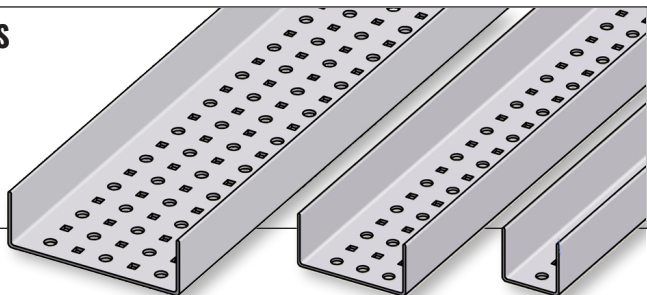


# CABLE-RACE®

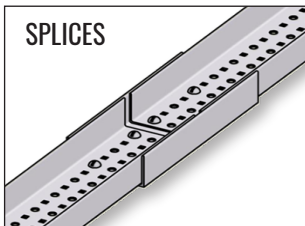
Dedicated tray support system for industrial instrument and control installations

## CHANNELS 2" DEEP

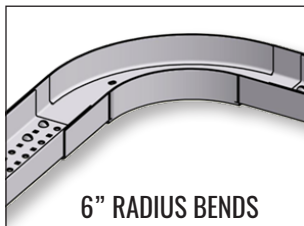


JCWCO CABLE-RACE® 2" deep tray system offers support of cabling for industrial instrumentation and control. 2" deep CABLE-RACE® tray features our heavier gage open tray system available in 4 corrosion-resistant metals and 3 channel widths. Components include a complete variety of fixed and adjustable tray connectors with hardware and cable clamps. See our tray load and deflection program now featured on our website ([www.JCWCO.com](http://www.JCWCO.com)) to help determine the correct cable tray for your system.

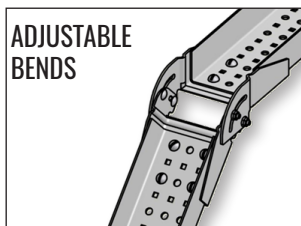
### SPLICES



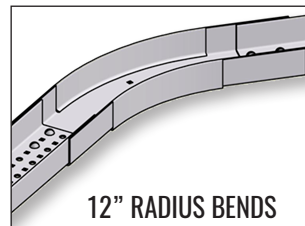
### 6" RADIUS BENDS



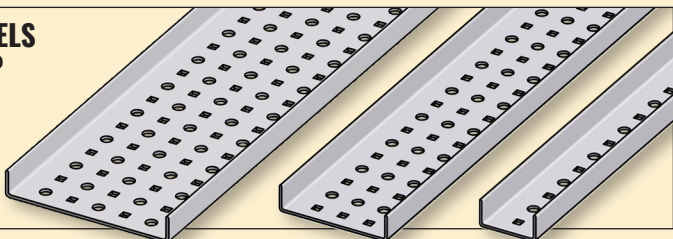
### ADJUSTABLE BENDS



### 12" RADIUS BENDS

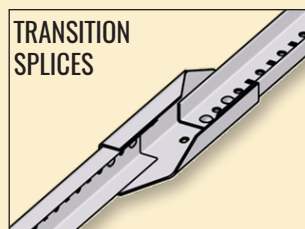


## CHANNELS 1" DEEP

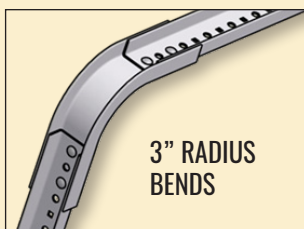


JCWCO CABLE-RACE® 1" deep tray system offers support of cabling for industrial instrumentation and control. 1" deep CABLE-RACE® tray features our lighter gage open tray system available in 4 corrosion-resistant metals and 3 channel widths. Components include a complete variety of fixed and adjustable tray connectors with hardware and cable clamps. See our tray load and deflection program now featured on our website ([www.JCWCO.com](http://www.JCWCO.com)) to help determine the correct cable tray for your system.

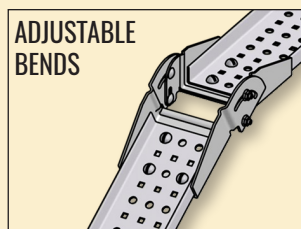
### TRANSITION SPLICES



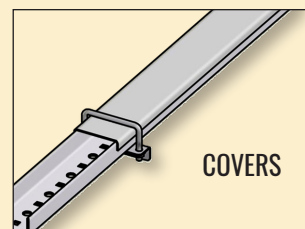
### 3" RADIUS BENDS



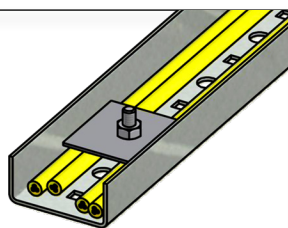
### ADJUSTABLE BENDS



### COVERS



## CLAMPS AND HARDWARE



JCWCO CABLE-RACE® is a complete system. Connecting bolts are included with all JCWCO channel splices and bends (3/8" dia. for 2" deep tray and 1/4" dia. for 1" deep tray). Tray covers, cable clamps, and system hardware are available to create a cable support system to fit your requirements.

CABLE-RACE® uses only tightenable fasteners to secure tray connections and maintain the conductivity necessary for UL classification.

## ► About James C. White Company, Inc.

We began as a partnership in 1952 as a distributor of tube fittings and valves. Two years later Jim and Bettye White took the Company to a new level and began manufacturing TUBETRACK®, Jim White's design of the first use of a Tray Support System for instrumentation tubing. The TUBETRACK® Tray System was the first industrial category of Instrument Support Tray.

To this day we have maintained the culture of quality and attention to detail that Jim and Bettye White so deeply ingrained in our personnel. Jim White was well known for many "famous" mottoes he used to guide the company and which he passed on to the current generation of company leadership. One of those mottoes that still directs the company today is:

**"Good business is business that is good for both parties."**



Under the direction of Tom White, owner and president, we have made significant advances in new product design and manufacturing improvements since 2005. James C. White Co. is a growing, innovative manufacturing company with complete fabrication and machining capabilities. Although a small business, we have served some of the world's largest EPC firms and supplied materials on time to some of the largest industrial projects in the world.

We welcome opportunities to partner with you to solve your special instrumentation support needs. Over the years we have custom machined or fabricated numerous custom products which are not catalog-standard items. If you don't find what you need in our catalogs, please contact the factory. There is a good possibility we may already have a solution or can partner with you to provide one.


Thank you for your continued interest in the James C. White Company.

## ► Quality Assurance Program

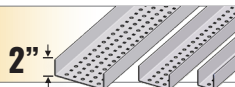
- Maintained and advanced for over 40 years
- Designed to conform to applicable requirements of:  
10CFR50 Appendix B, ASME NQA-1a-2009, ASME Boiler and Pressure Vessel Code Section III, Subarticle NCA-3800, MIL-Q-9858A, MIL-I-45208A, and CSA-299.2.
- Controls our manufacturing, inspection, and shipping activities as applicable to your order requirements
- Meets or exceeds various other Q.A. Program requirements, such as ISO
- Routinely audited by various customers and utilities, including NUPIC members

### Safety-Related Products

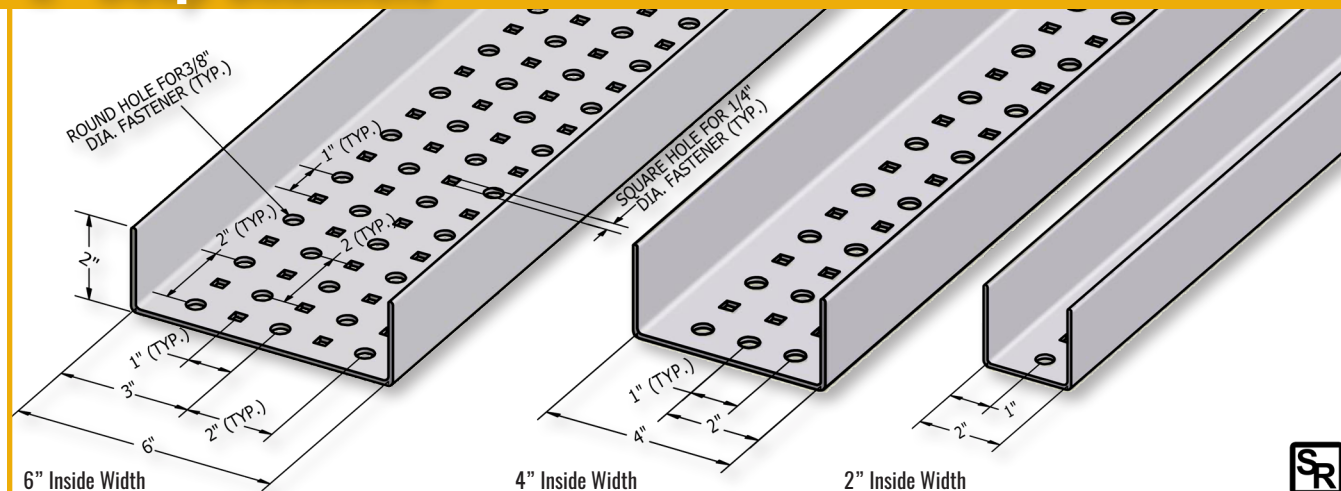


Throughout our TUBETRACK® and CABLE-RACE® catalogs, Hot-Dip Galvanized and Stainless Steel materials marked with a  symbol can be supplied as Safety-Related for use in nuclear facilities, in accordance with 10CFR50 Appendix B, ASME NQA-1, ASME B&PV Code, Section III NCA-3800 and/or CSA N299.2.

