel.

Part Number	Tube OD				
Single Tube Clamps					
TLG4-1SSN	1/4"				
TLG6-1SSN	3/8"				
TLG8-1SSN	1/2"				
TLG10-1SSN	5/8"				
TLG12-1SSN	3/4"				
TLG16-1SSN	1"				
Duplex Clamp	Duplex Clamps				
TLD4-2	1/4"				
TLD6-2	3/8"				
TLD8-2	1/2"				
TLD12-2	3/4"				
TLD16-2	1"				

Nuts and bolts sold separately, see page 30.



Yoke Clamps 316SS Material 100 Clamps per bag



Single Clamps 316SS Material 50 Clamps per bag



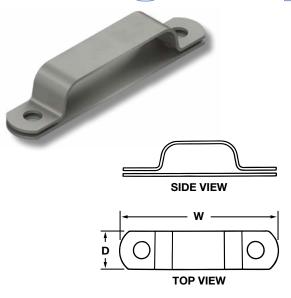
Duplex Clamps 316SS Material 50 Clamps per bag



### **Gang Clamps**

Part Number	Tube OD	# of Tubes	DI	W —
Gang Clamps				
TLO4 200D	4 /4"	0	F /O"	0.45"
TLG4-2SSB	1/4"	2	5/8"	2.15"
TLG4-3SSB	1/4"	3	5/8"	2.38"
TLG4-4SSB	1/4"	4	5/8"	2.65"
TLG4-5SSB	1/4"	5	5/8"	2.90"
TLG4-6SSB	1/4"	6	5/8"	3.17"
TLG4-7SSB	1/4"	7	5/8"	3.42"
TLG4-8SSB	1/4"	8	5/8"	3.67"
TLG4-9SSB	1/4"	9	5/8"	3.94"
TLG4-10SSB	1/4"	10	5/8"	4.18"
TLG4-11SSB	1/4"	11	5/8"	4.43"
TLG4-12SSB	1/4"	12	5/8"	4.63"
TLG6-2SSB	3/8"	2	5/8"	2.40"
TLG6-3SSB	3/8"	3	5/8"	2.80"
TLG6-4SSB	3/8"	4	5/8"	3.10"
TLG6-5SSB	3/8"	5	5/8"	3.50"
TLG6-6SSB	3/8"	6	5/8"	3.90"
TLG6-7SSB	3/8"	7	5/8"	4.30"
TLG6-8SSB	3/8"	8	5/8"	4.70"
TLG6-9SSB	3/8"	9	5/8"	5.00"
TLG6-10SSB	3/8"	10	5/8"	5.40"
TLG6-11SSB	3/8"	11	5/8"	5.80"
TLG6-12SSB	3/8"	12	5/8"	6.16"
TLG8-2SSB	1/2"	2	5/8"	2.60"
TLG8-3SSB	1/2"	3	5/8"	3.18"
TLG8-4SSB	1/2"	4	5/8"	3.70"
TLG8-5SSB	1/2"	5	5/8"	4.20"
TLG8-6SSB	1/2"	6	5/8"	4.70"
TLG8-7SSB	1/2"	7	5/8"	5.20"
TLG8-8SSB	1/2"	8	5/8"	5.70"
TLG8-9SSB	1/2"	9	5/8"	6.25"
TLG8-10SSB	1/2"	10	5/8"	6.69"

# Tubing Clamps

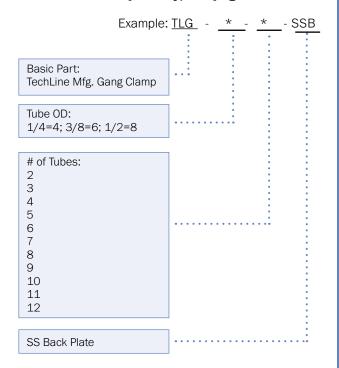


### **DESCRIPTION**

TechLine Mfg.'s Gang Clamps are used to hold down multiple tubes with a back plate. Gang Clamps are available in most standard sizes. Gang Clamps are sold in bags of 25 pieces. Hardware sold separately.

Gang Clamps 316SS Material 25 Clamps per bag

### Fasteners sold separately, see page 30



0.26 hole size need 1/4" fastener





### **Bundle Clamps**

Bundle Clamps are used to secure bundles of tubing or cable to TechLine Mfg. Angle and Channel. Bundle Clamps are available in 304SS. Complete assembly comes with Bundle Worm Gear clamp, Hold Down Clamp, 2 Hex Bolts and 2 Hex Nuts.

Part Number	Cable Size
Bundle Clamp	s
TLBC 0.0-1.2	1.24" or less
TLBC 1.2-2.0	1.25" to 2.00"
TLBC 2.0-3.0	2.00" to 3.00"
TLBC 3.0-4.0	3.00" to 4.00"
TLBC 4.0-5.0	4.00" to 5.00"
TLBC 5.0-6.0	5.00" to 6.00"





### Tech Line®

# Fasteners & Accessories

### Finishes:

316 Stainless Steel Zinc Plated Hot-Dipped Galvanized Aluminum



### **Variety:**

All standard size fasteners in stock. Special sizes available upon request.

# Fasteners

### **Fasteners**

Zinc Plated	316 Stainless Steel
1/4" Carriage Bolts	
ZP25CB.50	SS25CB.50
ZP25CB.75	SS25CB.75
ZP25CB1.00	SS25CB1.00
ZP25CB1.25	SS25CB1.25
ZP25CB1.50	SS25CB1.25
ZP25CB2.00	SS25CB2.00
ZP25CB3.00	SS25CB3.00
ZP25CB4.00	SS25CB4.00
1/4" Hex Bolts	
ZP25HB.50	SS25HB.50
ZP25HB.75	SS25HB.75
ZP25HB1.00	SS25HB1.00
ZP25HB1.25	SS25HB1.25
ZP25HB1.50	SS25HB1.50
ZP25HB2.00	SS25HB2.00
ZP25HB3.00	SS25HB3.00
ZP25HB4.00	SS25HB4.00
1/4" Phillips Head Scr	ew
ZP25CS.50	SS25PH.50
ZP25CS.75	SS25PH.75
ZP25CS1.00	SS25PH1.00
ZP25CS1.25	SS25PH1.25
ZP25CS1.50	SS25PH1.50
ZP25CS2.00	SS25PH2.00
ZP25CS3.00	SS25PH3.00
ZP25CS4.00	SS25PH4.00
Flat Washers	
(1/4") ZP25FW	(1/4") 6SS25FW
(5/16") ZP31FW	(5/16") 6SS31FW
(3/8") ZP38FW	(3/8") 6SS38FW
(1/2") ZP50FW	(1/2") Z6SS50FW
Lock Washers	
(1/4") ZP25LW	(1/4") 6SS25LW
(5/16")ZP31LW	(5/16") 6SS31LW
(3/8") ZP38LW	(3/8") 6SS38LW
(1/2") ZP50LW	(1/2") 6SS50LW
Hex Nuts, Wing Nuts, Lo	ck Nuts and Flange Nuts
(1/4") ZP25HN	(1/4") 6SS25HN
(5/16") ZP31HN	(5/16") 6SS31HN
(3/8") ZP38HN	(3/8") 6SS38HN
(1/2") ZP50HN	(1/2") 6SS50HN
(1/4") ZP25WN	(1/4") 6SS25WN
	(1/4") 6SS25LN
(1/4") ZP25FN	(1/4") 6SS25FN
(3/8") ZP38FN	(3/8") 6SS38FN
(1/2") ZP50FN	(1/2") 6SS50FN













All fasteners 100 pieces per bag. Other sizes and materials available upon request.



# Fasteners

### **U-bolts and All-Thread Rod**



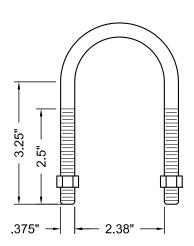
### 2" U-bolt

Thread: 3/8" - 16 UNC

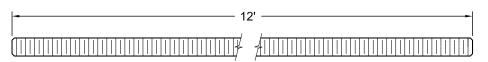
Material: 316SS Nuts: Supplied

Part Number: 3/8x2 UBOLT 316SS

**Sold Individually** 



3/8x2 UBOLT 316SS



### **All Thread Rod**

Thread: 3/8" or 1/2" Material: Zinc Plated Mild Steel \*\*Length: 10' or 12'

Part Number: STATR-375-\*-\*\* STATR-500-\*-\*\*

Other material finishes available

Weight: 4 LBS/ 12' length

### **Standard Materials\***

ZP: Zinc Plated GV: Hot-Dipped Galvanized 304SS: Stainless Steel

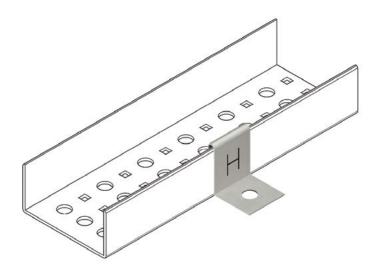
316SS: Stainless Steel

\*Select appropriate suffix for material finishes.

\*\*Select desired length, 10' or 12'.

# Accessories

### **Hold Down Clamps**



# | W — D | L ✓ | Hold Down Clamps | 1.75" | 2.000" | 1.75" | STHC-2-AL | 1.75" | 2.062" | 1.75" |

### **Installation Guideline:**

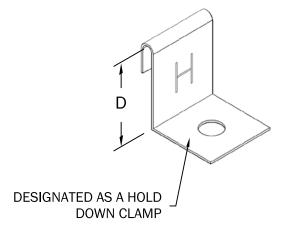
Cable tray can be anchored to supports, directly to the structural members, or to other supporting systems with Hold Down Clamps.

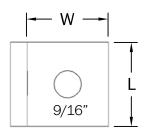
### **Single Hold Down Clamps**

Hold Down Clamps are used to anchor cable tray to a structural element. They are typically installed when the physical structure prevents or makes it difficult to use the hole pattern of the cable tray.

### **Installation Guideline:**

When installing Hold Down Clamps, two clamps should be used and attached to each side rail.

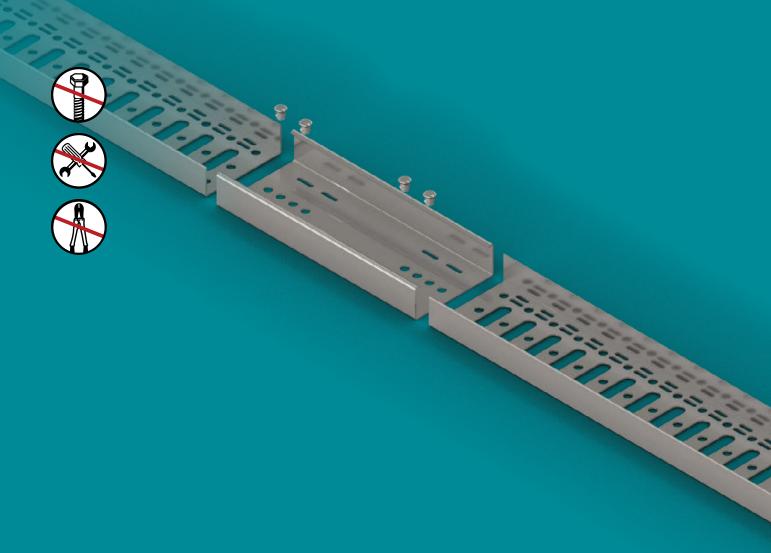






### Techline® MFG.

# SNAP TRACK Aluminum Cable Tray System











### Save on total installed costs with Snap Track V2 Ventilated Channel System.

Snap Track Channel Tray, which requires fewer supports and less labor to install, saves on total installed costs. Snap Track, TechLine Mfg.'s innovative ventilated channel-type cable tray, is a UL Classified product with patented push-pin assembly, and is an excellent choice for supporting electrical and instrumentation cables, as well as tubing in industrial plants, commercial buildings, food and beverage facilities and other applications. As a less-expensive alternative to conduit, a stronger alternative than wire basket, and superior to generic tray, Snap Track saves on labor and reduces total installed costs. Snap Track Channel Tray is available in 2", 4" and 6" widths.

### **Features and Benefits:**

- Ouick, easy installation saves labor
- Unique patented push-pin assembly requires less time to install without using tools
- Longer span distances require fewer supports, increasing cost savings
- Large selection of fittings reduces field labor
- Allows flexibility for future cable runs and routing changes
- UL Classified marine grade 6063-T6 aluminum is strong, lightweight, and corrosion resistant
- ABS Product Design Assessment allows for offshore use
- Hole pattern allows for easy cable drop outs
- Large inventories ready to ship



**Patented push-pin** assembly requires less time to install. In 2021, TechLine Mfg. released Snap Track **V2**, which offers better cable management with slotted holes for cable ties and larger center holes for easier cable dropouts. This change in the hole pattern also achieves a lighter weight while maintaining similar impressive performance on support spans.

### **Industries and Applications**

- Petroleum Refineries
- **Chemical Processing**
- Offshore and Marine
- **Biofuel Facilities**
- **LNG Export Facilities**
- **Commercial Construction**
- Food and Beverage
- Power Generation
- Data Management
- Renewable Energy

### **Background**

**Snap Track** was developed as a limited-width system to replace wire basket tray and conduit. It is stronger, provides better cable protection, and reduces installation costs.







#### Snap Track is

- An innovative channel tray system providing cable protection in a wide range of industries and applications.
- A unique limited-width ventilated bottom channel tray, to be used as an alternative to conduit, wire basket, or generic tray. *Snap Track* transitions control, power, data, and instrument cables from ladder tray to point of use, such as instruments and motor control stations.

# Commonly accepted benefits of running channel tray systems in lieu of conduit include

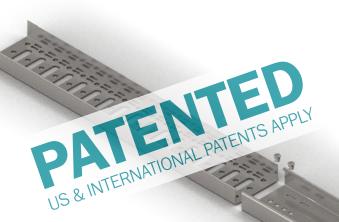
- Reduced total installed costs
- Cable accessibility
- Ease of future modifications
- Labor and material savings

## **UL Classification for Industrial Cable Trays**

The **Snap Track** system has been tested and is classified by Underwriters Laboratories for both UL and CUL (File Number E249472). Electrical continuity is achieved through our unique, extruded, inward-C configuration and snugfitting splice. A bonding jumper is required ONLY for adjustable fittings, expansion splice plates, beginning/end of tray runs, or a discontinuous run as to provide continuity. All other fittings used with push pins typically require no bonding jumpers.

## **ABS Product Design Assessment**

The American Bureau of Shipping has completed a design assessment of **Snap Track**, approving it for use in marine/offshore environments.



# **Why Specify Snap Track Cable Tray**

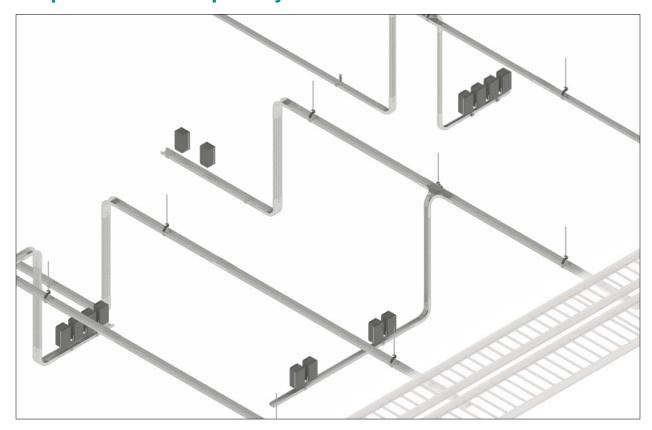
Snap Track is an innovative solution for transitioning cables from ladder tray to point of use in accordance with current NEMA, NEC, and UL standards. Snap Track was developed as a limited-width cable tray system designed to transition data and power cables from ladder tray to point of use. During the design process we consulted with numerous leading manufacturers, engineers, integrators, contractors, and cable providers to develop a complete UL classified system. Free product seminars are available. On-site training is included for projects. Contact us today to find out how Snap Track can benefit your project.

Schedule a no-obligation Product Seminar to learn more about how **Snap Track** can benefit your next project.

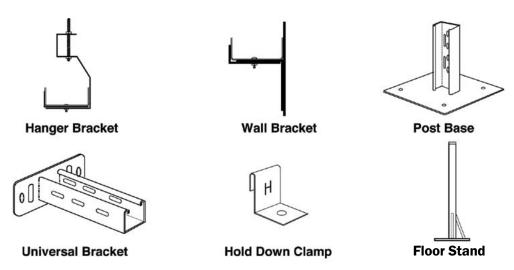


# General Information

# **Snap Track - The Complete System**



# **Snap Track - Mounting Brackets**







# SNAP TRACK Cable Tray

## **Extruded Construction**

Precise tolerances

# **Strength**

Twice the load-bearing capacity of wire basket

## **Solid Side Rails**

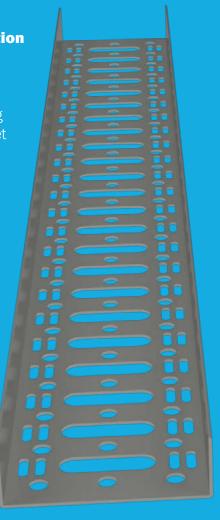
For maximum cable protection

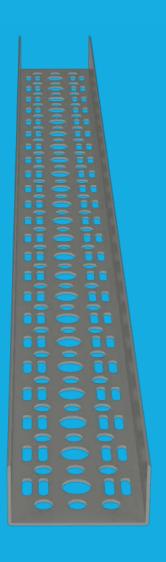
## **UL Classified**

Clearly marked UL

# Continuous Hole Pattern

Reduces field fabrication













# Cable Tray

# **SNAP TRACK Cable Tray Load Data**

## Span is the distance between supports, not the tray length.

Sı	Snap Track Span (feet)																
Tr	ay	6	3'	8	3'	10	0'	1:	2'	1.	4'	1	6'	1	8'	20	0'
W	h	Load	Deft*	Load	Deft*	Load	Deft*	Load	Deft*	Load	Deft*	Load	Deft*	Load	Deft*	Load	Deft*
2	2	45.33 LBS/ft		25.19 LBS/ft		15.9 LBS/ft		10.83 LBS/ft		7.79 LBS/ft	1.48 in.	5.66 LBS/ft	1.89 in.	3.78 LBS/ft		2.59 LBS/ft	2.36 in.
4	2	54.92 LBS/ft				19.25 LBS/ft		13.08 LBS/ft		9.43 LBS/ft		7.02 LBS/ft		4.99 LBS/ft		3.41 LBS/ft	2.38 in.
6	2	54.67 LBS/ft		30.25 LBS/ft		19.1 LBS/ft		12.96 LBS/ft		9.29 LBS/ft		6.88 LBS/ft		4.85 LBS/ft		3.28 LBS/ft	

<sup>\*</sup>Deft = Deflection

Snap Track Systems are designed and manufactured to meet or exceed the standards set forth in the NEMA BI-50015-2024. Section 4.8.3 of NEMA BI-50015-2024 states that Channel Cable Tray straight sections not exceeding 150mm (6 inches) in width and 50mm (2 inches) in depth do NOT require load testing; however, if load testing is conducted, then load testing shall be conducted in accordance with Section 5.2.

TechLine Mfg. deems that traditional load data information is an important factor for engineers, designers and other end users. Therefore, TechLine Mfg. has load tested Snap Track per the procedures in NEMA BI-50015-2024 Section 5.2.

Under NEMA BI-50015-2024 Section 5.2 load ratings are determined either by Destruction (NEMA BI-50015-2024 Section 5.2.8) or Residual Deflection (NEMA BI-50015-2024 Section 5.2.9). Residual Deflection is effectively the permanent recorded deflection when the defined minimum test load is applied.

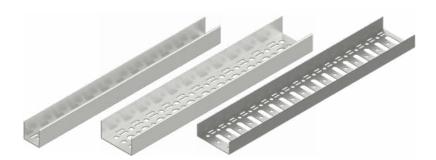
TechLine Mfg. recommends that Snap Track support systems be designed utilizing a safe working load as defined by IEC61537.

The values listed in the Snap Track Load Table were obtained using the procedures outlined in NEMA BI-50015-2024 Section 5.2 and the safe working load allowed by IEC61537.

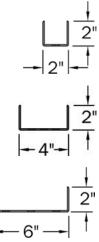


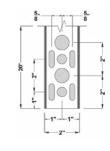
# Cable Tray

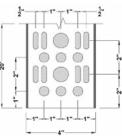
# SNAP TRACK Cable Tray

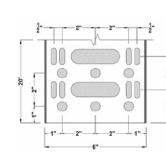


To assist in determining cable lengths and installation, Snap Track tray is clearly marked **UL Classified.** 









	MCSA *	W	D	L/	
Cable Tray					
STC-2-2-AL-V2	0.40	2"	2"	20'	12.72 LBS
STC-4-2-AL-V2	0.60	4"	2"	20'	16.29 LBS
STC-6-2-AL-V2	0.60	6"	2"	20'	19.07 LBS

**\*MCSA =** Minimum Cross Sectional Square Inch Area-per NEC code

Note: Aluminum Tray Thickness 0.103"

Splices and hardware sold separately.

Centerhole grommets available in 2" and 4". See page 74.

Round Holes 9/16"



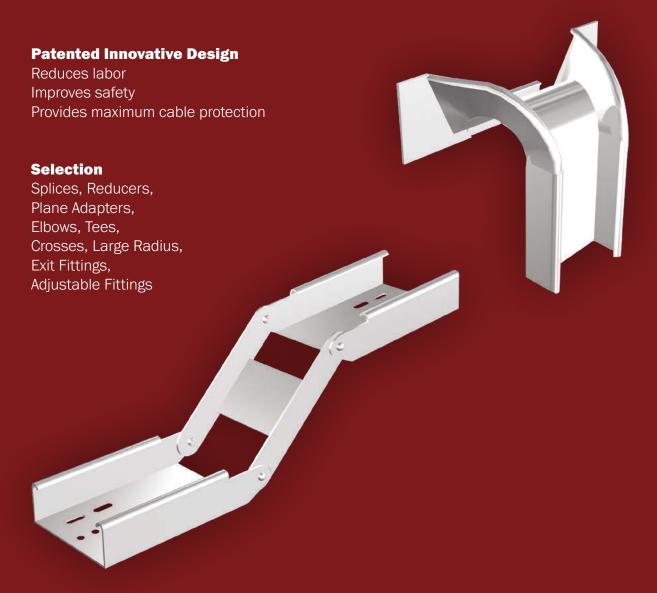




# **NOTES:**



# SNAP TRACK Fittings











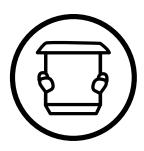
# **Snap Track Patented Push Pin**



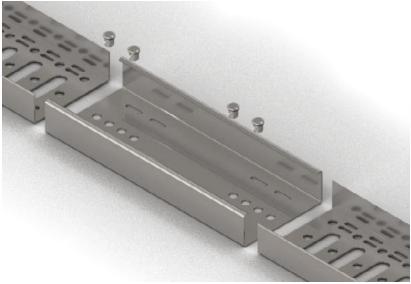








**Patent Number: 6,872,039** 



#### Snap Track Push Pin

The Push Pin eliminates bolts and nuts and does not require tools for assembly, thereby greatly speeding the installation of the Snap Track system.

Dual spring-loaded plungers and a tapered insertion ramp allow the pin to easily push into place. The vertical face at the rear of the plunger prevents the pin from backing out once engaged.

All Snap Track fittings and tray have been tested and UL Classified using the Patented Snap Track Push Pin



Push Pin	ÜL.
STSLP-9-22-T	9/16"

All Snap Track fittings are provided with the appropriate number of Push Pins. Only order P/N STSLP-9-22-T when additional pins are required. **Installation Guideline:** with the 9/16" round holes on the cable tray and the splice lined up, press the Push Pins into the holes. You will hear a click when the pins are secure. Two pins are to be installed on each side of the splice. Repeat the process until all pins provided are used.





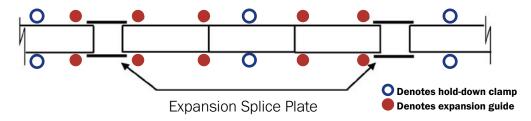
# **Thermal Expansion**

It is important to consider thermal contraction and expansion when installing cable tray systems. The length of the straight cable tray run and the temperature differential govern the number of expansion splice plates required.

Temperature	Differential	Maximum Distance			
С	(F)	М	(Feet)		
14	(25)	79	(260)		
28	(50)	40	(130)		
42	(75)	27	(87)		
56	(100)	20	(65)		
70	(125)	16	(52)		
83	(150)	13	(43)		

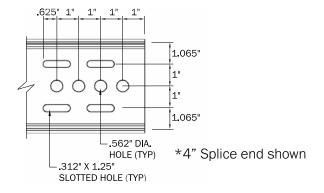
<sup>\*</sup> The temperature differential is the difference in the temperature between the hottest and coldest days of the year.

The cable tray should be anchored with hold-down clamps at the support nearest to its midpoint between expansion splice plates and secured by expansion guides at all other support locations. The cable tray should be permitted longitudinal movement in both directions from that fixed point.



Note: All Snap Track splices are provided with four  $1 \frac{1}{4}$ "  $X \ 0.312$ " slots and are designed for use as expansion splices. The  $1 \frac{1}{4}$ " slot also eliminates the need for gap calculations based on temperature differentials. See fasteners for appropriate installation hardware. A bonding jumper is required at each expansion joint.

<sup>\*</sup> See accessories page 65 for Expansion Guides & page 85 for Hold Down clamps.







# **Snap Track Splices**



	( W —	D	L /	
Channel Splice*				
STCS-2-2-AL	2"	2"	16"	1 LB
STCS-4-2-AL	4"	2"	16"	1 LB
STCS-6-2-AL	6"	2"	16"	2 LBS

#### Note:

Four push pins supplied with each fitting Round holes 9/16" Slotted holes 0.312" X 1.25"

# \*Splice may also be used for expansion joints.

#### **EJBK-SS**

**Expansion Splice Hardware Kit** 

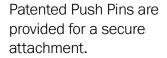
#### Each kit contains:

- (6) 1/4" x 3/4" SS Phil Pan Head Bolt
- (6) 1/4" SS Nylon Insert Lock Nuts and
- (6) 1/4" SS Flat Washers

#### **Installation Guideline**:

When assembling expansion joints use hardware kit EJBK-SS. Tighten carriage bolt and nylon lock nut then back off 1/4 turn.

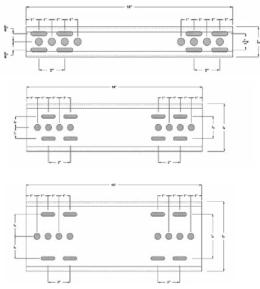
Bonding Jumpers should be installed with all expansion splices. See page 78.

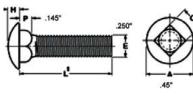


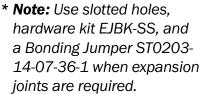


## **Installation Guideline:**

For maximum strength, insert pin using the first and third hole from each end.



















# **Snap Track Reducing and Plane Adapters**



	$\left(w-\right)$	D	( L /								
Reducing and Plane Adapters											
Reducing Adapter											
STRAS-4-2-AL-RH	4"	2"	16"	2 LBS							
STRAS-6-2-AL-RH	6"	2"	16"	2 LBS							
STRAS-6-4-AL-RH	6"	4"	16"	2 LBS							
STRAS-4-2-AL-LH	4"	2"	16"	2 LBS							
STRAS-6-2-AL-LH	6"	2"	16"	2 LBS							
STRAS-6-4-AL-LH	6"	4"	16"	2 LBS							
Plane Adapter											
STPAS-2-2-AL-RH	2"	2"	16"	2 LBS							
STPAS-4-2-AL-RH	4"	2"	16"	2 LBS							
STPAS-6-2-AL-RH	6"	2"	16"	2 LBS							
STPAS-2-2-AL-LH	2"	2"	16"	2 LBS							
STPAS-4-2-AL-LH	4"	2"	16"	2 LBS							
STPAS-6-2-AL-LH	6"	2"	16"	2 LBS							
STPAS-2-2-AL-BK	2"	2"	16"	2 LBS							
STPAS-4-2-AL-BK	4"	2"	16"	2 LBS							
STPAS-6-2-AL-BK	6"	2"	16"	2 LBS							

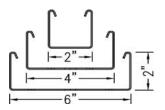
Patented Push Pins are provided for a secure attachment.



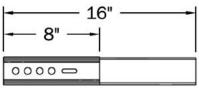
# **Installation Guideline:**

For maximum strength insert pin using the first and third hole from each end.

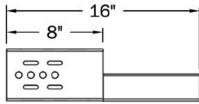
Round holes 9/16" Slotted Holes 0.312" x 1.25"



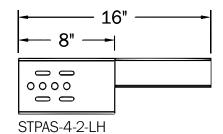
Plane Adapter Top View



STPAS-2-2-BK



STPAS-4-2-RH







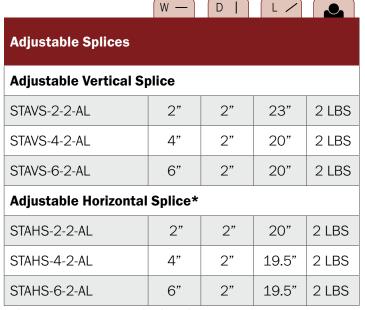




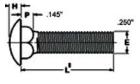


# **Snap Track Adjustable Splices**





<sup>\*</sup> Sidewall strip available for STAHS





**Note:** Use slotted holes, hardware kit EJBK-SS, and a Bonding Jumper ST0203-14-07-36-1 when expansion joints are required.

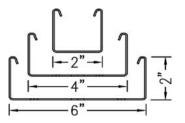


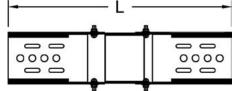
Patented Push Pins are provided for a secure attachment.

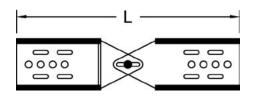


#### **Installation Guideline:**

Adjustable Splices allow for offset changes in the vertical direction or an adjustable radius in the horizontal direction.







# **Bonding Jumper**

**Note:** A Bonding Jumper is recommended for electrical continuity.

See accessory section for bonding jumpers.

**ST0203-14-07-36-1** See page 78.











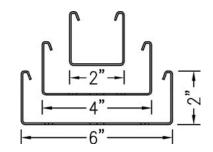
# **Snap Track 3" Radius Elbow**

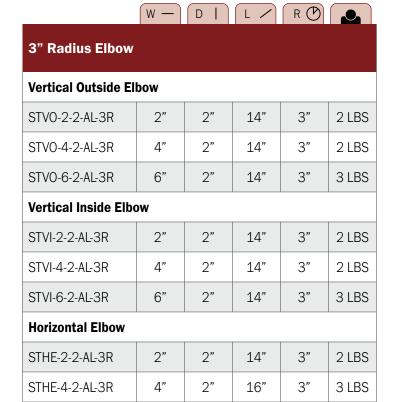


Patented Push Pins are provided for a secure attachment.



See Splice for hole detail page 43.





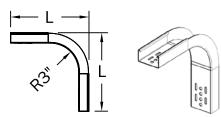
6"

2"

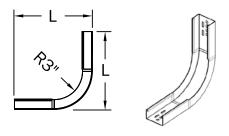
18"

3"

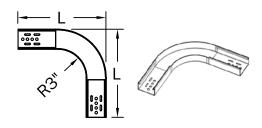
4 LBS



90° Vertical Outside 3" Radius



90° Vertical Inside 3" Radius



90° Horizontal 3" Radius









STHE-6-2-AL-3R



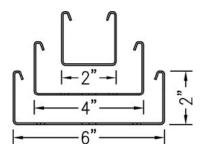
# **Snap Track 6" Radius Elbow**

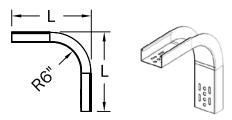


	$\left[ W - \right]$	$D \mid$	(L /	R (D)						
6" Radius Elbow										
Vertical Outside Elbow										
STVO-2-2-AL-6R	2"	2"	17"	6"	2 LBS					
STVO-4-2-AL-6R	4"	2"	17"	6"	3 LBS					
STVO-6-2-AL-6R	6"	2"	17"	6"	4 LBS					
Vertical Inside Elbo	)W									
STVI-2-2-AL-6R	2"	2"	17"	6"	2 LBS					
STVI-4-2-AL-6R	4"	2"	17"	6"	3 LBS					
STVI-6-2-AL-6R	6"	2"	17"	6"	4 LBS					
Horizontal Elbow										
STHE-2-2-AL-6R	2"	2"	17"	6"	2 LBS					
STHE-4-2-AL-6R	4"	2"	19"	6"	3 LBS					
STHE-6-2-AL-6R	6"	2"	21"	6"	4 LBS					

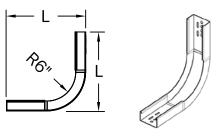
Patented Push Pins are provided for a secure attachment.



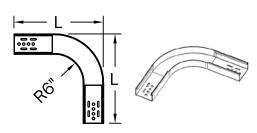




90° Vertical Outside 6" Radius



90° Vertical Inside 6" Radius



90° Horizontal 6" Radius



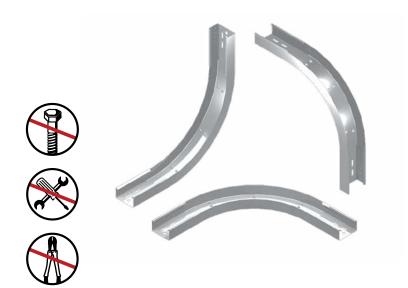






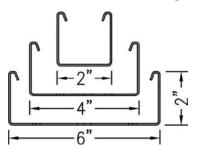


# **Snap Track 12" Radius Elbow**

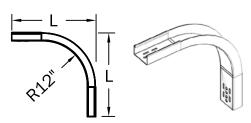


Patented Push Pins are provided for a secure attachment.

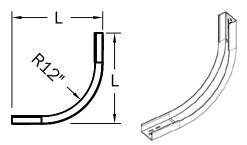




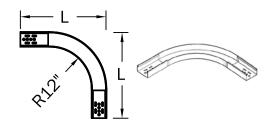
	$\overline{(W - )}$	D	L /	R (b)					
12" Radius Elbow									
Vertical Outside Elbow									
STV0-2-2-AL-12R	2"	2"	23"	12"	3 LBS				
STV0-4-2-AL-12R	4"	2"	23"	12"	4 LBS				
STVO-6-2-AL-12R	6"	2"	23"	12"	5 LBS				
Vertical Inside Elbo	Vertical Inside Elbow								
STVI-2-2-AL-12R	2"	2"	22.5"	12"	3 LBS				
STVI-4-2-AL-12R	4"	2"	22.5"	12"	4 LBS				
STVI-6-2-AL-12R	6"	2"	22.5"	12"	5 LBS				
Horizontal Elbow									
STHE-2-2-AL-12R	2"	2"	23"	12"	3 LBS				
STHE-4-2-AL-12R	4"	2"	25"	12"	4 LBS				
STHE-6-2-AL-12R	6"	2"	27"	12"	5 LBS				



90° Vertical Outside 12" Radius



90° Vertical Inside 12" Radius



90° Horizontal 12" Radius



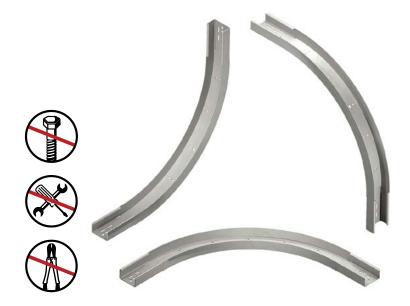






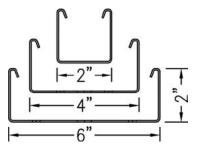


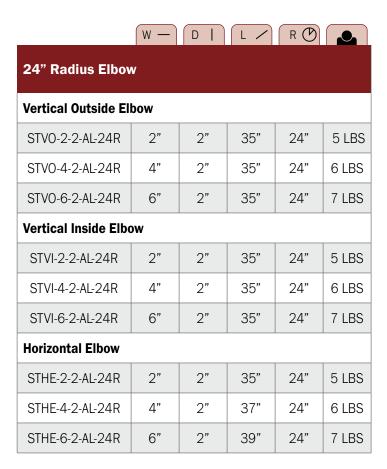
# **Snap Track 24" Radius Elbow**

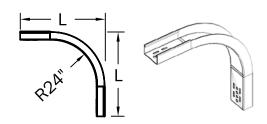


Patented Push Pins are provided for a secure attachment.