Contact our Nuclear Sales Department regarding availability, load rating, material and part specifications, or to inquire about the possibility of procuring other materials as Safety-Related.



## 2" Deep Channels



### Channels - 2" Deep

CABLE-RACE® standard tray channel sections are available in 4 corrosion-resistant metals and 3 channel widths. CABLE-RACE® components are factory inspected for quality of fabrication detail, finish, straightness, and appearance.

Channel tray details are shown for standard CABLE-RACE® part numbers, materials, widths, lengths, gages, and covers. **Other non-standard gages are available for 304SS and 316SS channels but are generally not available from factory stock.** See page 29 for Load and Deflection information.

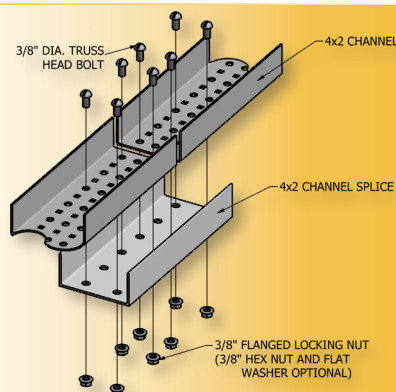
Expect quality product, service, and timely delivery from JCWCO.

Metal	Width	Channel Part No.	Chan. Gage	Chan. Length	Cover Part No.	Cover Length
Hot-Dip Galv.	2	CH2-GC2	12	20'	CV-CH2-MG	10'
Steel*	4	CH4-GC2			CV-CH4-MG	
	6	CH6-GC2			CV-CH6-MG	
Natural Finish Alum.	2	CH2-NA2	12	20'	CV-CH2-NA	10'
	4	CH4-NA2			CV-CH4-NA	
	6	CH6-NA2			CV-CH6-NA	
Stainless Steel T-304	2	CH2-SS2T4-144-6	16	12'	CV-CH2-SS4-144	12'
	4	CH4-SS2T4-144-6			CV-CH4-SS4-144	
	6	CH6-SS2T4-144-6			CV-CH6-SS4-144	
Stainless Steel T-316	2	CH2-SS2T6-144-6	16	12'	CV-CH2-SS6-144	12'
	4	CH4-SS2T6-144-6			CV-CH4-SS6-144	
	6	CH6-SS2T6-144-6			CV-CH6-SS6-144	



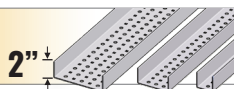
Structural connections for 2" deep CABLE-RACE® tray splices and bends are provided with 3/8" dia. bolt sets (truss head bolts with flanged locking nuts). Truss head bolts with hex nuts and flat washers are optional upon request. Bolt sets are supplied with all CABLE-RACE® splices and bends. Standard fastener metals include:

- Zinc-plated bolts with galvanized fittings
- 18-8 stainless bolts with aluminum fittings
- 18-8 stainless bolts with 304 SS fittings
- 316 stainless bolts with 316 SS fittings

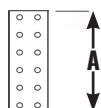


### Bolted Connections

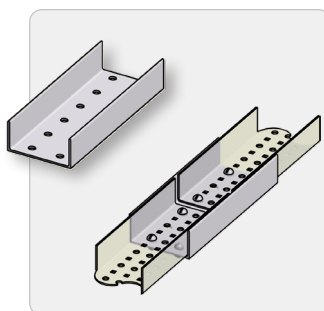
CABLE-RACE® uses only tightenable fasteners to secure tray connections and maintain the conductivity necessary for UL classification. Splices bolt through the first and third round holes in each end of a splice for maximum strength. Bolt sets are supplied with each CABLE-RACE® splice and bend. Stainless steel bolting is standard with aluminum CABLE-RACE® fittings. Stainless steel bolting is optional with galvanized CABLE-RACE® for an additional cost. Contact factory for additional information.



### Splice Channel



Includes 3/8" dia. bolting



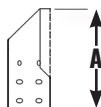
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SC2-GC2	CV-S2MG2
Steel*	4	SC4-GC2	CV-S4MG2
	6	SC6-GC2	CV-S6MG2
Natural Finish Alum.	2	SC2-NA2	CV-S2NA2
	4	SC4-NA2	CV-S4NA2
	6	SC6-NA2	CV-S6NA2
Stainless Steel	2	SC2-SS2T4	CV-S2SS2T4
	4	SC4-SS2T4	CV-S4SS2T4
T-304	6	SC6-SS2T4	CV-S6SS2T4
Stainless Steel	2	SC2-SS2T6	CV-S2SS2T6
	4	SC4-SS2T6	CV-S4SS2T6
T-316	6	SC6-SS2T6	CV-S6SS2T6

**A: 11.50"**

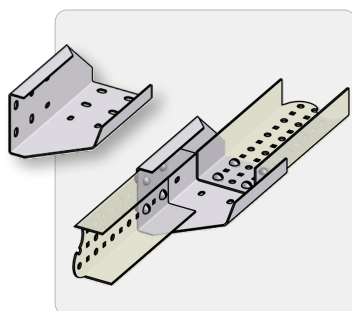
**Nominal Engagement: 5.5"**



### Transition Splice Right Hand



Includes 3/8" dia. bolting



Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SCT2-GC2-RH	-
Steel*	4	SCT4-GC2-RH	-
	6	SCT6-GC2-RH	-
Natural Finish Alum.	2	SCT2-NA2-RH	-
	4	SCT4-NA2-RH	-
	6	SCT6-NA2-RH	-
Stainless Steel	2	SCT2-SS2T4-RH	-
	4	SCT4-SS2T4-RH	-
T-304	6	SCT6-SS2T4-RH	-
Stainless Steel	2	SCT2-SS2T6-RH	-
	4	SCT4-SS2T6-RH	-
T-316	6	SCT6-SS2T6-RH	-

**A: 10.50"**

**Nominal Engagement: 3.5"**

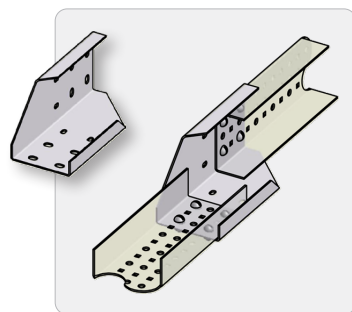


Transition Splices are marked with "L" or "R" to indicate Left or Right

### Transition Splice Left Hand



Includes 3/8" dia. bolting



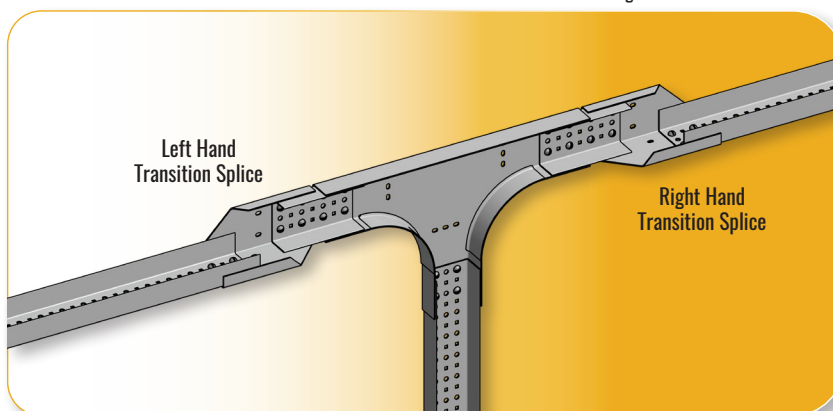
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SCT2-GC2-LH	-
Steel*	4	SCT4-GC2-LH	-
	6	SCT6-GC2-LH	-
Natural Finish Alum.	2	SCT2-NA2-LH	-
	4	SCT4-NA2-LH	-
	6	SCT6-NA2-LH	-
Stainless Steel	2	SCT2-SS2T4-LH	-
	4	SCT4-SS2T4-LH	-
T-304	6	SCT6-SS2T4-LH	-
Stainless Steel	2	SCT2-SS2T6-LH	-
	4	SCT4-SS2T6-LH	-
T-316	6	SCT6-SS2T6-LH	-

**A: 10.50"**

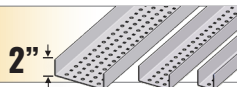
**Nominal Engagement: 3.5"**



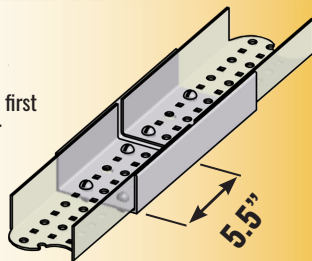
Transition Splices are marked with "L" or "R" to indicate Left or Right







Make splice connections for channels through the first and third round holes in each end of the splice for maximum strength.

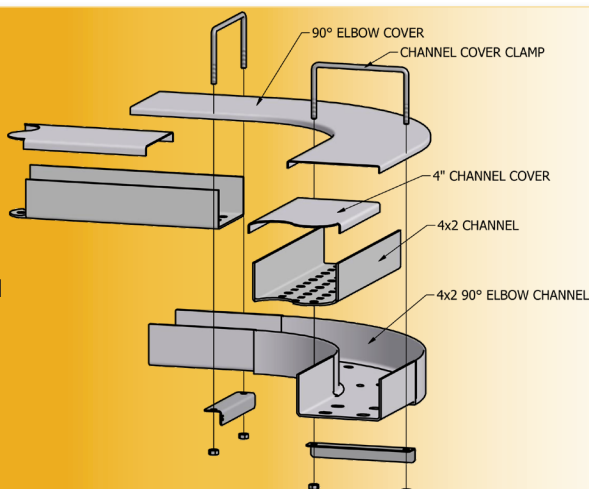


#### Nominal Engagement

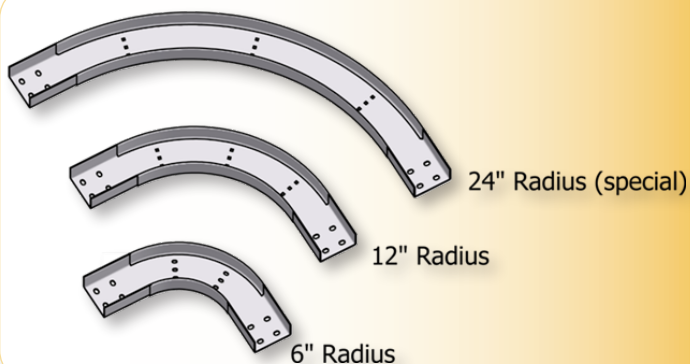
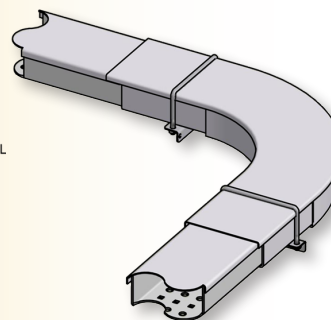
The nominal engagement is the overlap of tray inside the splice or bend fitting. CABLE-RACE® channel fits inside each end of this splice for a nominal engagement of 5.5". Use fitting dimensions to estimate straight channel lengths for a job.

#### Covers

Covers for each fitting are installed over the fitting and over the cover of the channel connected to the fitting to cover the entire connection. Channel Cover Clamps and Fitting Cover Clamps allow for easy re-opening and re-closing after cabling changes. Clamp bases are marked with "C" or "F" to indicate Channel or Fitting.



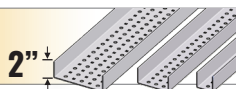
Use CABLE-RACE® Fitting Cover Clamps to hold down each end of a bend fitting cover. Channel Cover Clamps hold covers along straight tray.



#### Choice of Radius

6" and 12" radius bends (3 widths, 4 metals) are standard with dimensions and part numbers shown in this catalog. Other bend radii are available. Non-stock standards are available now for many fittings in 3", 18", 24", and 36" radius.

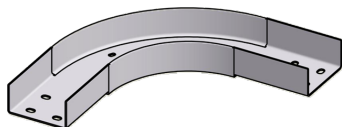
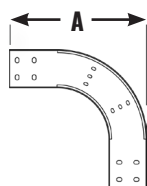
Also available are specific radius requirements. Special radii can mean 29-inch radius or 29-foot radius to match storage tank circumferences or other large curves. Contact factory for additional information.



## 6" Radius Bends



### Elbow Channel 90° Bend 6" Min. Radius

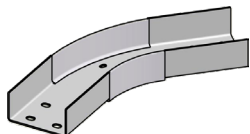
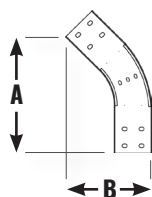


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC2-R6D90	CV-E2 MG2 R6D90
Steel*	4	EC4-GC2-R6D90	CV-E4 MG2 R6D90
	6	EC6-GC2-R6D90	CV-E6 MG2 R6D90
Natural Finish Alum.	2	EC2-NA2-R6D90	CV-E2 NA2 R6D90
	4	EC4-NA2-R6D90	CV-E4 NA2 R6D90
	6	EC6-NA2-R6D90	CV-E6 NA2 R6D90
Stainless Steel	2	EC2-SS2-R6D90T4	CV-E2 SS2 R6D904
	4	EC4-SS2-R6D90T4	CV-E4 SS2 R6D904
	6	EC6-SS2-R6D90T4	CV-E6 SS2 R6D904
Stainless Steel	2	EC2-SS2-R6D90T6	CV-E2 SS2 R6D906
	4	EC4-SS2-R6D90T6	CV-E4 SS2 R6D906
	6	EC6-SS2-R6D90T6	CV-E6 SS2 R6D906

**A: 12.0" plus channel width**  
**Nominal Engagement: 3.5"**

### Elbow Channel 45° Bend 6" Min. Radius

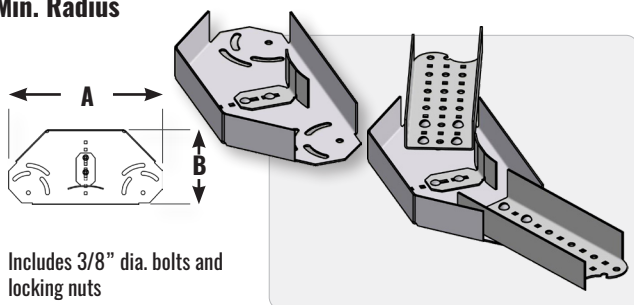


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC2-R6D45	CV-E2 MG2 R6D45
Steel*	4	EC4-GC2-R6D45	CV-E4 MG2 R6D45
	6	EC6-GC2-R6D45	CV-E6 MG2 R6D45
Natural Finish Alum.	2	EC2-NA2-R6D45	CV-E2 NA2 R6D45
	4	EC4-NA2-R6D45	CV-E4 NA2 R6D45
	6	EC6-NA2-R6D45	CV-E6 NA2 R6D45
Stainless Steel	2	EC2-SS2-R6D45T4	CV-E2 SS2 R6D454
	4	EC4-SS2-R6D45T4	CV-E4 SS2 R6D454
	6	EC6-SS2-R6D45T4	CV-E6 SS2 R6D454
Stainless Steel	2	EC2-SS2-R6D45T6	CV-E2 SS2 R6D456
	4	EC4-SS2-R6D45T6	CV-E4 SS2 R6D456
	6	EC6-SS2-R6D45T6	CV-E6 SS2 R6D456