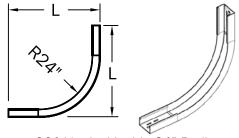




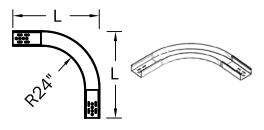




90° Vertical Outside 24" Radius



90° Vertical Inside 24" Radius



90° Horizontal 24" Radius









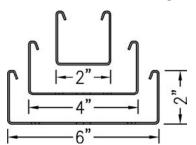


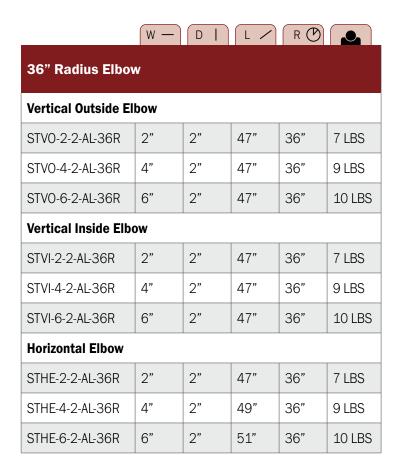
# **Snap Track 36" Radius Elbow**

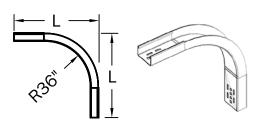


Patented Push Pins are provided for a secure attachment.

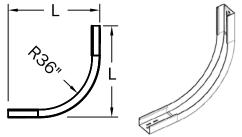




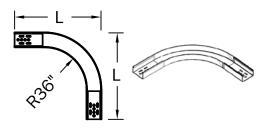




90° Vertical Outside 36" Radius



90° Vertical Inside 36" Radius



90° Horizontal 36" Radius









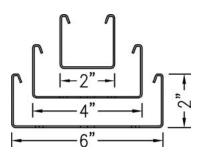


# Snap Track 3", 6" & 12" Radius Tee

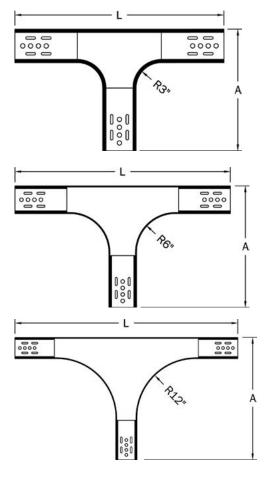


Patented Push Pins are provided for a secure attachment.





	$\overline{W-}$	D	L /	A	R 🕑	
Tee						
3" Radius Tee						
STCT-2-2-AL-3R	2"	2"	24.5"	13.5"	3"	3 LBS
STCT-4-2-AL-3R	4"	2"	26.5"	15.5"	3"	4 LBS
STCT-6-2-AL-3R	6"	2"	28.5"	17.5"	3"	5 LBS
6" Radius Tee						
STCT-2-2-AL-6R	2"	2"	31"	17"	6"	4 LBS
STCT-4-2-AL-6R	4"	2"	33"	19"	6"	5 LBS
STCT-6-2-AL-6R	6"	2"	35"	21"	6"	6 LBS
12" Radius Tee						
STCT-2-2-AL-12R	2"	2"	43.5"	23"	12"	6 LBS
STCT-4-2-AL-12R	4"	2"	45.5"	25"	12"	7 LBS
STCT-6-2-AL-12R	6"	2"	47.5"	27"	12"	8 LBS







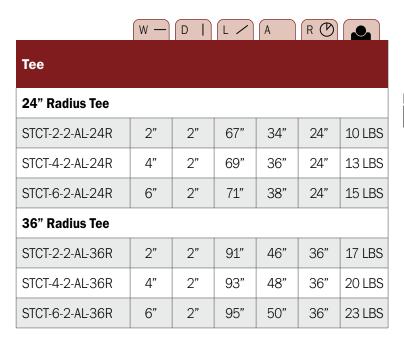


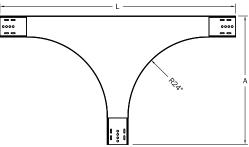


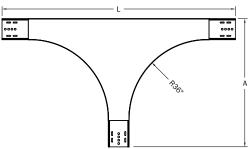


# Snap Track 24" & 36" Radius Tee

















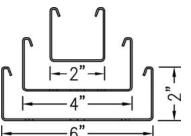


# Snap Track 3", 6" & 12" Radius Cross

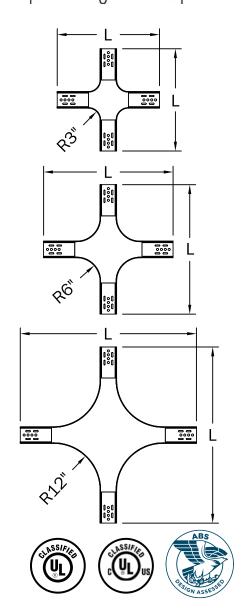


Patented Push Pins are provided for a secure attachment.





	W —	D	L /	R (b)	
Cross					
3" Radius Cross					
STCC-2-2-AL-3R	2"	2"	24.5"	3"	4 LBS
STCC-4-2-AL-3R	4"	2"	26.5"	3"	5 LBS
STCC-6-2-AL-3R	6"	2"	28.5"	3"	6 LBS
6" Radius Cross					
STCC-2-2-AL-6R	2"	2"	31"	6"	6 LBS
STCC-4-2-AL-6R	4"	2"	33"	6"	7 LBS
STCC-6-2-AL-6R	6"	2"	35"	6"	8 LBS
12" Radius Cross					
STCC-2-2-AL-12R	2"	2"	43"	12"	9 LBS
STCC-4-2-AL-12R	4"	2"	45"	12"	10 LBS
STCC-6-2-AL-12R	6"	2"	47"	12"	12 LBS







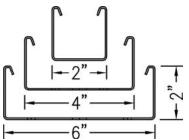
# **Snap Track 24" & 36" Radius Cross**

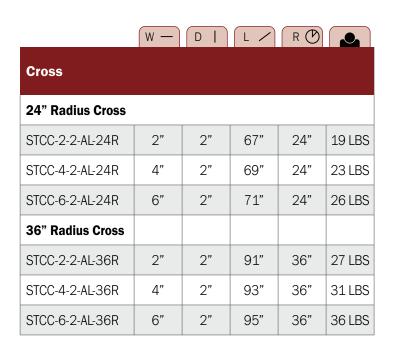


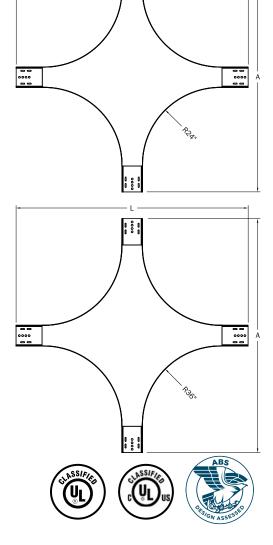
Patented Push Pins are provided for a secure attachment.



See Splice for hole detail page 43.









55



# **Snap Track Waterfall Exit Fittings**



Waterfall Transitions									
Vertical Transitions									
STWF-2-2-AL-6R	2"	2"							
STWF-4-2-AL-6R	4"	2"							
STWF-6-2-AL-6R	6"	2"							

6R standard or larger upon request.

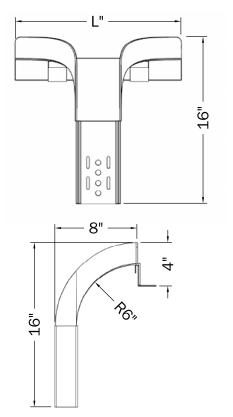
Patented Push Pins are provided for a secure attachment.



See Splice for hole detail page 43.

# **Waterfall Exit Fittings:**

Assembles onto any size **Snap Track** tray spilling over the side and transitioning into a vertical tray. Waterfalls mount directly to existing tray without alterations or tools.



Drawing represents 6" radius











# **Snap Track Downspout Exit Fittings**



Patented Push Pins are provided for a secure attachment.



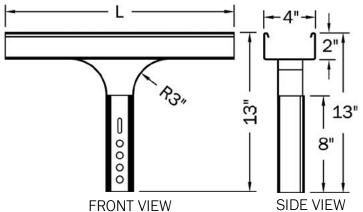
See Splice for hole detail page 43.

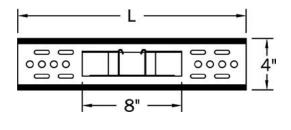
## **Downspout Exit Fittings:**

Create a 90° 2" X 2" spill out transition from the center of a horizontal or vertical run. The fittings maintain a 3" bend radius controlled throughout the transition to the downspout.



<sup>\*\*</sup>Consult Factory for Larger Radius Fittings.





TOP VIEW

Drawing represents 3" radius









<sup>\*3</sup>R or \*6R



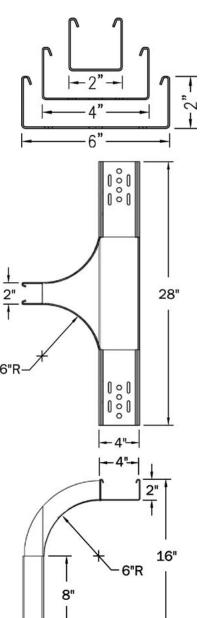
# **Snap Track Drop Tee Fittings**



**Drop Tee Fitting** Example: <u>STDT</u> - \* - \* - <u>AL</u> - \*R Basic Part: SnapTrack Drop Tee Fitting Width of Run Fitting: (2", 4" or 6") Bottom Size of Drop Fitting:  $(2^n, 4^n \text{ or } 6^n)$ Material Finish: Aluminum Radius of Drop: (6" or 12")

Patented Push Pins are provided for a secure attachment.





Drawing represents 6" radius





**SIDE VIEW** 







# **Snap Track Conduit Outlet Fittings**



## **Conduit Outlet Sections:**

Patented Push Pins are provided for a secure attachment.



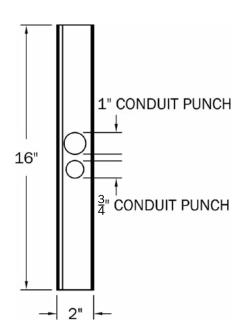
Allows for a direct conduit connection to any size **Snap Track** tray. 3/4" and 1" conduit knockouts are located on each side rail to provide for up to four conduit entries.

	$\overline{W-}$	D	L /	
Conduit Outlet S	ection			
STCOS-2-2-AL	2"	2"	16"	1 LB
STCOS-4-2-AL	4"	2"	16"	2 LBS
STCOS-6-2-AL	6"	2"	16"	3 LBS

**Note:** Knock-outs provide for the attachment of conduit to the cable tray. If a UL Listed connector is not used the fitting will provide only a mechanical connection, not an electrical connection. In order to make an electrical connection, a bonding jumper must first be run from the conduit to the cable tray.



Conduit Knockout Grommet(s) See page 73.







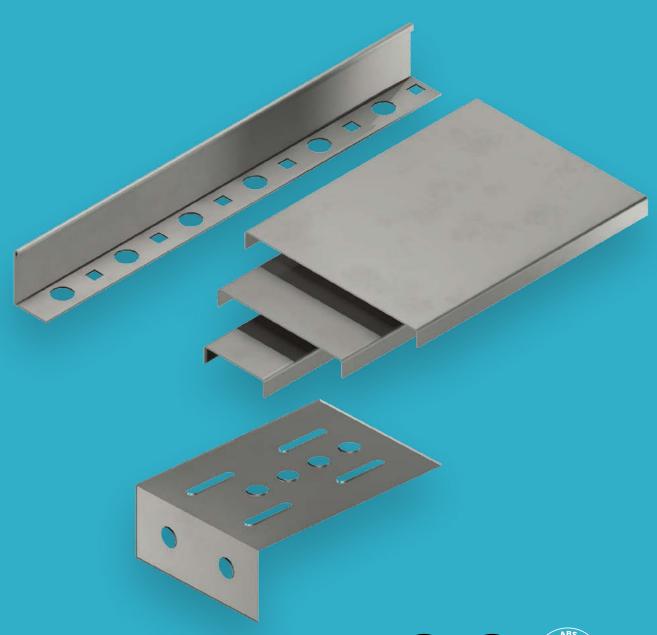




# **NOTES:**

# Tech Line® MFG.

# SNAP TRACK Accessories



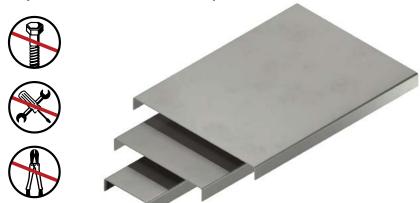






# **Snap Track Covers**

May be used for additional cable protection.

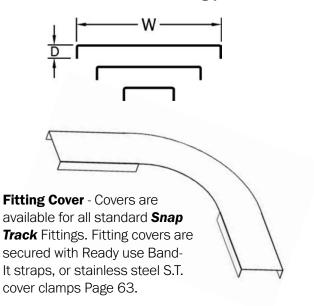


**Snap Track Covers** are designed to fit both **Snap Track** Tray and Splices

Fabricated from 0.032" 21 Gauge Aluminum

	W —	D	L /	
Covers				
STCV-2-AL	2.30"	0.5"	10'	2 LBS
STCV-4-AL	4.30"	0.5"	10'	4 LBS
STCV-6-AL	6.30"	0.5"	10'	6 LBS

Note: To order *Snap Track* Fittings with covers add suffix CVF to the selected fitting part number.



#### **Snap Track Covers**

- Provide maximum cable protection
- Reduce electromagnetic interference (EMI) effects
- Eliminate dust and dirt build-up on cable
- Secure easily to **Snap Track** Tray with "Ready-Use" Band-It Straps or **Snap Track** cover clamps.

## **Ready Use Band-it Straps**



Material: 201SS Width: 0.25" Length: 34" Thickness: 0.030"

Maximum Single Wrap Diameter: 8" Buckle: Pre-Assembled Ear-Lokt

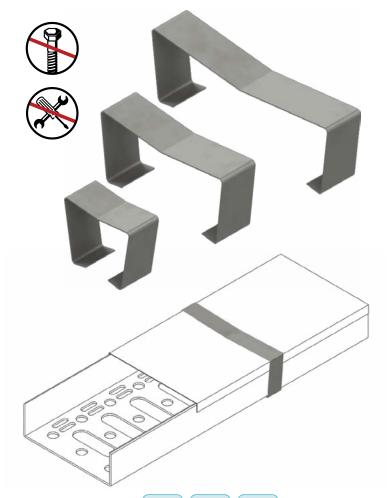








# **Snap Track Cover Clamps**



	$\left[W\;-\right]$	H	D /
Cover Clamps			
STCVC-2-2-*	2"	2"	1.25"
STCVC-4-2-*	4"	2"	1.25"
STCVC-6-2-*	6"	2"	1.25"

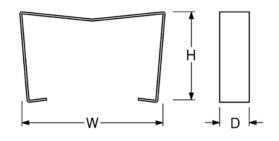
**"\*"** - Suffix use "C" for channel cover clamp and "F" for fitting cover clamp.

**Snap Track Cover Clamps** are used to secure the

**Snap Track Cover** to the tray.

- Assembled to **Snap Track** Tray and Cover without tools.
- Provides a better alternate method to secure the cover.
- Eliminates the need to cut straps and replace when opening the cover.

# Manufactured in 304SS finish only.





# **Snap Track End Plates**



Two Patented Push Pins are provided for a secure attachment.



	w —	D	L /	Tf	
Snap Track Blind End					
STBE-2-2-AL	2"	2"	4.75"	.100	
STBE-4-2-AL	4"	2"	4.75"	.100	
STBE-6-2-AL	6"	2"	4.75"	.100	

#### **Installation Guideline:**

Align both 9/16" round holes prior to making the final tray cut on a dead-end run.

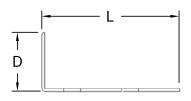
**Note:** Knock-outs provide for the attachment of conduit to the cable tray. If a UL listed fitting is not used it will provide only a mechanical connection, not an electrical connection. In order to make an electrical connection without a UL listed fitting, an equipment grounding conductor must first be run from the conduit to the cable tray.

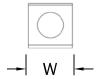
**Snap Track End Plates** are used for dead-end closure and indicates the termination of a cable tray run.

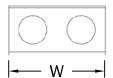
- Assembled to **Snap Track** tray with patented Push Pin.
- Designed with ½" and 1" conduit knockouts.

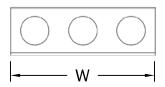


**Conduit Knockout Grommet(s)** See page 73.





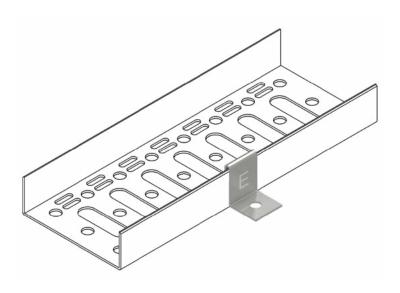








# **Snap Track Expansion Guides**



	W —	D	L /			
Snap Track Thermal Expansion Guides						
STEG-2-AL	1.75"	2.125"	1.75"			

## **Installation Guideline:**

The cable tray should be anchored at the support nearest to its midpoint between expansion splices and secured by expansion guides at all other support locations. The cable tray should be permitted longitudinal movement in both directions from that fixed point – NEMA BI-50016-2024 (Current Issue).

Standard **Snap Track** Splices may be used as expansion plates when secured to the tray with ½" carriage bolts and nylon insert nuts, hardware kit EJBK-SS. See page 44.

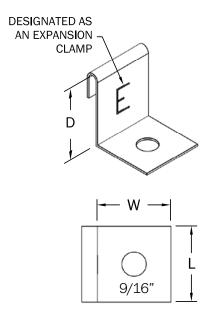
Do not strap tray or fitting covers within 3 feet of expansion guides.