**A: 13.75" B: 6.0" plus channel width**  
**Nominal Engagement: 3.5"**

### Horizontal Elbow Adjustable Bend (0-90°) Patent No.: US 8,573,409 B2 6" Min. Radius

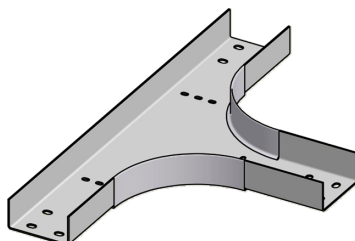
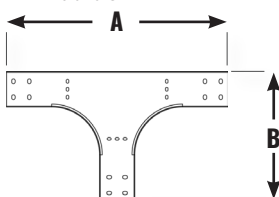


Includes 3/8" dia. bolts and locking nuts

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC2-R6DA	-
Steel*	4	EC4-GC2-R6DA	-
	6	EC6-GC2-R6DA	-
Natural Finish Alum.	2	EC2-NA2-R6DA	-
	4	EC4-NA2-R6DA	-
	6	EC6-NA2-R6DA	-
Stainless Steel	2	EC2-SS2-R6DAT4	-
	4	EC4-SS2-R6DAT4	-
	6	EC6-SS2-R6DAT4	-
Stainless Steel	2	EC2-SS2-R6DAT6	-
	4	EC4-SS2-R6DAT6	-
	6	EC6-SS2-R6DAT6	-

**2" Width Tray: A = 13", B = 7" (nominal dim.)**  
**4" Width Tray: A = 16", B = 8" (nominal dim.)**  
**6" Width Tray: A = 16", B = 10" (nominal dim.)**  
**Nominal Engagement: 3.5"**

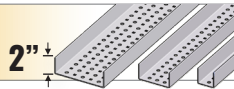
### Tee Channel 90° Bend 6" Min. Radius



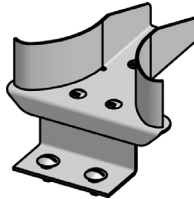
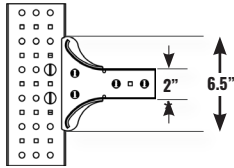
Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	TC2-GC2-R6D90	CV-T2 MG2 R6D90
Steel*	4	TC4-GC2-R6D90	CV-T4 MG2 R6D90
	6	TC6-GC2-R6D90	CV-T6 MG2 R6D90
Natural Finish Alum.	2	TC2-NA2-R6D90	CV-T2 NA2 R6D90
	4	TC4-NA2-R6D90	CV-T4 NA2 R6D90
	6	TC6-NA2-R6D90	CV-T6 NA2 R6D90
Stainless Steel	2	TC2-SS2-R6D90T4	CV-T2 SS2 R6D904
	4	TC4-SS2-R6D90T4	CV-T4 SS2 R6D904
	6	TC6-SS2-R6D90T4	CV-T6 SS2 R6D904
Stainless Steel	2	TC2-SS2-R6D90T6	CV-T2 SS2 R6D906
	4	TC4-SS2-R6D90T6	CV-T4 SS2 R6D906
	6	TC6-SS2-R6D90T6	CV-T6 SS2 R6D906

**A: 23.75" plus channel width**  
**B: 12.25" plus channel width**  
**Nominal Engagement: 3.5"**



## Horizontal Drop-Out Fitting



Metal	Width	Part No.
Stainless Steel T-304	2	DHC2-SS2-2T4
Stainless Steel T-316		-

**Nominal Engagement: 3.5"**

See pg. 16 for Horizontal Drop-Out Fitting for 1" deep tray

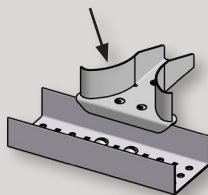
\* Same width as standard 2" wide CABLE-RACE® tray. Use with any CABLE-RACE® or TUBETRACK® fitting.

## Attachable Horizontal Drop-Out Fitting

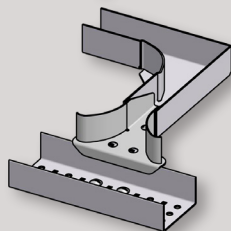
- Drop-Out to an instrumentation station or work station
- Bolt directly to any 2" deep CABLE-RACE® 2", 4", or 6" wide tray
- No need to cut or modify existing mainline tray
- Drop-Out at any point along the CABLE-RACE® main line tray
- Extend using any 2" wide CABLE-RACE® or TUBETRACK® tray fitting
- Use single Drop-Out fitting with a CABLE-RACE® fitting for desired configuration
- All CABLE-RACE® fittings include required fasteners
- Includes mounting bracket and fasteners for connection to 2" deep tray
- Available in stainless steel - fits CABLE-RACE® tray of any metal

## Examples of possible configurations using this single fitting for each Drop-Out:

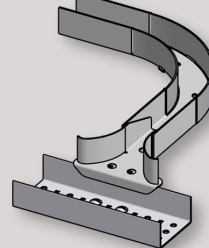
1" / 2" Deep Horizontal Drop-Out Fitting



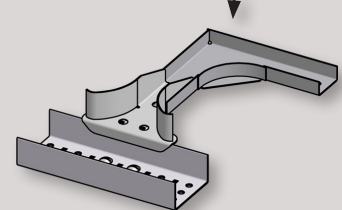
2" Deep x 3" Rad. 90° Elbow



2" Deep x 6" Rad. 90° Elbow

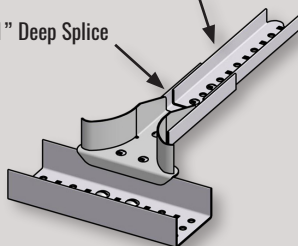


1" Deep x 3" Rad. 90° Elbow

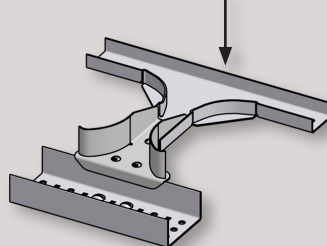


1" Deep Tray

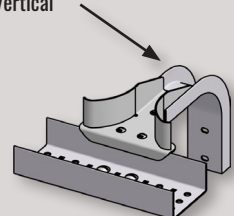
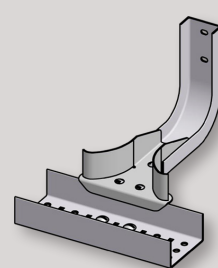
1" Deep Splice

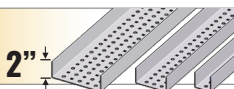


1" Deep Tee

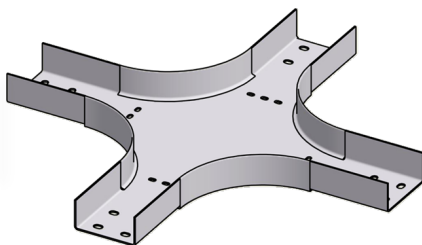
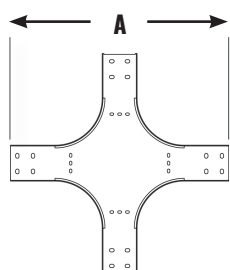


1" Deep x 3" Rad. 90° Vertical





**Cross Channel  
90° Bend  
6" Min. Radius**

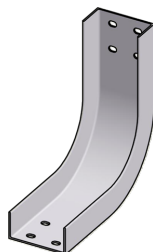


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip	2	KC2-GC2-R6D90	CV-K2 MG2 R6D90
Galv.	4	KC4-GC2-R6D90	CV-K4 MG2 R6D90
Steel*	6	KC6-GC2-R6D90	CV-K6 MG2 R6D90
Natural	2	KC2-NA2-R6D90	CV-K2 NA2 R6D90
Finish	4	KC4-NA2-R6D90	CV-K4 NA2 R6D90
Alum.	6	KC6-NA2-R6D90	CV-K6 NA2 R6D90
Stainless	2	KC2-SS2-R6D90T4	CV-K2 SS2 R6D904
Steel	4	KC4-SS2-R6D90T4	CV-K4 SS2 R6D904
T-304	6	KC6-SS2-R6D90T4	CV-K6 SS2 R6D904
Stainless	2	KC2-SS2-R6D90T6	CV-K2 SS2 R6D906
Steel	4	KC4-SS2-R6D90T6	CV-K4 SS2 R6D906
T-316	6	KC6-SS2-R6D90T6	CV-K6 SS2 R6D906