# **Snap Track Expansion Guides**

#### **Installation Guideline:**

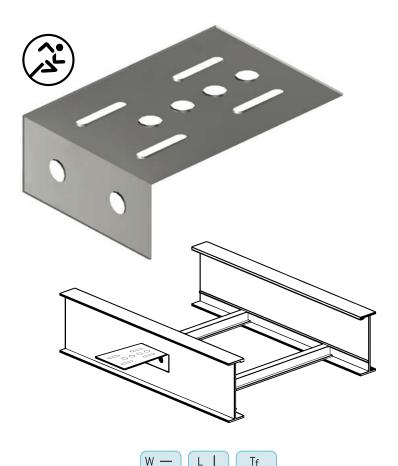
Thermal expansion guides are recommended per NEMA BI-50016-2024 to provide longitudinal movement from a fixed point. Refer to page 43 for further information regarding thermal expansion.

When installing **Snap Track**Expansion Guides, two guides should be used and attached to each side rail.





# **Snap Track Ladder Tray Transition Bracket**



		- 1	-11	
Ladder Tray Transitions				
STLTT-2-AL	2"	6"	0.100	
STLTT-4-AL	4"	6"	0.100	
STLTT-6-AL	6"	6"	0.100	

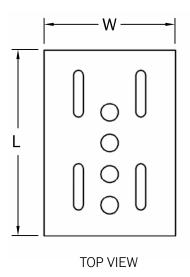
Snap Track Ladder Tray
Transitions adapt ladder tray to
Snap Track Cable Tray

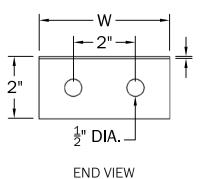


Two Patented Push Pins are provided for a secure attachment.

#### **Installation Guideline:**

Bolt Transition Bracket a minimum of 2.5" below the bottom lip of the ladder tray side rail top flange. Either horizontal or perpendicular Snap Track cable tray runs can then be attached with 2 Push Pins.

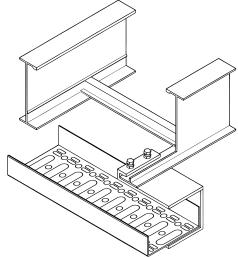






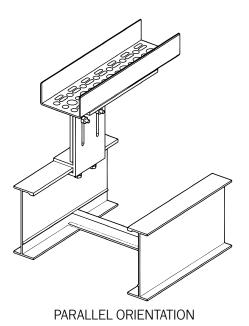
# **Snap Track Ladder Tray Transition**

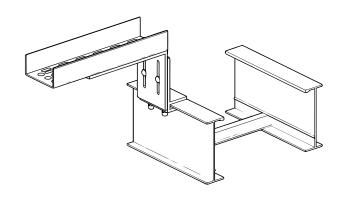
**Snap Track** has a wide variety of options to exit ladder style tray systems. Our brackets allow the user to install to the top, bottom or side of the tray. Snap Track can run perpendicular or parallel to the ladder tray.



Part#: STULTTBKT-AL







PERPENDICULAR ORIENTATION

Part#: STOLTTBKT-AL-ADJ-PER/PAR



# **Snap Track Conduit Bracket**



**Snap Track** Conduit Brackets allow for an easy transition from cable tray to conduit. The two Hold Down Clamps slide over the inside wall of the tray and are secured by two patented push pins. The cable can exit either from the top or bottom of the tray. Conduit is secured utilizing traditional strut clamps.\*\*

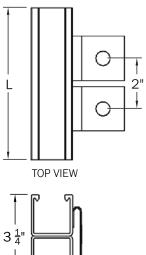
	W —	L		
Conduit Bracket Adapter				
STCB-AL	3 1/4"	6"		
STCB-AL-12	3 1/4"	12"		

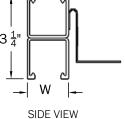
\*\*Strut pieces are 15/8" x 15/8" solid, back to back with two hold down clamps.

**Snap Track Conduit Bracket** attaches to **Snap Track** Cable Tray to allow exiting of the tray via conduit. The conduit can be secured to the bracket by strut clamps.



Two Patented Push Pins are provided for a secure attachment.







# **Snap Track Bulkhead Connector**



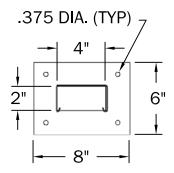
Bulkhead Connector					
STBH-2-AL	2"	8"	.125"	3.0 LBS	
STBH-4-AL	4"	8"	.125"	3.2 LBS	
STBH-6-AL	6"	8"	.125"	3.4 LBS	

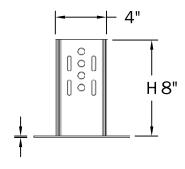
# **Snap Track Bulkhead**

**Connector** connects **Snap Track** to a wiring panel or equipment. A channel sized opening is in the baseplate of the connector. This allows for transitioning into **Snap Track** from an enclosed location.



Two Patented Push Pins are provided for a secure attachment.

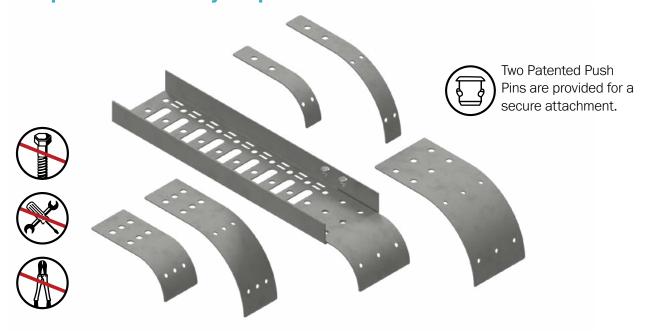




STBH-4-AL Shown

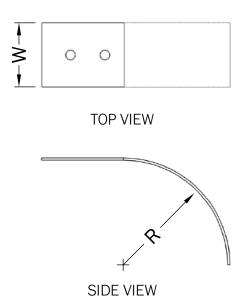


# **Snap Track End of Tray Drop Out**



**Snap Track End of Tray Drop Outs** are designed to allow cables to freely spill out the end of the tray while providing the proper bend radius protection.

	W —	R 🕑		Tf
Drop Out				
3" Radius Drop Ou				
STDO-2-AL-3R	2"	3"	.5 LBS	0.100
STDO-4-AL-3R	4"	3"	.75 LBS	0.100
STDO-6-AL-3R	6"	3"	1 LBS	0.100
6" Radius Drop Out				
STDO-2-AL-6R	2"	6"	.5 LBS	0.100
STDO-4-AL-6R	4"	6"	.75LBS	0.100
STDO-6-AL-6R	6"	6"	1 LBS	0.100





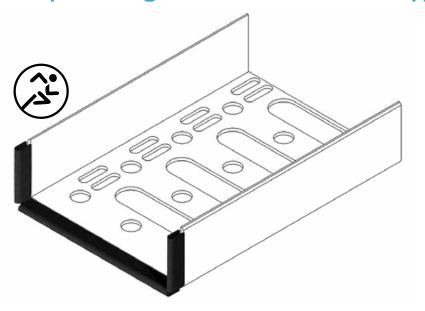






# Accessories

### **Snap Track Edge Protector & Instrument Support Kit**

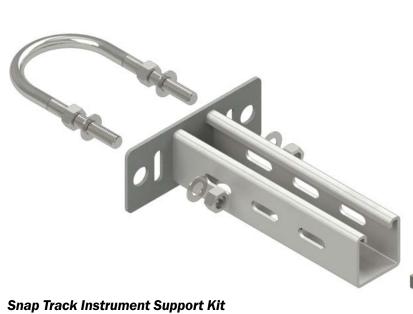


**Snap Track Edge Protector** is a flexible PVC trim that enables the user to continue a run without the use of a conduit connection or STBE blind end. Protects cables from any edges after field fabrication.

- Color: Black
- Available in minimum of 250 ft. rolls.

1/8"

**Part#: 100B3TPRFRX1/8** 



The **Snap Track** STUSB-GV-KIT connects to a 2" nominal bore pipe instrument stand or other structure with a U-bolt. This allows the connecting of **Snap Track Cable Tray** in either a vertical or horizontal plane. The kit contains (1) STUSB-GV strut bracket, (1) 5/16" X 2" U-bolt w/ nut & washer, (1) 3/8" spring nut, (1) 3/8" x 1" hex bolt.

Additional fasteners required for vertical mount. All kit items are zinc plated.



Part#: STUSB-GV-KIT

# Accessories

### **Snap Track Wire Spool and Bracket**



**Snap Track Wire Spools** were designed to eliminate "pig tails," which commonly occur at the instrument connection, in a connectivity solution.

- Mounts directly to standard 2" instrument stands or can be adapted to the instrument conduit connection with STWSB6-AL mounting bracket.
- 4" spool diameter to accommodate the minimum bend radius of control cables.
- Minimizes potential of cable damage.

Manufactured from 12 Gauge Aluminum

#### **Installation Guideline:**

Order with STWSB-6-AL bracket to mount wire spools directly to surface mounted transmitters, or with a U-bolt directly to stand.

#### **Eliminate "Pig Tails"**

Pre-ordered cable lengths and "slack" requirements commonly result in unprotected and unsightly "pigtails".

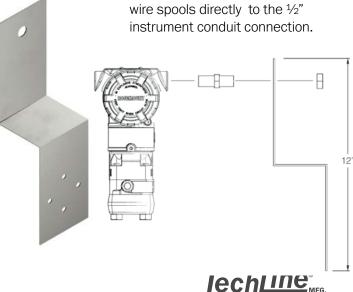




#### STWSB6-AL

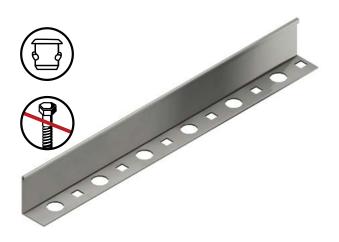
#### **Wire Spool Mounting Bracket**

Optional mounting bracket for surface mount applications. Use STWSB6-AL to mount **Snap Track** wire spools directly to the  $\frac{1}{2}$ " instrument conduit connection.





### **Snap Track Dividers and Grommets**





Patented Push Pins are provided for a secure attachment.

**Snap Track Dividers** are used to separate power and data cables within **Snap Track** Tray.

- Assembled to **Snap Track** Tray with Patented Push Pin
- Field fabricated with tin snips for changes in radius or level
- Rolled edge for maximum cable protection

#### **Installation Guideline:**

Whenever possible, power cables and data cables should be run in separate trays to prevent electromagnetic interference (EMI). When this is not possible, dividers should be installed to provide an EMI barrier.

EMI is the disruption of operation of an electronic device when it is in the vicinity of an electromagnetic field (EM field) in the radio frequency (RF) spectrum that is caused by another electronic device.

Problems with EMI can be minimized by ensuring that all electronic equipment is operated with a good electrical ground system. In addition, cords and cables connecting the peripherals in an electronic or computer system should, if possible, be shielded to keep unwanted RF energy from entering or leaving. Common sources of EMI include power cables, radios, motors, lighting, and mobile phones.

Grommets	Size
STG-890	1/2"
STG-1370	1"





Max. Panel Thickness: 0.125" Circular Punch Hole: for ½" & 1" Conduit. Color: Black



#### **Installation Guideline**:

For maximum cable protection, install **Snap Track** Grommets wherever conduit knockouts are used without conduit fittings. Not for center hole dropouts.





### **Snap Track Center Hole Grommet**

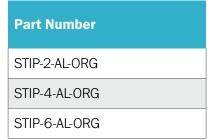
Rubber grommets are available for center holes in **Snap Track Channel Tray**.

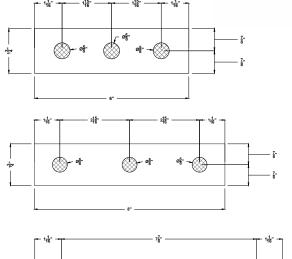


Part Number	Description
STG-B90-2/4	Rubber Grommet Fits 2" and 4" Snap Track, 1/2" inside diameter

### **Snap Track Isolator Pad**

TechLine Mfg.'s new Isolator Pad fits between strut supports and **Snap Track** Aluminum Cable Tray, reducing dissimilar metal corrosion and protecting vital components. Isolator pads are available for all sizes of **Snap Track**, 2", 4" and 6", with each pad extending two inches on either side of the tray to allow for **Snap Track** Hold Down Clamps (page 85). Isolator Pads are made from UV-resistant rubbercoated aluminum.







# Tech Line MFG.

# SNAPTIRACK Grounding & Bonding Accessories



# Grounding & Bonding Accessories

## **Snap Track Grounding & Bonding**

# Metal cable trays must be grounded and an electrically continuous system per NEC Article 392.

The ground network consists of all metal parts of a building connected together: beams, conduits, cable trays, metal frames or devices, all parts which must be connected together to guarantee the equipotentiality of the ground network.

# Snap Track Cable Tray can be used as an Equipment Grounding Conductor (EGC)

**Snap Track** Cable Tray is **UL Classified**, marked with the available minimum cross sectional area and meets all requirements for use as an Equipment Grounding Conductor (EGC) per NEC Article 392.60.

Standard **Snap Track** Splices, Tees, Crosses, and Elbows are also UL Classified as an EGC component and are bonded per NEMA BI-50015-2024 Section 5.1. Standard **Snap Track** Splices, Tees, Crosses and Elbows do not require bonding jumpers. However, it is recommended that a bonding jumper be installed on **Snap Track** adjustable fittings, splices when used as expansion joints, discontinuous tray, and beginning/end of tray runs.

# Installations Requiring a Separate Equipment Grounding Conductor:

Per the minimum cross sectional area requirements of NEC 392.60, table 392.60 (A), 4" and 6" **Snap Track** tray can be used as an EGC for circuits not exceeding 1000 ampere, while **Snap Track** 2" tray can be used as an EGC for circuits not exceeding 600 ampere.

A separate equipment ground conductor is required for any circuits exceeding these limits.

A bare copper EGC should not be used with **Snap Track** Aluminum Tray.

**Note:** NEC Article 392.6 clearly states that a cable tray system must be electrically continuous but does not have to be mechanically continuous. Gaps between **sections are restricted to 1.8m (6 ft).** Cables must be secured to the cable tray prior to and after the transition, and protected by <u>guarding</u> or location. The electrical connection between sections can be maintained with bonding jumpers or a ground wire.



# Grounding & Bonding Accessories

### **Snap Track Grounding Clamps**

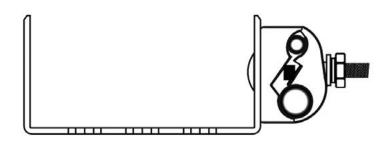


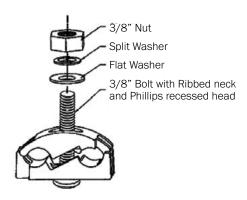
#### **Snap Track Grounding Clamps**

- UL Classified
- Two sided for a wide range of cable sizes
- 3/8" bolt with a ribbed neck & recessed head prevents rotation when tightened in a .440" hole.



**Note:** Refer to NEC Table 250-122 for appropriate sized ground conductors.





#### **Installation Guideline:**

<u>DO NOT</u> connect bare copper conductors to Aluminum Cable Tray.



# Grounding & Bonding Accessories

### **Snap Track Bonding Jumpers**



#### **Snap Track Bonding Jumpers**

#### **Installation Guideline:**

A bonding jumper is required to be installed with adjustable splices and expansion splices.

Install Bonding Jumpers by bolting each lug to a slotted hole located at each end of the channel. Do not use splice plate bolt or pin locations to connect the jumper to the splice plate. Only connect to the channel.

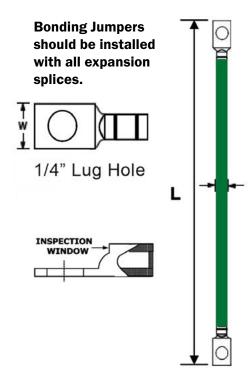
2 AWG Soft Drawn Tin Plated Copper Stranded Cable. Extremely flexible flame retardant PVC (VW-1) Insulation. Resists abrasion, oil, acid, and diesel fuel.

	(w - )			(- <b>A</b> -)
Bonding Jumpers				
ST0203-14-07-12-1	0.7"	0.446"	12"	500
ST0203-14-07-24-1	0.7"	0.446"	24"	500
ST0203-14-07-36-1	0.7"	0.446"	36"	500

Standard **Snap Track** Bonding Jumpers come in various lengths. It is recommended that a Bonding Jumper be installed on the following: **Snap Track** Adjustable Fittings, splices when used as expansion joints, discontinuous tray, and beginning/end of tray runs.

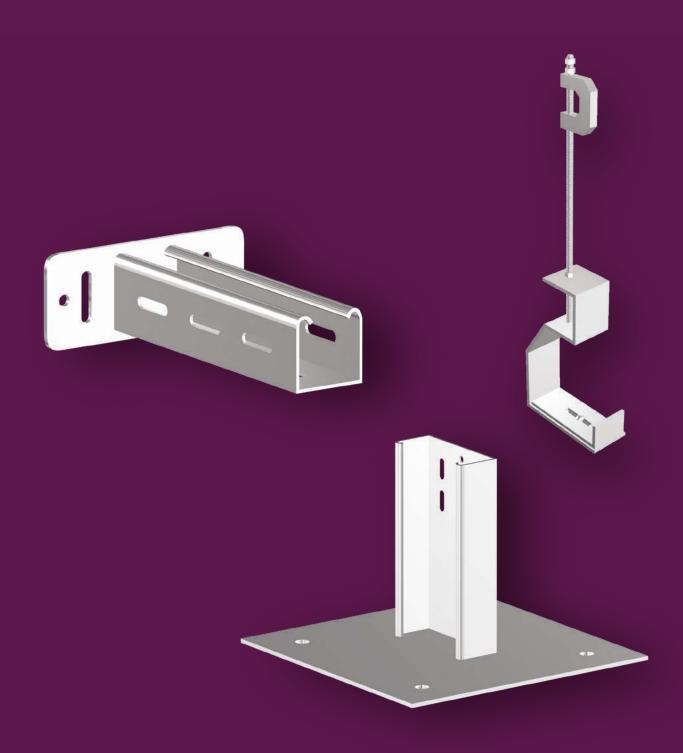
Standard color is Green. Please consult factory for optional colors.

For Fasteners see page 30.