**A: 23.75" plus channel width**  
**Nominal Engagement: 3.5"**

**Inside Channel Vertical  
90° Bend  
6" Radius**



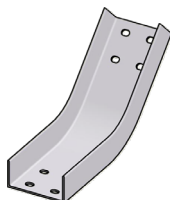
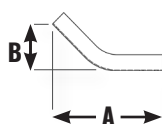
Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip	2	ICV2-GC2-R6D90	CV-I2 MG2 R6D90
Galv.	4	ICV4-GC2-R6D90	CV-I4 MG2 R6D90
Steel*	6	ICV6-GC2-R6D90	CV-I6 MG2 R6D90
Natural	2	ICV2-NA2-R6D90	CV-I2 NA2 R6D90
Finish	4	ICV4-NA2-R6D90	CV-I4 NA2 R6D90
Alum.	6	ICV6-NA2-R6D90	CV-I6 NA2 R6D90
Stainless	2	ICV2-SS2 R6D90T4	CV-I2 SS2 R6D904
Steel	4	ICV4-SS2 R6D90T4	CV-I4 SS2 R6D904
T-304	6	ICV6-SS2 R6D90T4	CV-I6 SS2 R6D904
Stainless	2	ICV2-SS2 R6D90T6	CV-I2 SS2 R6D906
Steel	4	ICV4-SS2 R6D90T6	CV-I4 SS2 R6D906
T-316	6	ICV6-SS2 R6D90T6	CV-I6 SS2 R6D906

**A: 10.75"**  
**Nominal Engagement: 3.5"**



**Inside Channel Vertical  
45° Bend  
6" Radius**



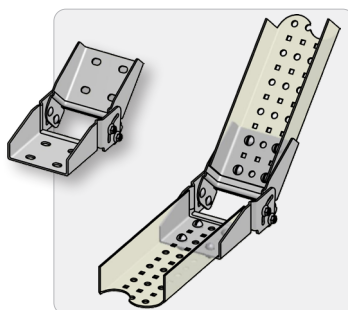
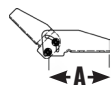
Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip	2	ICV2-GC2-R6D45	CV-I2 MG2 R6D45
Galv.	4	ICV4-GC2-R6D45	CV-I4 MG2 R6D45
Steel*	6	ICV6-GC2-R6D45	CV-I6 MG2 R6D45
Natural	2	ICV2-NA2-R6D45	CV-I2 NA2 R6D45
Finish	4	ICV4-NA2-R6D45	CV-I4 NA2 R6D45
Alum.	6	ICV6-NA2-R6D45	CV-I6 NA2 R6D45
Stainless	2	ICV2-SS2 R6D45T4	CV-I2 SS2 R6D454
Steel	4	ICV4-SS2 R6D45T4	CV-I4 SS2 R6D454
T-304	6	ICV6-SS2 R6D45T4	CV-I6 SS2 R6D454
Stainless	2	ICV2-SS2 R6D45T6	CV-I2 SS2 R6D456
Steel	4	ICV4-SS2 R6D45T6	CV-I4 SS2 R6D456
T-316	6	ICV6-SS2 R6D45T6	CV-I4 SS2 R6D456

**A: 15.75" B: 8.0"**  
**Nominal Engagement: 3.5"**



**Inside Channel Vertical  
Adjustable Bend (0-90°)  
Patent No.: US 8,167,250 B2**



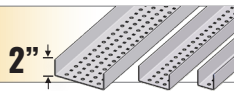
Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip	2	ICV2-GC2-DA	-
Galv.	4	ICV4-GC2-DA	-
Steel	6	ICV6-GC2-DA	-
Natural	2	ICV2-NA2-DA	-
Finish	4	ICV4-NA2-DA	-
Alum.	6	ICV6-NA2-DA	-
Stainless	2	ICV2-SS2-DAT4	-
Steel	4	ICV4-SS2-DAT4	-
T-304	6	ICV6-SS2-DAT4	-
Stainless	2	ICV2-SS2-DAT6	-
Steel	4	ICV4-SS2-DAT6	-
T-316	6	ICV6-SS2-DAT6	-

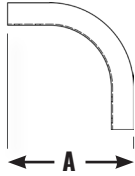
**A: 6.0"**  
**Nominal Engagement: 3.5"**







**Outside Channel Vertical  
90° Bend  
6" Min. Radius**



Includes 3/8" dia. bolting

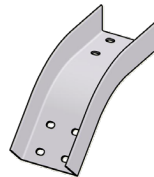
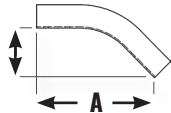
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-R6D90	CV-O2 MG2 R6D90
Galv.	4	OCV4-GC2-R6D90	CV-O4 MG2 R6D90
Steel*	6	OCV6-GC2-R6D90	CV-O6 MG2 R6D90
Natural Finish Alum.	2	OCV2-NA2-R6D90	CV-O2 NA2 R6D90
	4	OCV4-NA2-R6D90	CV-O4 NA2 R6D90
	6	OCV6-NA2-R6D90	CV-O6 NA2 R6D90
Stainless Steel	2	OCV2-SS2 R6D90T4	CV-O2 SS2 R6D904
	4	OCV4-SS2 R6D90T4	CV-O4 SS2 R6D904
T-304	6	OCV6-SS2 R6D90T4	CV-O6 SS2 R6D904
Stainless Steel	2	OCV2-SS2 R6D90T6	CV-O2 SS2 R6D906
	4	OCV4-SS2 R6D90T6	CV-O4 SS2 R6D906
T-316	6	OCV6-SS2 R6D90T6	CV-O6 SS2 R6D906

**A: 10.00"**

**Nominal Engagement: 3.5"**



**Outside Channel Vertical  
45° Bend  
6" Min. Radius**



Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-R6D45	CV-O2 MG2 R6D45
Galv.	4	OCV4-GC2-R6D45	CV-O4 MG2 R6D45
Steel*	6	OCV6-GC2-R6D45	CV-O6 MG2 R6D45
Natural Finish Alum.	2	OCV2-NA2-R6D45	CV-O2 NA2 R6D45
	4	OCV4-NA2-R6D45	CV-O4 NA2 R6D45
	6	OCV6-NA2-R6D45	CV-O6 NA2 R6D45
Stainless Steel	2	OCV2-SS2 R6D45T4	CV-O2 SS2 R6D454
	4	OCV4-SS2 R6D45T4	CV-O4 SS2 R6D454
T-304	6	OCV6-SS2 R6D45T4	CV-O6 SS2 R6D454
Stainless Steel	2	OCV2-SS2 R6D45T6	CV-O2 SS2 R6D456
	4	OCV4-SS2 R6D45T6	CV-O4 SS2 R6D456
T-316	6	OCV6-SS2 R6D45T6	CV-O6 SS2 R6D456

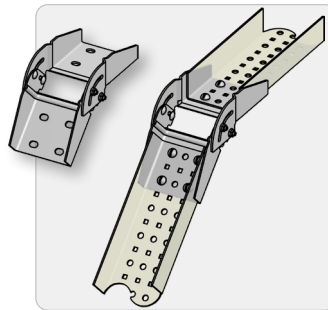
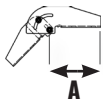
**A: 15.25"**

**B: 6.25"**

**Nominal Engagement: 3.5"**



**Outside Channel Vertical  
Adjustable Bend (0-90°)  
Patent No.: US 8,167,250 B2**



Includes 3/8" dia. bolting

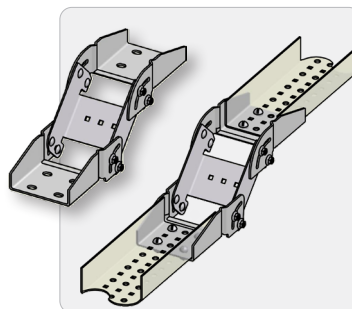
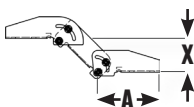
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-DA	-
Galv.	4	OCV4-GC2-DA	-
Steel*	6	OCV6-GC2-DA	-
Natural Finish Alum.	2	OCV2-NA2-DA	-
	4	OCV4-NA2-DA	-
	6	OCV6-NA2-DA	-
Stainless Steel	2	OCV2-SS2-DAT4	-
	4	OCV4-SS2-DAT4	-
T-304	6	OCV6-SS2-DAT4	-
Stainless Steel	2	OCV2-SS2-DAT6	-
	4	OCV4-SS2-DAT6	-
T-316	6	OCV6-SS2-DAT6	-