# Tech Line® MFG.

# SNAP TRACK Supports

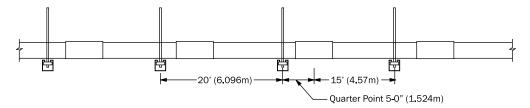




### **Support Locations - Snap Track Cable Tray**

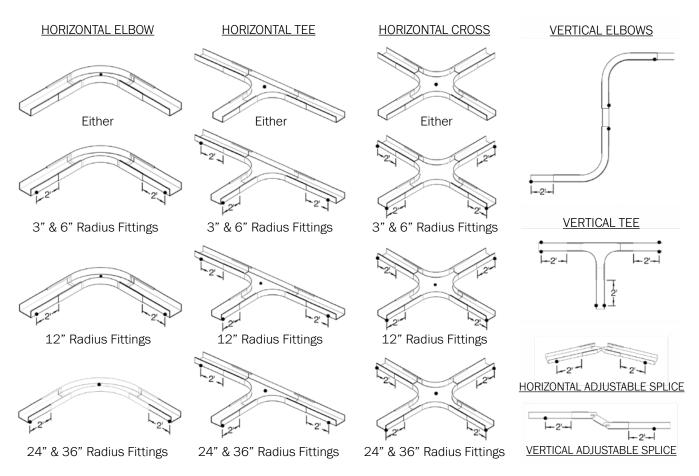
(Reference: NEMA BI-50016-2024 Current Issue)

Supports should be located so that connectors (splice joints) between horizontal runs fall between the support point and quarter point of the span. The support span should not be greater than the straight section length. Snap Track Tray standard 20' lengths.

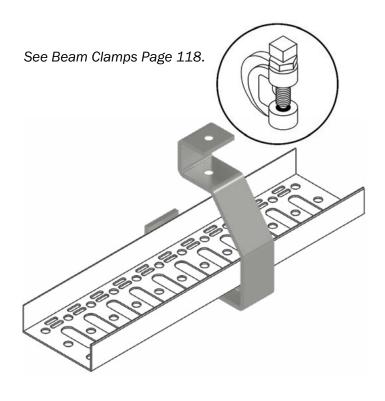


Vertical straight lengths should be supported at intervals dictated by the building structure not to exceed 20' centers. A support should be located within 2' on one side of a **Snap Track** splice. **Snap Track** fittings with a radius less than 12" can be supported within 2' of each extremity or alternatively with a single center section support. **Snap Track** fittings with 12" or greater radii

should be supported within 2' of each extremity. **Snap Track**, 24" and 36", large radius fittings should be supported within 2' of each extremity when installed in a vertical plane. An additional center support should be installed when fittings with radii larger than 12" are installed in a horizontal plane.



### **Snap Track Single Hanger Bracket**



	H <b>‡</b>	W —	D /	
Single Hanger Bracke	t			
STHB-4-6-AL- <u>*</u> *	7.75"	4.25"-6.25"	2"	2 LBS

Threaded Rod

\*\* 1/2-16UNC Zinc Plated Mild Steel

XX – no all thread

10(ft) all thread

12 (ft) all thread length

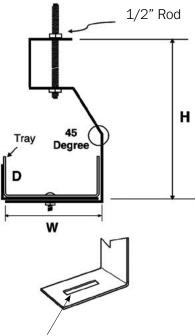
#### **Installation Guideline:**

Thread top nut onto rod approximately 2.5" then assemble hanger onto the rod and secure with bottom nut.

#### Snap Track Single Hanger Brackets

Used for overhead or beam mounting when installed with a beam clamp.

- Adjusts to fit 2", 4", or 6" Tray
- Includes 1/2" Threaded Rod and Nuts\*
- 1/4" Thick Aluminum Load Capacity 50 LBS



**5/16"** X 2.25" Adjustment Slot





### **Snap Track Horizontal Wall Bracket**



#### **Snap Track Wall Bracket**

For Horizontal Wall Mounting

- Adjusts to 4" or 6" width tray
- Manufactured from ¼"
   Aluminum
- Designed for 2" deep tray

### **Snap Track Universal Bracket**



Manufactured from 1 5/8" slotted strut. Horizontal configuration also available.

#### **Snap Track Universal Bracket**

For Horizontal or Vertical Mounting

- Manufactured from galvanized 1 5/8" slotted strut with side slots added for versatility
- Mounting holes provided for 2" pipe mounting



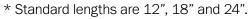
### **Strut Wall Brackets**



(Back-to-Back Horizontal)

#### Both horizontal and vertical brackets are available in various lengths.

	W	L /	
Strut Wall Bracket			
TLSWBH1000 - ** - "Length"	8"	4"- 48"	2 LBS
TLSWBH1001 - ** - "Length"	8"	4"- 48"	3 LBS
TLSWBV1000 - ** - "Length"	8"	4"- 48"	4 LBS



<sup>\*\*</sup> Select appropriate suffix for material finishes:

AL: Aluminum

(Horizontal)

HDG: Hot-Dipped Galvanized

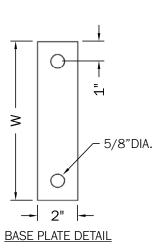
SS: 304SS

Fits all 15/8" Channel

Note: Rubber end caps available upon request.

Strut wall brackets are used for various mountings and other support needs.

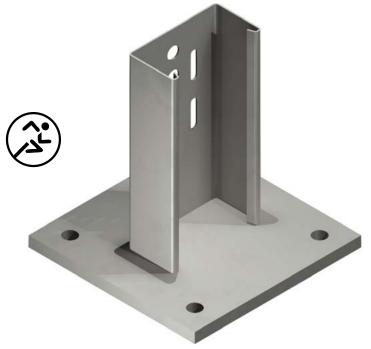
- 15/8" x 15/8" Strut. Also available in back to back and deep strut
- Accepts all standard strut fasteners and strut clamps
- Standard material is Aluminum. SS and Hot-Dipped Galvanized are also available



(Vertical)

83

### **Snap Track Post Base**



	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
	W —	H <b>‡</b>	
Post Base			
STFPB-2-AL	2"	8"	4 LBS
STFPB-4-AL	4"	8"	4 LBS
STFPB-6-AL	6"	8"	6 LBS

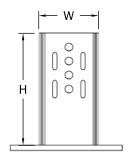
**Installation Guideline:** See fasteners for grating clamps, page 106 when attaching to platform grating.

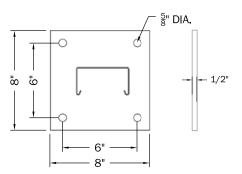


#### **Snap Track Post Base**

vertical runs to the foundation on an 8" X 8" base plate.

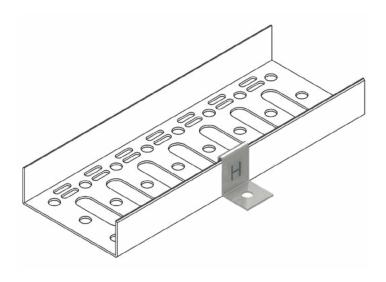
Assembles to **Snap Track** tray with Patented Push Pin.







### **Snap Track Hold Down Clamps**



	M	D	L /	
Snap Track Hold Down Clamps				
STHC-2-AL	1.75"	2.062"	1.75"	

#### **Installation Guideline:**

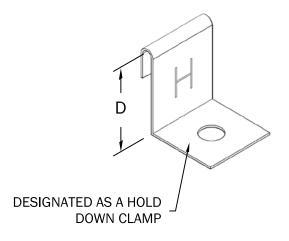
**Snap Track** Cable Tray can be anchored to **Snap Track** Supports, directly to the structural members, or to other supporting systems with **Snap Track** Hold Down Clamps at the midpoint between expansion splice. At all other supports, **Snap Track** Expansion Guides should be installed to allow for thermal expansion and permit longitudinal movement from the anchor or fixed point. NEMA BI-500016-2024.

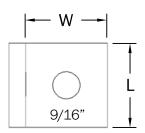


Hold Down Clamps are used to anchor **Snap Track** Cable Tray to a structural element. They are typically installed when the physical structure prevents or makes it difficult to use the hole pattern of the cable tray.

#### **Installation Guideline:**

When installing **Snap Track**Hold Down Clamps, two clamps
should be used and attached to
each side rail.

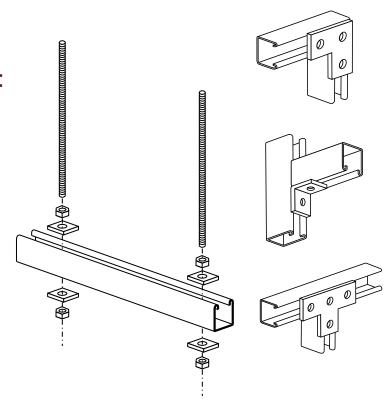






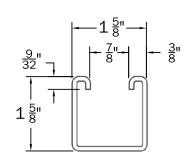
85

### **Snap Track Strut Supports**



#### **Snap Track Strut Supports**

Virtually an unlimited variety of support members can be field assembled using **Snap Track** 1 5/8" slotted strut and associated hardware.



#### AE50ZP

Angle Fitting
For Use with ½" Bolts
Material: Zinc Plated



Slotted 1 5/8" strut

#### Material:

Aluminum Pre-Galvanized

10' and 20' Lengths Available

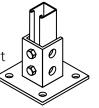
#### SW50ZP

Square Washer
For Use with ½" Bolts
Material: Zinc Plated

#### 15205

Single Post Base
For Use with 1 5/8" Strut
Material: Galvanized

Weight: 4 LBS



# **FE50ZP** Flat Elbow

For Use with ½" Bolts Material: Zinc Plated

#### SN50ZP

Spring Nut For Use with ½" bolt

Material: Zinc Plated



#### FT50ZP

Flat Tee For Use with ½" Bolts

Material: Zinc Plated





# Instrument Stands & Racks

#### **Materials and Finishes:**

Hot-Dipped Galvanized per ASTM A-123

Aluminum

304 Stainless Steel

316 Stainless Steel

Painted

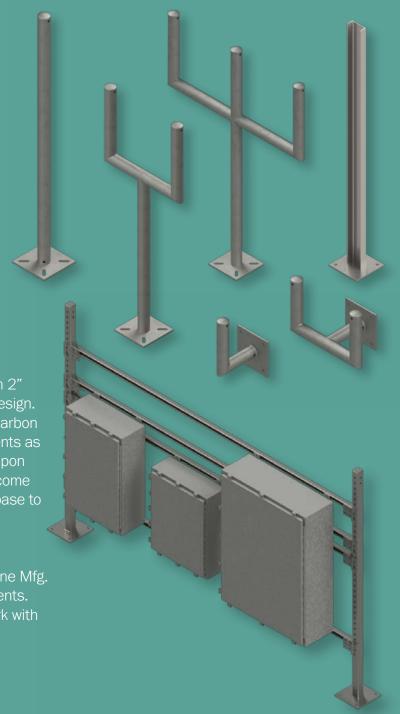
**Powder Coated** 

#### **General Stand Specifications:**

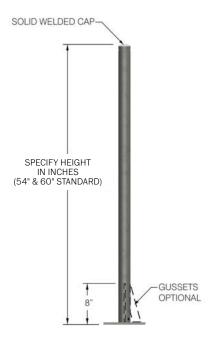
TechLine Mfg. stands are fabricated from 2" Schedule 40 pipe and utilize a flat cap design. TechLine offers Hot-Dipped Galvanized Carbon Steel meeting ASTM A123/89 requirements as a standard. Optional coatings available upon request. Hot-Dipped Galvanized stands come standard with weep holes and an open base to allow for drainage.

#### **Custom Fabrication:**

With our onsite fabrication facility, TechLine Mfg. can handle any of your custom requirements. We can build to your drawings or can work with you to design to your requirements.



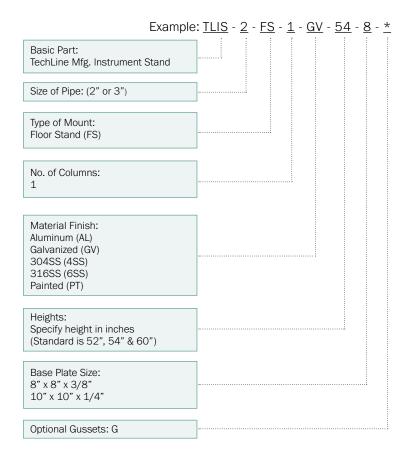
### **Single Floor Stand**

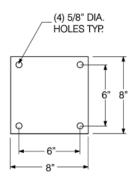


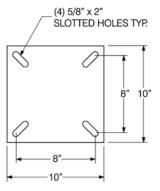
#### **General Stand Specifications:**

TechLine Mfg. stands are fabricated from 2" Schedule 40 pipe and utilize a flat cap design. Standard stock stands have an 8"x 8" x 3/8" base plate, and a variety of sizes and thicknesses are available upon request. Gussets can also be added upon request for additional support. TechLine Mfg. offers Hot-Dipped Galvanized Carbon Steel meeting ASTM A123/89 requirements as a standard. Optional coatings available upon request. Hot-Dipped Galvanized stands come standard with weep holes and an open base to allow for drainage.

For mounting hardware, see page 106.

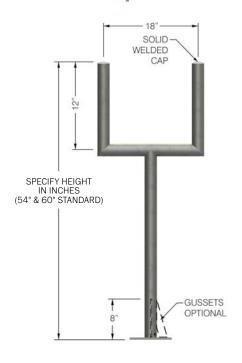


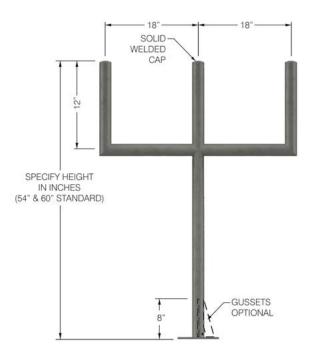




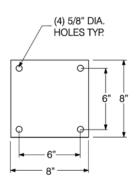


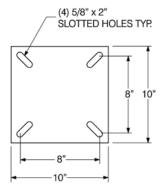
### **Double & Triple Floor Stands**





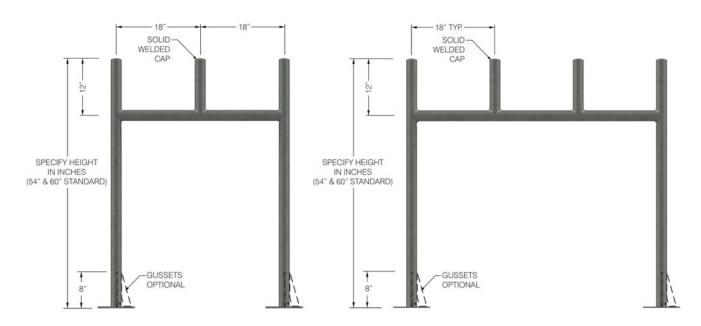


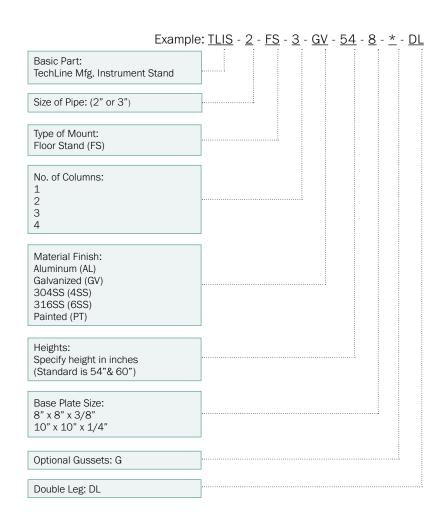


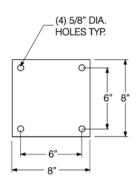


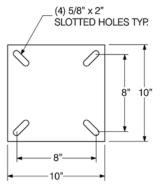


### **Triple & Quad Multi-Rack Floor Stands**









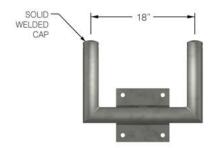


### **Wall Mount Stands**

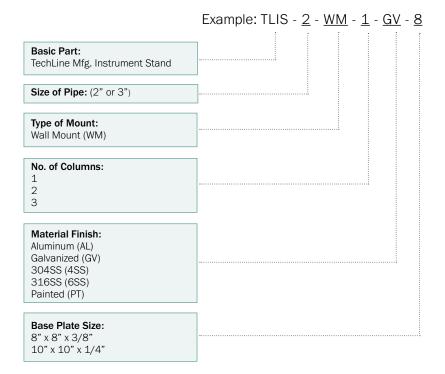


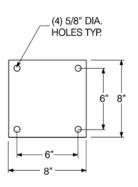


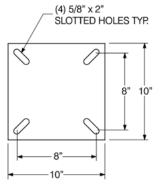
See Beam Mount Bracket on page 105 for easy installation.







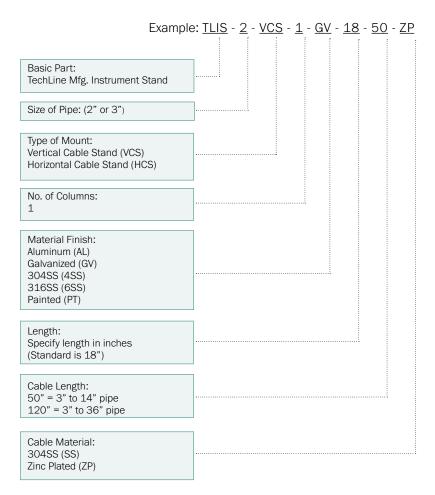






#### **Vertical & Horizontal Cable Mount Stands**





#### **General Specifications:**

Provides adjustable mounting capabilities on process lines. 2" schedule 40 pipe welded to 3" extruded channel. The channel provides the gripping edge on the process line. Two high-tensile strength cables 5/16" dia. wraps around the process line holding the stand in place. Galvanized cable is standard. SS Cable is optional. Cables are available in two lengths, 50" for process lines 3" to 14" dia. & 120" for process lines 3" to 36" dia. One end of cable terminates on the base bracket in a galvanized wire rope clip. The other end has a 5/8" threaded end which also terminates on the base bracket. 5/8"- 11 carbon steel zinc plated hex nut and SS plated washer used as a fine adjustment.