**A: 5.25"**

**Nominal Engagement: 3.5"**



**Offset Channel Vertical  
Double Adjustable Bend  
Patent No.: US 8,167,250 B2**



Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-DDA5	-
Galv.	4	OCV4-GC2-DDA5	-
Steel*	6	OCV6-GC2-DDA5	-
Natural Finish Alum.	2	OCV2-NA2-DDA5	-
	4	OCV4-NA2-DDA5	-
	6	OCV6-NA2-DDA5	-
Stainless Steel	2	OCV2-SS2-DDA5T4	-
	4	OCV4-SS2-DDA5T4	-
T-304	6	OCV6-SS2-DDA5T4	-
Stainless Steel	2	OCV2-SS2-DDA5T6	-
	4	OCV4-SS2-DDA5T6	-
T-316	6	OCV6-SS2-DDA5T6	-

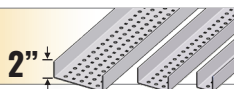
**A: 6.0"**

**X: Offset at 45° (pictured): 3.25"**

**Max offset (bends at 90°): 5"**

**Nominal Engagement: 3.5"**

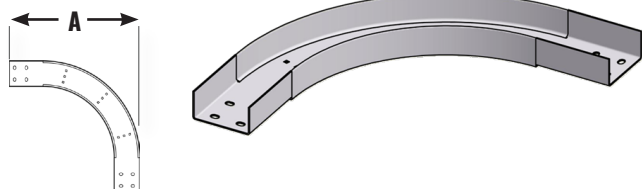




## 12" Radius Bends



### Elbow Channel 90° Bend 12" Min. Radius

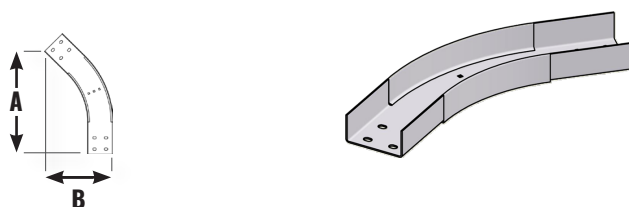


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC2-R12D90	CV-E2 MG2 R12D90
Steel*	4	EC4-GC2-R12D90	CV-E4 MG2 R12D90
	6	EC6-GC2-R12D90	CV-E6 MG2 R12D90
Natural Finish Alum.	2	EC2-NA2-R12D90	CV-E2 NA2 R12D90
	4	EC4-NA2-R12D90	CV-E4 NA2 R12D90
	6	EC6-NA2-R12D90	CV-E6 NA2 R12D90
Stainless Steel	2	EC2-SS2 R12D90T4	CV-E2 SS2 R12D904
	4	EC4-SS2 R12D90T4	CV-E4 SS2 R12D904
T-304	6	EC6-SS2 R12D90T4	CV-E6 SS2 R12D904
Stainless Steel	2	EC2-SS2 R12D90T6	CV-E2 SS2 R12D906
	4	EC4-SS2 R12D90T6	CV-E4 SS2 R12D906
T-316	6	EC6-SS2 R12D90T6	CV-E6 SS2 R12D906

**A: 18.00" plus channel width**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**

### Elbow Channel 45° Bend 12" Min. Radius

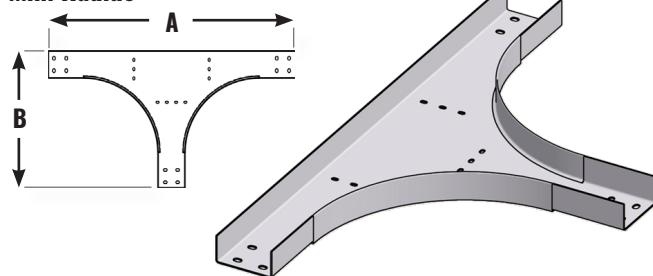


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC2-R12D45	CV-E2 MG2 R12D45
Steel*	4	EC4-GC2-R12D45	CV-E4 MG2 R12D45
	6	EC6-GC2-R12D45	CV-E6 MG2 R12D45
Natural Finish Alum.	2	EC2-NA2-R12D45	CV-E2 NA2 R12D45
	4	EC4-NA2-R12D45	CV-E4 NA2 R12D45
	6	EC6-NA2-R12D45	CV-E6 NA2 R12D45
Stainless Steel	2	EC2-SS2 R12D45T4	CV-E2 SS2 R12D454
	4	EC4-SS2 R12D45T4	CV-E4 SS2 R12D454
T-304	6	EC6-SS2 R12D45T4	CV-E6 SS2 R12D454
Stainless Steel	2	EC2-SS2 R12D45T6	CV-E2 SS2 R12D456
	4	EC4-SS2 R12D45T6	CV-E4 SS2 R12D456
T-316	6	EC6-SS2 R12D45T6	CV-E6 SS2 R12D456

**A: 18.0"** **B: 8.0" plus channel width**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**

### Tee Channel 90° Bend 12" Min. Radius

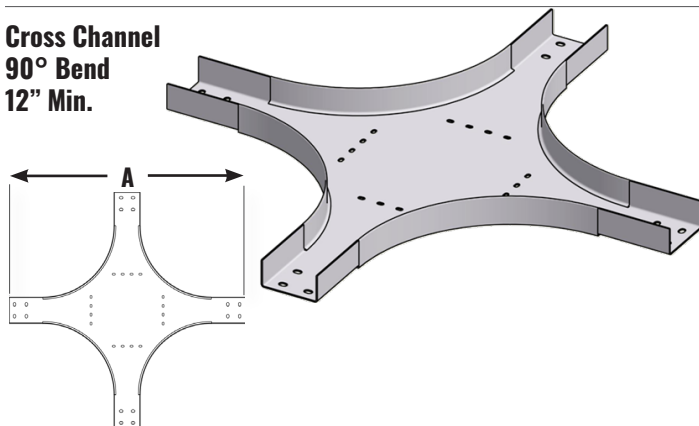


Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	TC2-GC2-R12D90	CV-T2 MG2 R12D90
Steel*	4	TC4-GC2-R12D90	CV-T4 MG2 R12D90
	6	TC6-GC2-R12D90	CV-T6 MG2 R12D90
Natural Finish Alum.	2	TC2-NA2-R12D90	CV-T2 NA2 R12D90
	4	TC4-NA2-R12D90	CV-T4 NA2 R12D90
	6	TC6-NA2-R12D90	CV-T6 NA2 R12D90
Stainless Steel	2	TC2-SS2 R12D90T4	CV-T2 SS2 R12D904
	4	TC4-SS2 R12D90T4	CV-T4 SS2 R12D904
T-304	6	TC6-SS2 R12D90T4	CV-T6 SS2 R12D904
Stainless Steel	2	TC2-SS2 R12D90T6	CV-T2 SS2 R12D906
	4	TC4-SS2 R12D90T6	CV-T4 SS2 R12D906
T-316	6	TC6-SS2 R12D90T6	CV-T6 SS2 R12D906

**A: 35.5" plus channel width**  
**B: 18.0" plus channel width**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**

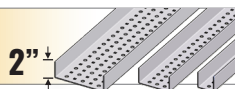
### Cross Channel 90° Bend 12" Min.



Includes 3/8" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	KC2-GC2-R12D90	CV-K2 MG2 R12D90
Steel*	4	KC4-GC2-R12D90	CV-K4 MG2 R12D90
	6	KC6-GC2-R12D90	CV-K6 MG2 R12D90
Natural Finish Alum.	2	KC2-NA2-R12D90	CV-K2 NA2 R12D90
	4	KC4-NA2-R12D90	CV-K4 NA2 R12D90
	6	KC6-NA2-R12D90	CV-K6 NA2 R12D90
Stainless Steel	2	KC2-SS2 R12D90T4	CV-K2 SS2 R12D904
	4	KC4-SS2 R12D90T4	CV-K4 SS2 R12D904
T-304	6	KC6-SS2 R12D90T4	CV-K6 SS2 R12D904
Stainless Steel	2	KC2-SS2 R12D90T6	CV-K2 SS2 R12D906
	4	KC4-SS2 R12D90T6	CV-K4 SS2 R12D906
T-316	6	KC6-SS2 R12D90T6	CV-K6 SS2 R12D906

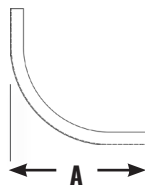
**A: 35.5" plus channel width**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**



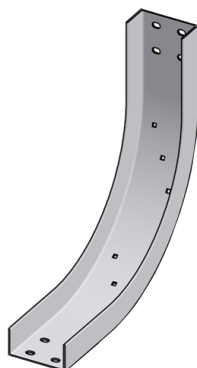
## 12" Radius Bends



### Inside Channel Vertical 90° Bend 14" Radius



Includes 3/8" dia. bolting



Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	ICV2-GC2-R14D90	CV-I2 MG2 R14D90
	4	ICV4-GC2-R14D90	CV-I4 MG2 R14D90
Steel*	6	ICV6-GC2-R14D90	CV-I6 MG2 R14D90
Natural Finish Alum.	2	ICV2-NA2-R14D90	CV-I2 NA2 R14D90
	4	ICV4-NA2-R14D90	CV-I4 NA2 R14D90
	6	ICV6-NA2-R14D90	CV-I6 NA2 R14D90
Stainless Steel	2	ICV2 SS2 R14D90T4	CV-I2 SS2 R14D904
	4	ICV4 SS2 R14D90T4	CV-I4 SS2 R14D904
T-304	6	ICV6 SS2 R14D90T4	CV-I6 SS2 R14D904
Stainless Steel	2	ICV2 SS2 R14D90T6	CV-I2 SS2 R14D906
	4	ICV4 SS2 R14D90T6	CV-I4 SS2 R14D906
T-316	6	ICV6 SS2 R14D90T6	CV-I6 SS2 R14D906

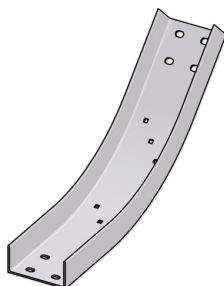
**A: 22.25"**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**



### Inside Channel Vertical 45° Bend 14" Radius



Includes 3/8" dia. bolting

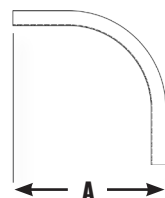


Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	ICV2-GC2-R14D45	CV-I2 MG2 R14D45
	4	ICV4-GC2-R14D45	CV-I4 MG2 R14D45
Steel*	6	ICV6-GC2-R14D45	CV-I6 MG2 R14D45
Natural Finish Alum.	2	ICV2-NA2-R14D45	CV-I2 NA2 R14D45
	4	ICV4-NA2-R14D45	CV-I4 NA2 R14D45
	6	ICV6-NA2-R14D45	CV-I6 NA2 R14D45
Stainless Steel	2	ICV2 SS2 R14D45T4	CV-I2 SS2 R14D454
	4	ICV4 SS2 R14D45T4	CV-I4 SS2 R14D454
T-304	6	ICV6 SS2 R14D45T4	CV-I6 SS2 R14D454
Stainless Steel	2	ICV2 SS2 R14D45T6	CV-I2 SS2 R14D456
	4	ICV4 SS2 R14D45T6	CV-I4 SS2 R14D456
T-316	6	ICV6 SS2 R14D45T6	CV-I6 SS2 R14D456

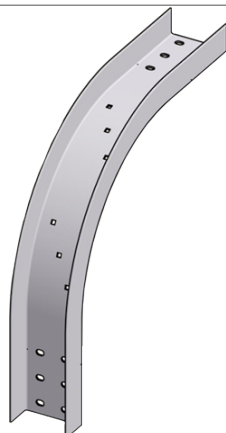
**A: 21.75"** **B: 9.0"**  
**Nominal Engagement: 3.5"**  
**Larger radii available (18", 24", etc.)**



### Outside Channel Vertical 90° Bend 12" Min. Radius



Includes 3/8" dia. bolting

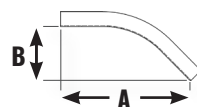


Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-R12D90	CV-O2 MG2 R12D90
	4	OCV4-GC2-R12D90	CV-O4 MG2 R12D90
Steel*	6	OCV6-GC2-R12D90	CV-O6 MG2 R12D90
Natural Finish Alum.	2	OCV2-NA2-R12D90	CV-O2 NA2 R12D90
	4	OCV4-NA2-R12D90	CV-O4 NA2 R12D90
	6	OCV6-NA2-R12D90	CV-O6 NA2 R12D90
Stainless Steel	2	OCV2 SS2 R12D90T4	CV-O2 SS2 R12D904
	4	OCV4 SS2 R12D90T4	CV-O4 SS2 R12D904
T-304	6	OCV6 SS2 R12D90T4	CV-O6 SS2 R12D904
Stainless Steel	2	OCV2 SS2 R12D90T6	CV-O2 SS2 R12D906
	4	OCV4 SS2 R12D90T6	CV-O4 SS2 R12D906
T-316	6	OCV6 SS2 R12D90T6	CV-O6 SS2 R12D906

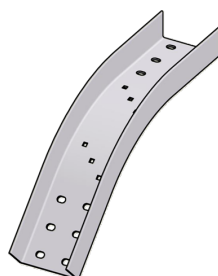
**A: 20.00"**  
**Nominal Engagement: 3.5" OR 5.5"**  
**Larger radii available (18", 24", etc.)**



### Outside Channel Vertical 45° Bend 12" Min. Radius



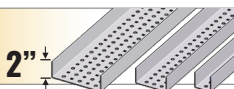
Includes 3/8" dia. bolting



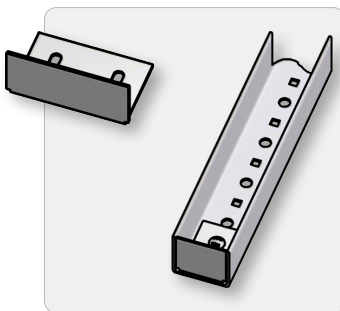
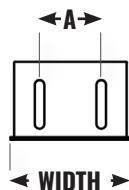
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-R12D45	CV-O2 MG2 R12D45
	4	OCV4-GC2-R12D45	CV-O4 MG2 R12D45
Steel*	6	OCV6-GC2-R12D45	CV-O6 MG2 R12D45
Natural Finish Alum.	2	OCV2-NA2-R12D45	CV-O2 NA2 R12D45
	4	OCV4-NA2-R12D45	CV-O4 NA2 R12D45
	6	OCV6-NA2-R12D45	CV-O6 NA2 R12D45
Stainless Steel	2	OCV2 SS2 R12D45T4	CV-O2 SS2 R12D454
	4	OCV4 SS2 R12D45T4	CV-O4 SS2 R12D454
T-304	6	OCV6 SS2 R12D45T4	CV-O6 SS2 R12D454
Stainless Steel	2	OCV2 SS2 R12D45T6	CV-O2 SS2 R12D456
	4	OCV4 SS2 R12D45T6	CV-O4 SS2 R12D456
T-316	6	OCV6 SS2 R12D45T6	CV-O6 SS2 R12D456

**A: 22.0"** **B: 9.0"**  
**Nominal Engagement: 3.5" or 5.5"**  
**Larger radii available (18", 24", etc.)**





## Channel End Cover



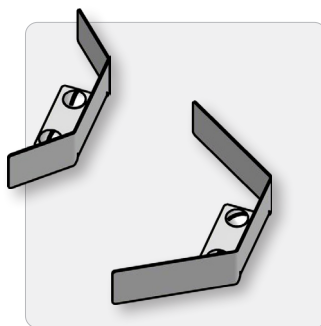
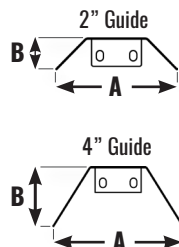
Includes 1/4" dia. bolting

Metal	Width	A	Part No.
Stainless Steel	2	0	CVE-CH2SS2T4
Steel	4	2	CVE-CH4SS2T4
T-304	6	4	CVE-CH6SS2T4
Stainless Steel	2	0	-
Steel	4	2	-
T-316	6	4	-

Channel End Covers are used where there is a requirement to enclose the end of a CABLE-RACE® tray. CABLE-RACE® End Covers are adjustable to make flush with the end of the tray.