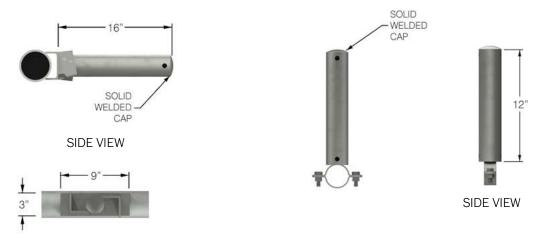
#### Material:

Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### **Coating:**

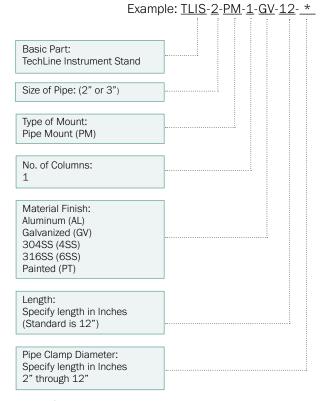


### **Cable Mount Stand / Pipe Mount Stand**



Example: <u>TLIS-2-CS-1-GV-16-50-ZP</u> Basic Part: TechLine Mfg. Instrument Stand Size of Pipe: (2" or 3") Type of Mount: Cable Stand (CS) No. of Columns: 1 Material Finish: Aluminum (AL) Galvanized (GV) 304SS (4SS) 316SS (6SS) Painted (PT) Specify length in inches (Standard is 16") Cable Length: 50" = 3" to 14" pipe 120" = 3" to 36" pipe Cable Material: 304SS (SS) Zinc Plated (ZP)

CABLE STAND



PIPE MOUNT STAND

#### Material:

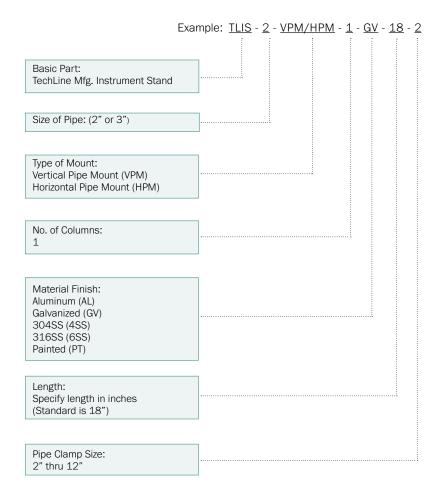
Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### Coating:



### **Vertical & Horizontal Pipe Mount Stand**





#### General Specifications: Vertical Pipe Mount

- Uses 2" SCH40 pipe welded to saddle style pipe clamp. Specify line size in inches.
- Solid welded cap is standard.

#### **Horizontal Pipe Mount**

- Uses 2" SCH40 pipe welded to saddle style pipe clamp. Specify line size in inches.
- Solid welded cap is standard.

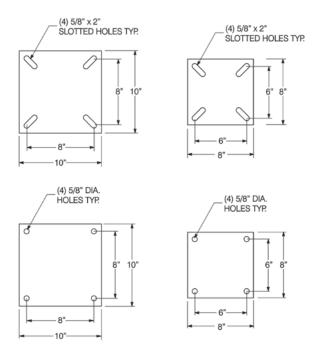
#### Material:

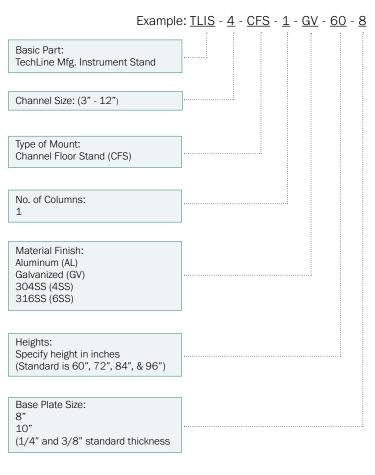
Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### Coating:



#### **Channel Floor Stand**





#### For mounting hardware, see page 105.

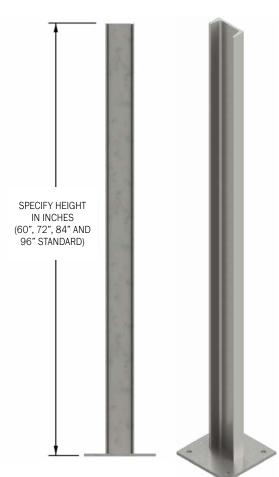
#### **General Specifications:**

TechLine Mfg. offers single channel floor stands fabricated from structural channel and flat structural bar for the base. Customer to specify channel width and height as well as base plate size.

#### Standards:

TechLine Mfg. stocks Hot-Dipped Galvanized 4" wide channel stands with 8"x8"x3/8" base plates in 5',6',7' and 8' heights.

#### **Coating:**

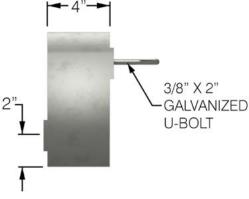




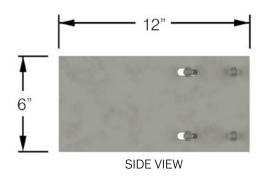
# ment Stan

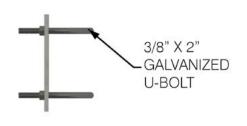
### **Capillary Spool**





### **Mounting Flag**





#### CH-8-\_\_ \_\_

#### **General Specifications:**

8" Schedule 40 Carbon Steel Capillary Spool.

This spool can be mounted horizontally or vertically. 2"x1/4" flat bar has two holes drilled to accept a 3/8" x 2" U-bolt for mounting.

#### Material:

Carbon steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### Coating:

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating, available upon request.

#### TLIS2UFP-\_\_\_\_

#### **General Specifications:**

1/4" Steel Plate Adapter

1/4" steel plate 6" x 12". Plate is slotted to accept two U-bolts that are 3/8" x 2" galvanized steel with two hex nuts.

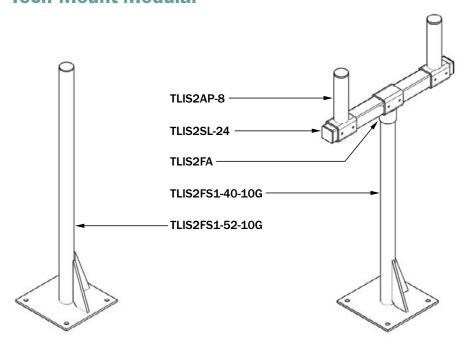
#### Material:

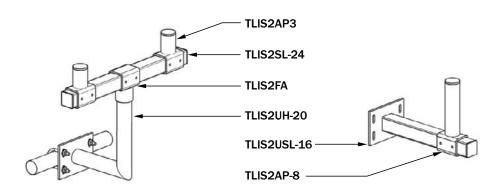
Carbon steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### **Coating:**



### **Tech-Mount Modular**



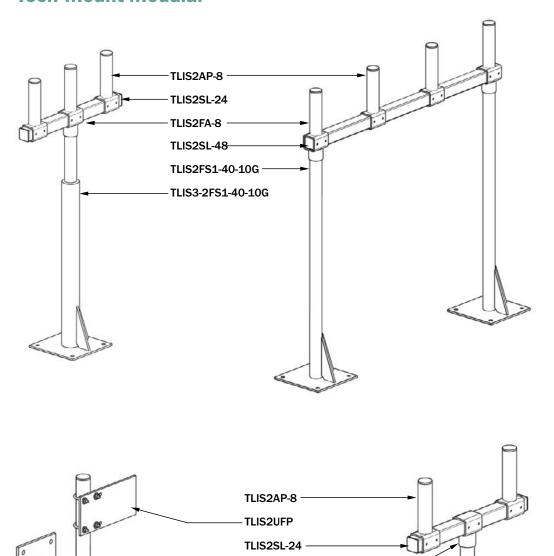


#### **Tech-Mount Modular Systems:**

TechLine Mfg. can help you configure components needed for a modular instrument support system. Each part shown is featured in this catalog. Please refer to pages 99-102 for more detailed information and drawings of the individual parts shown here.



### **Tech-Mount Modular**



TLIS2FA -

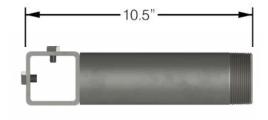
TLIS2WM1-16



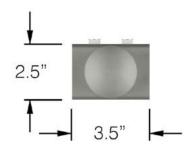
TechLine Mfg. can help you configure components needed for a modular instrument support system. Each part shown is featured in this catalog. Please refer to pages 99-102 for more detailed information and drawings of the individual parts shown here.

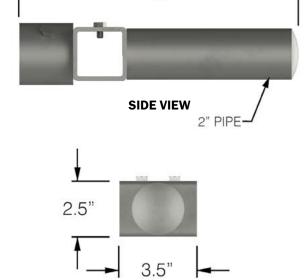


### **Female Pipe and Square Tube Adapter**



**SIDE VIEW** 





TLIS2TAP8\_\*\_\*

#### **General Specifications:**

#### 2-1/2" Square Tube

- This female adapter is primarily used with modular instrument stands.
- 2-1/2" square tube 3-1/2" long welded to the bottom of a 2" SCH 40 pipe extension 8" long pipe thread one end. Four 5/16" x 1/2" zincplated hex bolts in square tubing for securing.

#### **Coating:**

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings such as painting and powder coating available upon request.

#### **Materials:**

Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS.

#### TLIS2FA8 \_\* \_\*

#### **General Specifications:**

#### 2-1/2" Female Adapter with 8" Extension

 This adapter provides a female junction for 2" pipe. 2" SCH 40 pipe extension 8" long welded to 2-1/2" square tube 3-1/2" long, with a 2-1/2" pipe base. Six 5/16" x 1/2" zinc-plated hex bolts in 2-1/2" pipe for securing.

#### **Coating:**

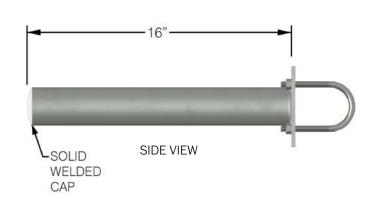
Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings such as painting and powder coating available upon request.

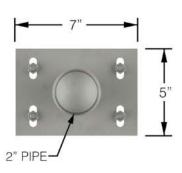
#### Materials:

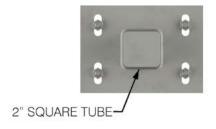
Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS.

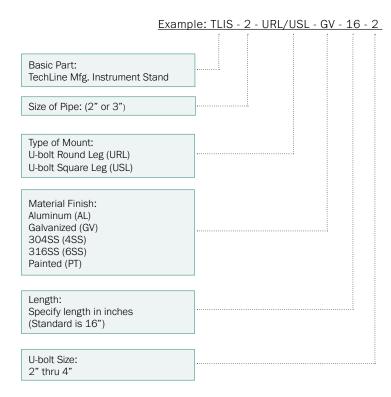


### **Round & Square Leg U-bolt Mount Stands**









#### **General Specifications:**

**U-bolt Mount Stands** 

- 16" long 2" round or square leg extension for use with primary modular instrument stand. Fully galvanized steel welded cap provides weather tight seal as standard
- 1/4" steel plate 5' x 7".

Both can be mounted horizontally or vertically. 3/8" diameter galvanized U-bolts, nuts and washers are supplied with each for mounting.

#### Material:

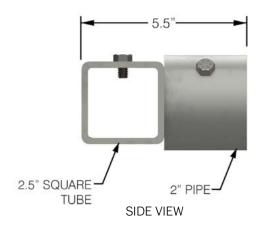
Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### **Coating:**

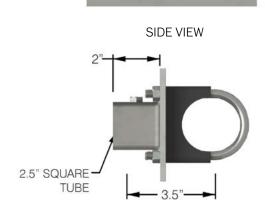


# ument Sta

### **Female Adapter & Square Tube Rack Adapter**







\*\* 2" diameter shown. Muffler Clamp only available in 2" diameter. For larger sizes, Please contact the factory.

#### **TLIS2FA** \* \*

#### **General Specifications:**

#### 2-1/2" Female Adapter

• Has 2 1/2" SCH 40 pipe, extension 2" long which provides a female junction for 2" pipe. This female adapter is used with primary modular instrument stand. 2" SCH 40 pipe 9" long is welded to 2 1/2" square tubing 3 1/2" long. .188" wall thickness in carbon steel. Four 5/16" x 1/2" zinc plated hex bolts in square tubing and two in pipe.

#### Material:

Carbon steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### **Coating:**

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating, available upon request.

#### TLIS2FUS \* \*

#### **General Specifications:**

#### 2-1/2" Square Tube Rack Adapter for use with primary modular instrument stand

• This modular stand can be mounted horizontally or vertically 1/4" steel plate 5" x 7" with 2 1/2" square tubing. .188" wall thickness. Plate is slotted to accept two U-bolts. 3/8" diameter galvanized U-bolts, nuts and washers are supplied with each or mounting.

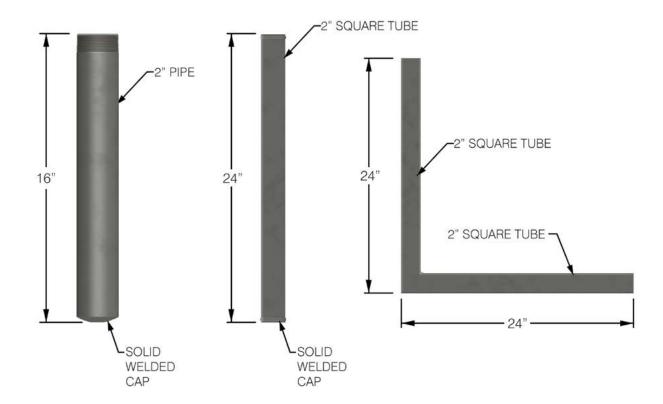
#### Material:

Carbon steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### **Coating:**



### Round Threaded Leg Ext., Square Leg & Elbow Module



#### TLIS2RL16 \* \*

#### **General Specifications:**

#### **Round Threaded Leg Extension**

- 2" pipe, threaded on one end, 16" long. For use with primary modular instrument stand.
- Fully galvanized inside and outside.
- Solid welded cap provided as a standard.

#### Coating:

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating, available upon request.

#### TLIS2SL24 \* \*

#### **General Specifications:**

#### **Square Leg Module**

• 2" square leg tubing 24" long, for use with primary modular instrument stand. Wall thickness. .188" carbon steel.

#### Coating:

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating, available upon request.

#### TLIS2SE24 \* \*

#### **General Specifications:**

#### **Square Elbow Module**

- 2" square leg tubing "L" shaped, each leg 24" long.
   For use with primary modular instrument stand. Wall thickness .188" carbon steel.
- Solid welded cap provided as a standard.

#### **Coating:**

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating, available upon request.

\*\* Select appropriate suffix for material finishes: TLIS-2-\_\_\_- AL

**AL:** Aluminum **SS:** 304 Stainless Steel

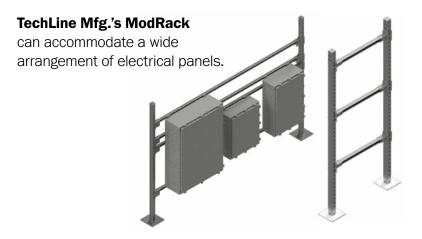
**HDG:** Hot-Dipped Galvanized, ASTM A-123 Note: Contact factory for additional finishes.



# strument ka

### **Medium-Duty ModRack**

ModRack is an innovative medium-duty modular support rack that saves time. This off-the-shelf product can be configured as needed using the stanchions, receivers and strut material.



#### **Adjustable Receivers** accommodate single or double strut (not provided).



#### **Ordering Instructions**

Using the information below, create the part number needed.



**Contact us today to find out** how ModRack can provide solutions for you in the field.

See page 118 for spring nuts if additional hardware is needed.

Note: Direct burial options are available. Provide length needed and add D.B. to end of part number.



1.800.395.3369

<sup>\*</sup>Order 1 set for each crossbar needed

<sup>\*\*</sup>Rack usable width

# Instrument Racks

### **Heavy-Duty ModRack**

ModRack is an innovative heavy-duty modular support rack that saves time. This off-the-shelf product can be configured as needed and has welded supports with cross arms.

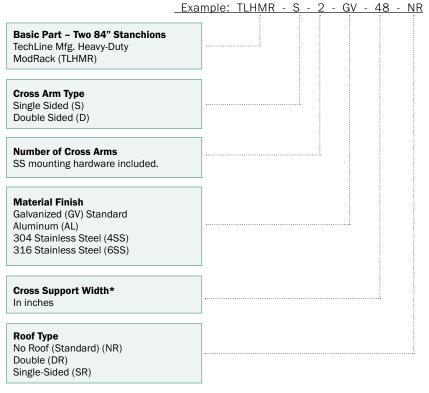
#### **TechLine Mfg.'s ModRack**

can accommodate a wide arrangement of electrical panels.



#### **Ordering Instructions**

Using the information below, create the part number needed.



Contact us today to find out how ModRack can provide solutions for you in the field.

48" and 72" are standard crossbar lengths.
Custom sizes available.

#### See page 118 for spring nuts if additional hardware is needed.

Note: Direct Burial options are available. Provide length needed and add D.B. to end of part number.



<sup>\*</sup>Rack usable width

# Instrument Stands and Racks

#### **Beam Mount Bracket**



Example: TLIS - BM - GV - 4-6 / 8-10 / 10-12 - LG - HARDWARE

Basic Part:
TechLine Mfg. Instrument Stand

Type of Mount: (BM) Beam Mount

Material Finish:
Galvanized (GV)
Aluminum (AL)
304SS (4SS)
316SS (6SS)

Width of Beam:
Specify length in inches

Flange Thickness over .51":
Large (LG)

Appropriate hardware Included with all Beam Mount Brackets.

#### **General Specifications:**

- Beam mount for standard 8"x8" instrument stand base plate.
- 3 Sizes to choose from. 4-6 works for beams from 4"-6" in width, 8-10 works for beams from 8"-10" in width, and the 10-12 works for beams from 10"-12".
- Beam Mount Brackets fit common wide flange beams with flange thickness up to 1/2". Specify "LG" for the larger beam flange sizes.

#### Material:

Galvanized carbon steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

#### Coating:

Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, such as painting and powder coating available upon request.

\*Custom mounting holes are available upon request. Consult factory.

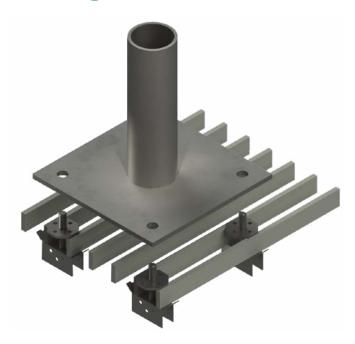
#### **Bracket Load Rating:**

Galvanized Steel - 250 LBS Aluminum - 125 LBS



# Instrument Stands and Racks

### **Grating Fasteners**



**Model GF** is used to fasten lightweight devices to 19-space bar grating. The GF fastener is designed to be used instead of J-Bolts. Model GF will withstand 1000 pounds of direct upward pull force. Available in Galvanized Carbon Steel and 316 Stainless Steel.

**Tools Required:** The Model GF can be installed using a spanner wrench or tongue-and-groove pliers.



#### **Model GF**

This grating fastener is used to mount instrument stands as well as other devices onto existing grating surfaces. Model GF does not fasten grating to structural steel supports.

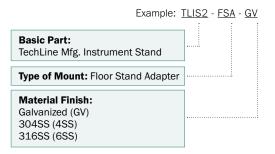
Model GF Grating Fasterners			
GF3-SS	3" Stud	316SS	
GF5-SS	5" Stud	316SS	
GF3-GV	3" Stud	Hot-Dipped Galvanized	
GF5-GV 5" Stud Hot-Dipped Galv		Hot-Dipped Galvanized	

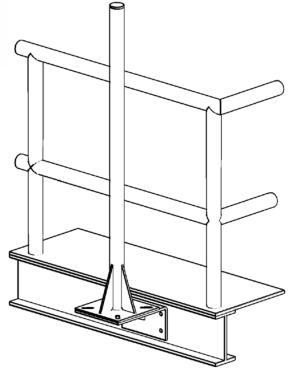


# Instrument Stands and Racks

### Floor Stand Adapter (FSA)







### **General Specifications:**

- The TechLine Mfg. Floor Stand Adapter allows mounting of standard stock floor mount instrument stands to a platform or other structure where concrete or grating mount is not available
- The Floor Stand Adapter accommodates standard 8" and 10" base plates with its slotted hole design. Custom mounting holes available upon request. Consult factory

### Material:

Galvanized Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.

### **Coating:**

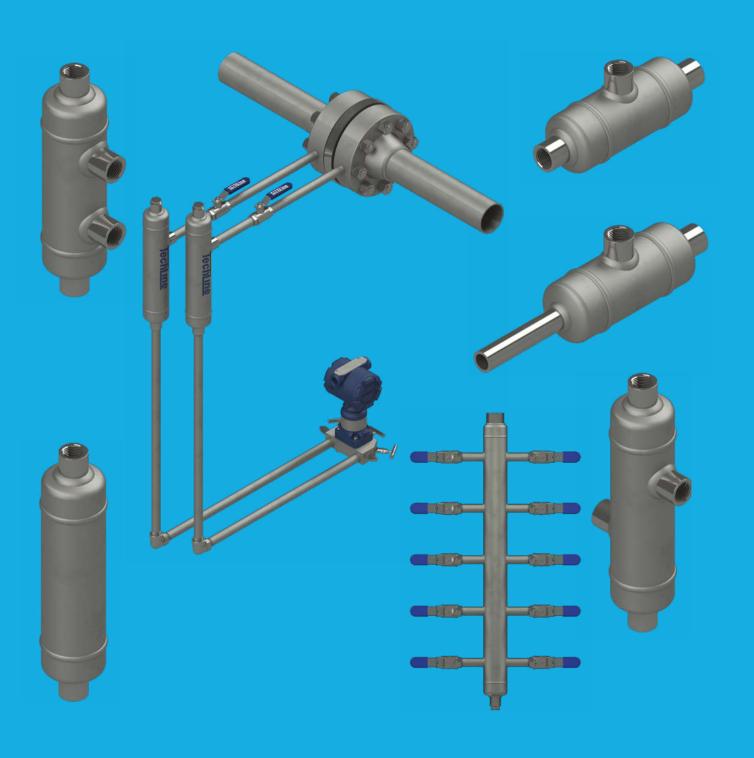
Hot-Dipped Galvanized (meeting ASTM A 123-89 specification) is our standard coating. Optional coatings, painting and powder coating available upon request.



# **NOTES:**

## Tech Line MFG.

# Condensate Chambers / Distribution Manifolds



# Condensate Chambers

### **About TechLine Mfg. Fabricated Condensate Chambers**

### **Condensate Chambers/ Seal Pots:**

TechLine Mfg. chambers are used to protect sensitive metering systems and devices by trapping and holding condensate and foreign material that may accumulate in gaseous service lines. TechLine Mfg. Condensate Chambers are also used as a liquid barrier between the main line and the secondary instruments, preventing steam and other vapors, or corrosive or viscous process fluids from reaching those instruments.

TechLine Mfg. Condensate Chambers & Seal Pots are fabricated from seamless pipe. A variety of materials and wall dimensions are available to meet a customer's design pressure and temperature.

Standard stock chambers are 3" pipe, 12" long with 3 ½" FNPT connections in Schedule 80 316 Stainless Steel or Carbon Steel. Expedited delivery is available for non-stock chambers.

All chambers are hydro-pressure tested and certified prior to shipping. X-ray and Dye-Pen testing are available upon request.

# 1/3 LENGTH OF CHAMBER (TYP.) 12, ½" FNPT 3000# CONNECTIONS (TYP.)

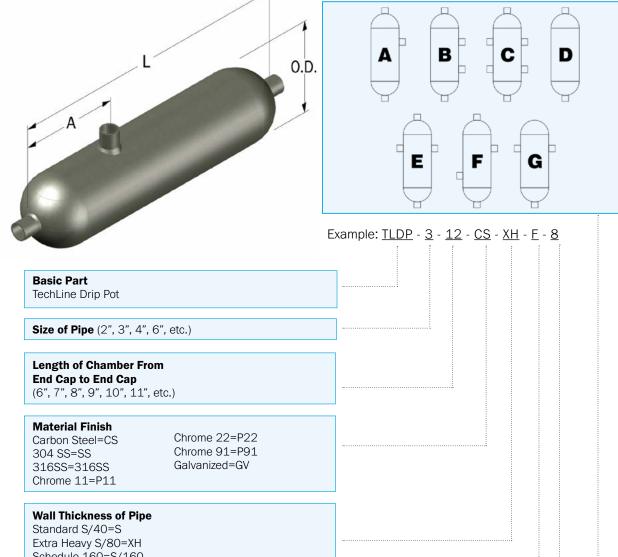
### **ASME Standards**

Pressure Vessels are manufactured following Welding Procedures under provisions of ASME Section IX and hydrotested under provisions of ASME Section VIII Div I: UG-99



# Condensate Cham

### **How to Order Condensate Chambers**



Schedule 160=S/160 Extra Extra Heavy=XXH

### **Connection Style (Code)**

Female NPT = F Socket Weld = S Special = X

### **Connection Size (Code)**

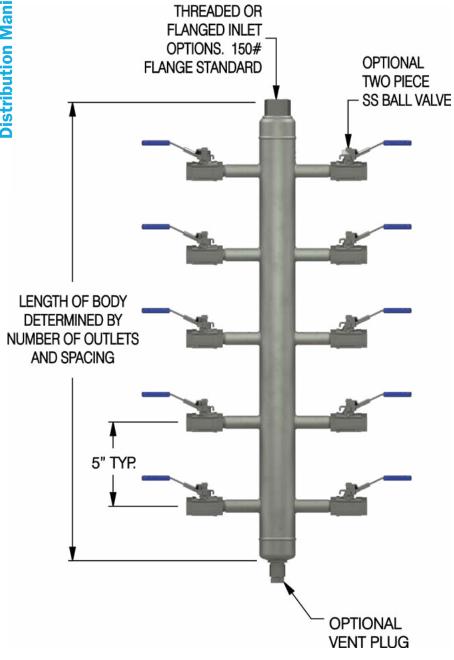
1/4" = 43/4" = 123/8" = 61" = 16 1/2" = 8 Special = X

### **Port Configuration**



# Manifolds

### **Distribution Manifolds & Headers**



### Notes:

TechLine Mfg. Distribution Manifolds/ Air Headers are manufactured in accordance with customer specifications allowing for ease of installation. Offered in various pipe sizes, schedules and lengths, the distance between taps may vary depending upon customer specifications. Standard dimensions are 5" apart. Connections are available in threaded, socket weld or flanged.

Two piece 1/2' threaded TechLine International ball valves and 1/2" bleed valve.

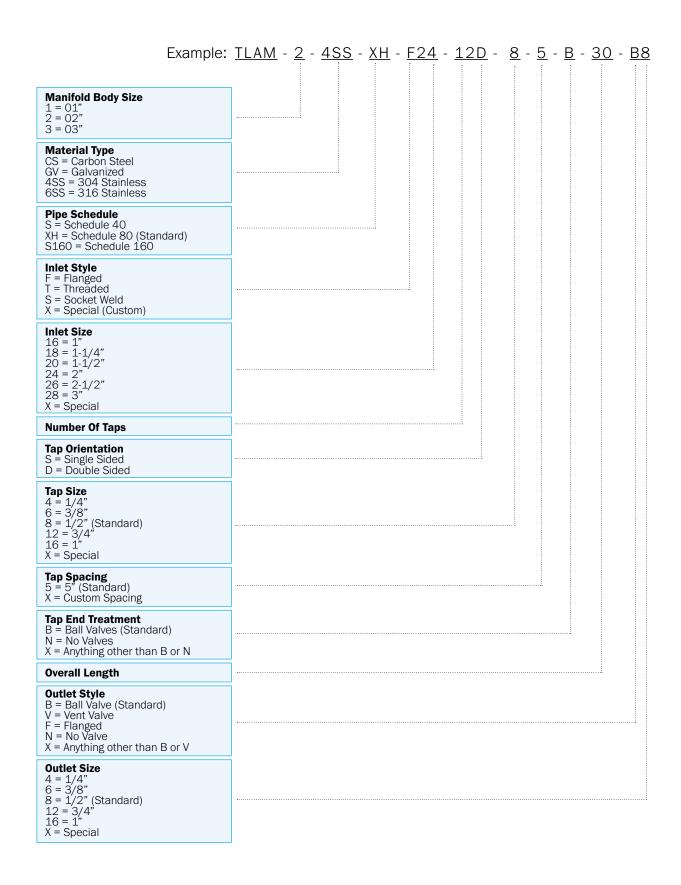
### Material:

Carbon Steel is standard. Aluminum, 304SS, and 316SS materials available upon request.





### **How To Order Distribution Manifolds**





# Condensate Chambers /

# Distribution Manifolds



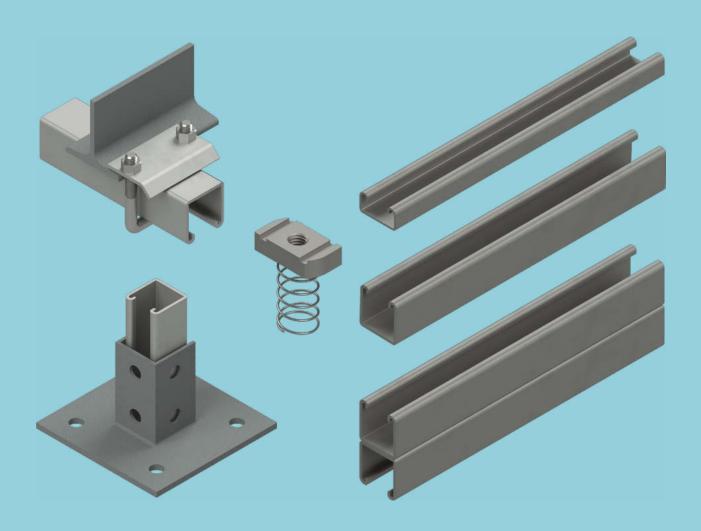


114

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# Tech\_Line® MFG.

## Strut Products





### **Single Strut**



1000 **I1315** 

	W —	D	L /
Standard Strut			
1000 <u>*</u> <u>*</u>	1 5/8"	15/8"	10'

\*\* Select appropriate suffix for Material Finishes: 1000-AL-S

AL: Aluminum

HDG: Hot-Dipped Galvanized

PG: PreGalvanized

4S: 304SS 6S: 316SS

S: Place an "S": after product number for

a slotted strut.

All material offered is 12 Gauge thickness.

	W —	D	L /
Shallow Strut			
	15/8"	13/16"	10'

\*\* Select appropriate suffix for Material Finishes: I1315-AL-S

AL: Aluminum

HDG: Hot-Dipped Galvanized

PG: PreGalvanized

4S: 304SS 6S: 316SS

S: Place an "S" after product number for

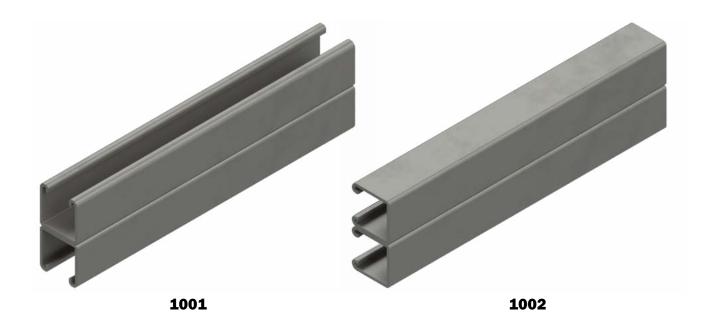
a slotted strut.

All material offered is 12 Gauge thickness.





### **Double Strut**



	$\left(w-\right)$	D	L /
Double Strut			
1001 <u>*</u> <u>*</u>	1 5/8"	1 5/8"	10'

\*\* Select appropriate suffix for Material Finishes: 1001-AL-S

AL: Aluminum

HDG: Hot-Dipped Galvanized

PG: PreGalvanized

4S: 304SS 6S: 316SS

S: Place an "S": after product number for

a slotted strut.

All material offered is 12 Gauge thickness.

	( W —	D	L /
Double Strut			
1002 <u>*</u> <u>*</u>	15/8"	13/16"	10'

\*\* Select appropriate suffix for Material Finishes: 1002-AL-S

AL: Aluminum

HDG: Hot-Dipped Galvanized

PG: PreGalvanized

4S: 304SS 6S: 316SS

S: Place an "S": after product number for

a slotted strut.

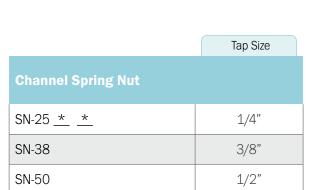
All material offered is 12 Gauge thickness.





### **Channel Spring Nut & Beam Clamp**





\*\* Select appropriate suffix for Material Finishes: SN-25-ZP

ZP: Zinc Plated

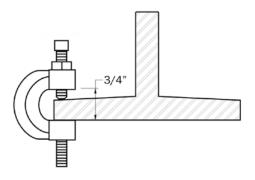
SS: 316SS (standard)

**Easy Installation** 

Fits all 15/8" Channel



	Tap Size
Beam Clamp	
RC50 EP	1/2"
RC375 EP	3/8"



\*\* Select appropriate suffix for Material Finishes: RC50-EP

EP: Electroplated SS: 304SS





### **Square Washer & Angle Fittings**



	Tap Size
Square Washer	
SW-25 <u>*</u> <u>*</u>	1/4"
SW-38	3/8"
SW-50	1/2"

\*\* Select appropriate suffix for Material Finishes: SW-25- $\mathbb{ZP}$ 

ZP: Zinc-Plated

HDG: Hot-Dipped Galvanized

SS: 304SS

Easy Installation Fits all 1 5/8" Channel

Angle Fitting	
AE-25 <u>*</u> <u>*</u>	1/4"
AE-38	3/8"
AE-50	1/2"

\*\* Select appropriate suffix for Material Finishes: AE-25-ZP

ZP: Zinc-Plated

HDG: Hot-Dipped Galvanized

SS: 304SS

Easy Installation Fits all 1 5/8" Channel





### Flat Elbow & Tee





	Tap Size
Flat Elbow	
FE-50 <u>*</u> *	1/2"

	Tap Size
Flat Tee	
FT-50 <u>*</u> <u>*</u>	1/2"

\*\* Select appropriate suffix for Material Finishes: FE-50-ZP

ZP: Zinc-Plated

HDG: Hot-Dipped Galvanized

SS: 304SS

Easy Installation Fits all 15/8" Channel

Fitting Designed for Use with 1/2" Bolts





### **Window Type Beam Clamp**





	W —	Н ţ
Window Type Beam Clamp		
WC-158 - <u>*</u> <u>*</u>	3"	3 3/8"

\*\* Select appropriate suffix for Material Finishes: WC-158 - $\mathbb{ZP}$ 

ZP: Zinc Plated SS: 304SS

3/8" Square U-bolt provided

Fits all 1 5/8" Channel

	RIGID CONDUIT	A
Right Angle Beam (	Clamp	
RA50 - <u>*</u> <u>*</u>	1/2"	2"
RA75 - <u>*</u> <u>*</u>	3/4"	2 1/8"
RA100 - <u>*</u> <u>*</u>	1"	2 5/8"
RA125 - <u>*</u> <u>*</u>	1 1/4"	2 7/8"
RA150 - <u>*</u> <u>*</u>	1 1/2"	3 3/4"
RA200 - <u>*</u> <u>*</u>	2"	3 7/8"
RA250 - <u>*</u> <u>*</u>	2 1/2"	4 5/8"
RA300 - <u>*</u> <u>*</u>	3"	5 1/4"
RA350 - <u>*</u> <u>*</u>	3 1/2"	5 3/4"
RA400 - <u>*</u> <u>*</u>	4"	6 1/4"

\*\* Select appropriate suffix for Material Finishes: RA50 -ZP

ZP: Zinc Plated SS: 304SS

3/8" U-bolt provided





### **Strut Post Base**



### **Strut Post Base**

PB-158 <u>\*</u> <u>\*</u>

\*\* Select appropriate suffix for Material Finishes: PB-158-ZP

ZP: Zinc-Plated

HDG: Hot-Dipped Galvanized

SS: 304SS

**Easy Installation** Fits all 1 5/8" Channel

### **Cushion Clamp**

Cushion Clamps are used to secure tubing or pipe to strut. This provides vibration isolation or protection from dissimilar metals. Cushion Clamps come in both a Zincplated and 316SS finish. Complete assembly comes with cushion insert, outer metal clamp and hardware.

Steel Part No.	SS Part No.	Tube Size		
Cushion Clamps				
TLC-025-W3-K	TLC-025-W4-K	1/4"		
TLC-037-W3-K	TLC-037-W4-K	3/8"		
TLC-050-W3-K	TLC-050-W4-K	1/2"		
TLC-075-W3-K	TLC-075-W4-K	3/4"		
TLC-100-W3-K	TLC-100-W4-K	1"		

Pipe sizes available upon request.



\*Standard stock sizes and finishes listed. Contact TechLine Mfg. for additional tubing and pipe diameter sizes.





### **Strut Clamps**

	SIZE	LOAD		
Conduit Strut Clamps				
CC50 - <u>*</u> *	1/2"	400#		
CC75 - <u>*</u> *	3/4"	400#		
CC100 - <u>*</u> *	1"	400#		
CC125 - <u>*</u> *	1-1/4"	600#		
CC150 - <u>*</u> *	1-1/2"	600#		
CC200 - <u>*</u> *	2"	600#		
CC250 - <u>*</u> *	2-1/2"	800#		
CC300 - <u>*</u> *	3"	800#		
CC350 - <u>*</u> *	3-1/2"	1000#		
CC400 - <u>*</u> *	4"	1000#		
Tubing Strut Clamps				
TC25 - <u>*</u> *	1/4"	400#		
TC38 - <u>*</u> *	3/8"	400#		
TC50 - <u>*</u> *	1/2"	400#		
TC63 - <u>*</u> *	5/8"	400#		
TC75 - <u>*</u> *	3/4"	400#		
TC100 - <u>*</u> *	1"	600#		
TC125 - <u>*</u> *	1-1/4"	600#		
TC138 - <u>*</u> *	1-3/8"	600#		
TC150 - <u>*</u> *	1-1/2"	600#		
TC175 - <u>*</u> *	1-3/4"	800#		
TC200 - <u>*</u> *	2"	800#		
TC250 - <u>*</u> *	2-1/2"	800#		
TC300 - <u>*</u> *	3"	800#		
TC350 - <u>*</u> *	3-1/2"	800#		
TC400 - <u>*</u> *	4"	800#		



- Easy Installation
- Conduit Clamps Fit Both EMT and Rigid Conduit
- Tubing Clamps Fit O.D. Tubing
- Nut and Bolt Included

### Fits all 1 5/8" Channel

Material Finishes: CC-25-ZP

ZP: Zinc Plated SS: 304SS





### **Terms and Conditions**

### 1. Acceptance

(a) Acceptance of orders by Techline Mfg, is based on the following terms. These terms supersede all prior correspondence. Additional or different terms must be agreed to in writing by Techline mfg

(b) Techline Mfg. failure to insist on strict performance of any of the following terms or additional terms agreed to will not constitute a waiver of that or other terms and will not be considered a breach of contract.

(c) All orders are subject to final acceptance at Techline Mfg.'s primary facility, Spanish Fort,

### Al.

### 2. Price, Payment Terms, Taxes, and Title

(a) Unless otherwise stated, all pricing is firm for 30 days from the date of the quotation and is firm for goods released within 90 days of order acceptance. Quoted prices are valid only for the quantities indicated per item. A service charge of \$25.00 will be accessed for any order less than \$100.00

(b) All invoices are payable in U S Dollars and are due in Net thirty (30) Days after delivery. If Buyer fails to fulfill the terms of payment, Techline Mfg. may defer future shipments to the buyer, or at its option, cancel the unshipped portions of the Buyer's orders. Buyer agrees to pay (i) interest at 12% annum, calculated monthly, on all past due invoices, (ii) In the event that legal action is required to collect past due invoices, buyer shall pay all reasonable collection agency costs, attorney fees and court cost incurred by Techline Mfg.

(c) "Sales", "Use" or similar taxes imposed on the sale or transaction are not included in the quoted price. If applicable, such taxes will be added to the invoice and are to be remitted by the

(d) Until full payment of all obligations of the Buyer for an order, Techline Mfg., reserves the title (but not the risk of loss) to all Products furnished under that order. If the Buyer defaults in payment or performance or becomes subject to insolvency, receivership or bankruptcy proceedings or makes an assignment for the benefit of creditors, or without the consent of Techline Mfg. voluntarily or involuntarily sells, transfers, leases or permits any lien or attachment on the Products. Techline Mfg., may treat all amounts then or thereafter owing by Buyer to be immediately due and payable and Techline Mfg., at its election Techline Mfg. may repossess Products for which Buyer has not paid in full. In the event of repossession of Products under this section, Buyer agrees that Techline Mfg., may enter the premises where the Products may be located and remove them without notice and without being liable to Buyer for such repossession. Buyer will not set off invoiced amounts or any portion thereof against sums that are due or may become due from Techline Mfg., its parents, affiliates, or subsidiaries. Buyer grants Techline Mfg., a security interest in all Products for which title has passed (including all after-acquired Products) that Techline Mfg. sells Buyer and all proceeds of Products (including but not limited to all products in which Products are incorporated and any funds and products that Buyer receives in exchange for Products). Buyer consents to Techline Mfg. execution of any documents to evidence and perfect this security interest, and agrees to execute the same if requested by Techline Mfg.

### 3. Shipping, Freight and Packaging

(a) Techline Mfg. reserves the right to make partial shipments unless otherwise specified in writing by the buyer.

(b) Freight charges may not be included in the quotation. Unless, expressly agreed to by Techline mfg. in writing, all applicable freight charges will be added to the invoice and are to be remitted by the buyer.

(c) Packaging costs may not be included in the quotation. Unless, expressly agreed to by Techline mfg. in writing, all applicable packaging costs will be added to the invoice and are to be remitted by the buyer.

### 4. Force Majeure

Techline Mfg., shall not be liable for any failure to perform or delay in performing its obligations resulting directly or indirectly from or contributed to by any acts of God, acts of Buyer or those under Buyer's control, acts of government or other civil or military authorities, priorities, strikes, or other labor disputes, fires, accidents, floods, epidemics, war, riot, embargoes, delays in transportation, lack of or inability to obtain raw materials, components, labor, fuel or supplies, or other circumstances beyond Techline Mfg. reasonable control ("Force Majeure Event"). If Techline Mfg. elects, the time for performance shall be extended by a period of time equal to the time lost because of any delays caused by reasons of a Force Majeure Event. Should Techline Mfg. be prevented from completing Buyer's order or any part thereof because of any Force Majeure Event, then Buyer agrees promptly upon request and upon receipt of invoice therefor, to pay Seller for any Product or Products then completed.

### 4. Delivery and Risk of Loss

(a) Unless otherwise agreed in writing, all deliveries of Products will be EXW (Incoterms 2000) Techline Mfg. facility. Products will be packed in Techline Mfg. standard commercial shipping packages.

(b) Delivery and shipping dates are approximate and represent Techline Mfg. best estimate of the time required to make delivery or shipment. Time is not of the essence with respect to the transactions covered by these terms and conditions, except with respect to Buyer's obligation make all related payments. Techline Mfg.'s obligations under these terms and conditions will be dependent upon Techline Mfg.'s ability to obtain necessary raw materials and components.

### 5. Shortages and Damages

(a) Claims for shortages must be made in writing to Techline Mfg. within two (2) weeks of receipt of the product or the invoice for the product received, whichever is sooner.

(b) Freight claims, for any damaged incurred in transit, are the responsibility of the buyer.

### 6. Cancellation / Liquidation Damages

Orders accepted by Techline Mfg. may not be cancelled or deliveries deferred by the buyer without written consent of Techline Mfg. Techline Mfg., reserves the right to access liquidation damages for cancellation or other order changes. The determination of the exact cancellation charges will be based on but not limited to: the nature of the order, product type, or material. Cancellation charges will not exceed the following schedule; 1 week – 20%, 2 weeks-45%, 3Weeks-90%.

### 7. Returns

(a) Techline Mfg. will not accept product returns without written prior approval.

(b) Because of the nature of the product specialty fabricated items (seal pots, special fittings, air headers etc.) are not returnable.

(c) Returns from project awards in excess of \$5,000 will be limited to a 10% overage and must not exceed 10% per line item.

(d) Acceptance of all returns is subject to inspection of goods upon receipt by Techline Mfg. Material in non-resalable condition will not be credited. Consult factory for credit amount available for returned goods.

(e) Freight for returned goods is the responsibility of the buyer.

### 8. Limited Warranty

(a) Techline Mfg. warrants to each original Buyer of Products that Products are, at the time of delivery to the Buyer, in good working order, free of defects in material and workmanship, and conform to Techline Mfg.'s official published specifications, provided that no warranty is made with respect to any Products, component parts, or accessories manufactured by others but supplied by Techline Mfg..

(b) Techline Mfg.'s obligation under this warranty for any Product proved not to be as warranted within the applicable warranty period is limited to, at its option, replacing the Product, refunding the purchase price of the Product, or using reasonable efforts to repair the Product during normal business hours at any authorized service facility of Techline Mfg. All costs of transportation of any Product claimed not to be as warranted and of any repaired or replacement Product to or from such service facility shall be borne by Buyer.

(c) Techline Mfg. may require the return of any Product claimed not to be as warranted to one of its facilities, transportation prepaid by Buyer, to establish a claim under this warranty. The cost of labor for removing a Product and for installing a repaired or replacement Product shall be borne by Buyer. Replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period of the Products in which they are installed to the same extent as if such parts were original components. Warranty services provided under these terms and conditions do not assure uninterrupted operations of Products; Techline Mfg. shall not be liable for damages caused by any delays involving warranty service.

(d) The warranty period for Products is one (1) year from the date of shipment unless otherwise agreed by Techline Mfg. in writing.

(e) EXCEPT FOR THE EXPRESS WARRANTY SET FORTH ABOVE, TECHLINE MFG. PROVIDES PRODUCTS AS-IS AND MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, REGARDING THE PRODUCTS, THEIR FITNESS FOR ANY PARTICULAR PURPOSE, THEIR MERCHANTIBILITY, THEIR QUALITY, THEIR NONINFRINGEMENT, OR OTHERWISE. IN NO EVENT SHALL TECHLINE MFG BE LIABLE FOR THE COST OF PROCUREMENT AND INSTALLATION OF SUBSTITUTE PRODUCT(S).

### 9. LIMITATION OF LIABILITY

IN NO EVENT WILL TECHLINE MFG. BE LIABLE FOR ANY SPECIAL DAMAGES, CONSEQUENTIAL DAMAGES, INDIRECT DAMAGES, INCIDENTAL DAMAGES, STATUTORY DAMAGES, EXEMPLARY OR PUNITIVE DAMAGES, LOSS OF PROFITS, LOSS OF REVENUE, LIQUIDATED DAMAGES, OR LOSS OF USE, EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. TECHLINE MFG.'S LIABILITY FOR DAMAGES ARISING OUT OF OR RELATED TO A PRODUCT SHALL IN NO CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT FROM WHICH THE CLAIM ARISES. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE LIMITATIONS AND EXCLUSIONS WILL APPLY WHETHER TECHLINE MFG'S LIABILITY ARISES OR RESULTS FROM BREACH OF CONTRACT, BREACH OF WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE, GROSS NEGLIGENCE, MALICE OR INTENTIONAL CONDUCT), STRICT LIABILITY, BY OPERATION OF LAW, OR OTHERWISE.

### 10. Changes in Product Design or Manufacture

Techline Mfg. reserves the right to change, discontinue or modify the design or construction of any of its products and to substitute Products equal to or superior to those originally specified or purchased.

### 11. Patent Indemnity

In the event any Product is made in accordance with drawings, samples or manufacturing specifications designated by Buyer, Buyer agrees to indemnify, defend, and hold Techline Mfg, harmless from any and all damages, costs and expenses (including attorney's fees) relating to any claim arising from or relating to the design, distribution, manufacture, marketing, sale, or use of the Product or arising from or relating to a claim that such Product furnished to Buyer by Techline Mfg, or the use thereof, infringes any claim of any patent, foreign or domestic, and Buyer agrees at its own expense to undertake the defense of any suit against Techline Mfg. brought upon by such claim or claims.

### 12. Governing Law

These terms and conditions shall be governed by and construed in accordance with the laws of the State of Alabama, without reference to its choice of law rules. If Buyer is incorporated in the United States, any claim or litigation arising out of or relating to Products shall be brought exclusively in a court of competent jurisdiction in Baldwin County, Alabama. If Buyer is incorporated outside of the United States, any dispute will be resolved by arbitration in Spanish Fort, Alabama, by three arbitrators and under the International Chamber of Commerce Rules of Arbitration. The language of the arbitration will be English. In all cases, Buyer and Seller expressly exclude from application the United Nations Convention on Contracts for the International Sale of Goods.

### 13. Waiver

No waiver of any portion of these terms and conditions shall be effective unless in writing and signed by an authorized representative of Techline Mfg. Any such waiver shall be effective only for instance given, and shall not operate as a waiver with respect to any other conditions or obligations under these terms and conditions.

### 14. Severability

If any provision of these terms and conditions is determined to be illegal, invalid, or unenforceable, the validity and enforceability of the remaining provisions of these terms and conditions will not be affected.

TLM 091313 March 2015



Waterfall | Downspout Ladder Tray Track tray and fittings. Indicate requirements by noting Covers: Pre-Fabricated covers are available for Snap Transition Universal STUSB STLTT All fittings should be supported w/in 2' of each extremity ģ ğ **Exit Fittings** "CVF" in the appropriate box. Hanger Bkt Wall Bkt Post Base Hold Down **Support Requirements** Conduit STCOS STHC Splice ğ Q Ş Fax: Zip: Exp Guide STFPB Thermal STEG ģ ģ State: Large Radius Sweeps Indicate Type & Qty Installing Contractor: STWB Divider STDS Strip Qty Contact Name: Type Company: Address: STHB ģ Phone: Email: City: Blind End STCC STBE Cross Q Ş Fitting Requirements Accessories RH,LH,BK STCT Plane Tee ģ ģ Gromets Adapter STG Reducing Vert Outside | Vert Inside | Horz Elb STHE 1/2" ģ Q ty Area: Splice Plates | Adjust Vert Adjust Horz STAHS STWS Spool STVI ģ ğ Wire Fax to 251.380.7301 or email to sales@techlinemfg.com Splice plates may be used as expansion joints Clamps STAVS STVO STWC Wire ģ Q Ş **Material Take-Off Worksheet** Linear Footage Cable Tray Requirements Cable Tray Grounding Clamps STCS STCTG **Splice Requirements** STC Q Ş **Bonding Jumpers Tray Widths Tray Widths** Project Name: ST0203 .<sub>4</sub> ..9 <u>.</u>9 4"

# Gustom Products

### **Custom Products**

TechLine Mfg. offers custom fabrication for many of our product categories. Please contact TechLine Mfg. for custom solutions:

- Instrument Stands/Supports
- Racks
- **Brackets**
- Condensate Pots
- Distribution Manifolds











# Time-Saving Innovation

Don't miss our time-saving innovative products!

### **Beam Mount Bracket**

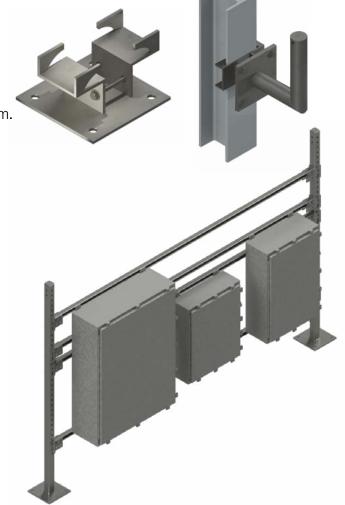
Our Beam Mount Bracket can be used for attaching instrument stands, cameras, TV monitors, or other devices to a structural beam.

Find out more on page 105.



Check out our modular instrument and electrical rack. This rack saves time and money in the field, using off-the-shelf products. Easy to ship and install.

Find out more on pages 103 and 104.

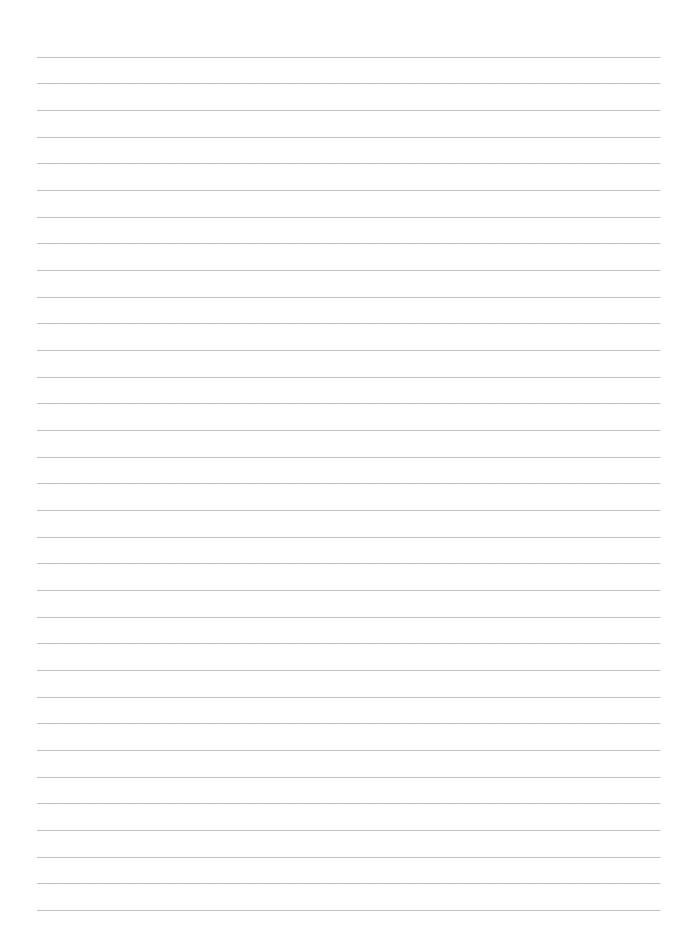


Ask about our design services.

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# **NOTES:**





# Leader in Instrumentation & Electrical Supports