## Reduction Guide



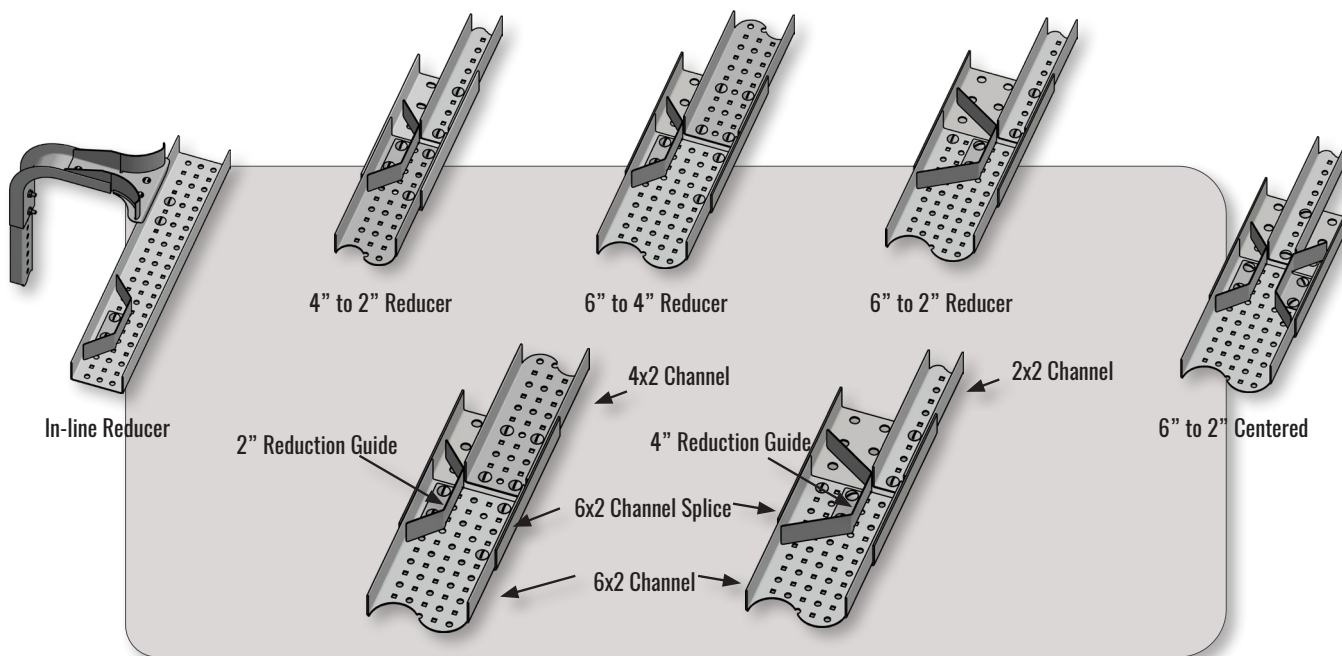
Includes 3/8" dia. bolting

Metal	Width	A	B	Part No.
Stainless Steel	2	7.3"	2"	REG2SS2-T4RHLH
Steel	4	8.5"	4"	REG4SS2-T4RHLH
T-304				
Stainless Steel	2	7.3"	2"	-
Steel	4	8.5"	4"	-
T-316				

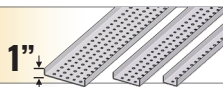
Use with standard CABLE-RACE® splice fittings. Reduction Guides are adjustable to a desired flange alignment. Each deflector can be used for either right hand or left hand reduction. Fasteners included with each Reduction Guide.



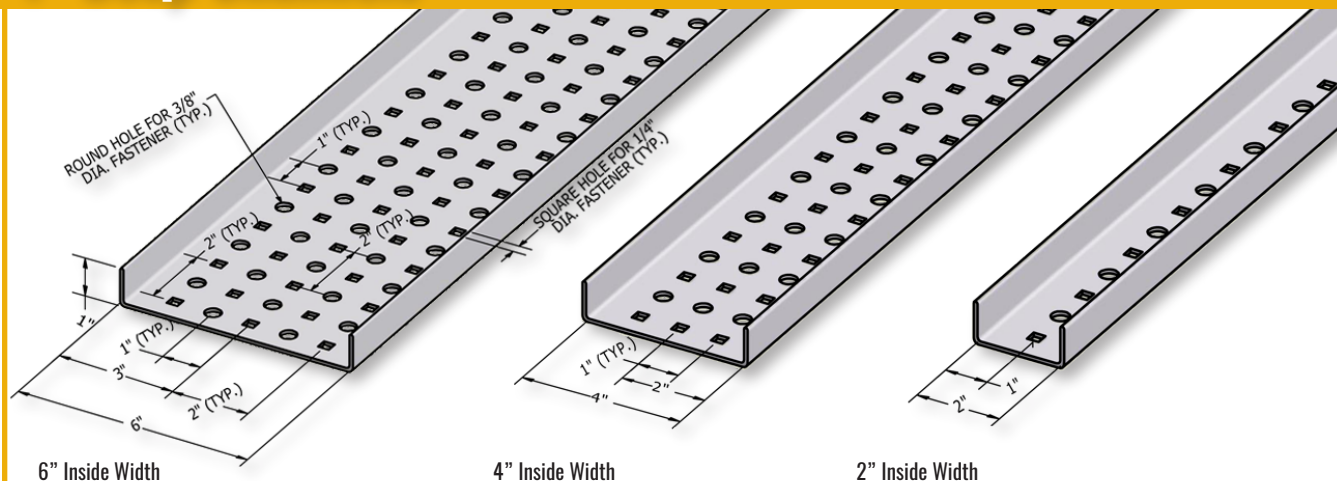
## Examples of Reduction Options:







# 1" Deep Channels



## Channels - 1" Deep

1" deep CABLE-RACE® channel tray matches the widths and metals of our heavier 2" deep channels. Metal gages are lighter for some of the 1" deep channel members. Channel tray details are shown for standard part numbers, materials, widths, lengths, gages, and covers.

The punch patterns for 1" deep and 2" deep channel trays are identical except that the initial hole for 1" deep channel is a square hole for a 1/4" dia. fastener to match the hole pattern of CABLE-RACE® splice and bend fittings. The hole pattern in 1" deep CABLE-RACE® channel is compatible with 2" deep fittings by using round holes and the 3/8" dia. fasteners provided with each CABLE-RACE® 2" deep fitting.

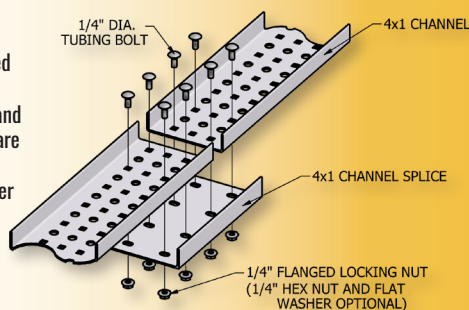
See page 28 for Load and Deflection information.

**Note:** 1" wide Stainless Steel CABLE-RACE® is not UL Classified.

Metal	Width	Channel Part No.	Chan. Gage	Chan. Length	Cover Part No.	Cover Length
Hot-Dip Galv.	2	CH2-GC1			CV-CH2-MG	10'
	4	CH4-GC1	14	20'	CV-CH4-MG	10'
Steel*	6	CH6-GC1-144	14	12'	CV-CH6-MG-144	12'
Natural Finish Alum.	2	CH2-NA1-144			CV-CH2-NA-144	12'
	4	CH4-NA1-144	14	12'	CV-CH4-NA-144	12'
	6	CH6-NA1-144			CV-CH6-NA-144	12'
Stainless Steel	2	CH2-SS1T4-144-6			CV-CH2-SS4-144	12'
	4	CH4-SS1T4-144-6	16	12'	CV-CH4-SS4-144	12'
T-304	6	CH6-SS1T4-144-6			CV-CH6-SS4-144	12'
Stainless Steel	2	CH2-SS1T6-144-6			CV-CH2-SS6-144	12'
	4	CH4-SS1T6-144-6	16	12'	CV-CH4-SS6-144	12'
T-316	6	CH6-SS1T6-144-6			CV-CH6-SS6-144	12'

Structural connections for 1" deep CABLE-RACE® tray, splices, and bends are provided with 1/4" dia. bolt sets (JCWCO tubing bolts with flanged locking nuts). Tubing bolts with hex nuts and flat washers are optional upon request. Bolt sets are supplied with all CABLE-RACE® splices and bends. Standard fastener metals include:

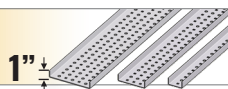
- Zinc-plated bolts with galvanized fittings
- 18-8 stainless bolts with aluminum fittings
- 18-8 stainless bolts with 304 SS fittings
- 316 stainless bolts with 316 SS fittings



## Bolted Connections

Drawing shows JCWCO standard splice connection for 1" deep channels. Bolts are JCWCO standard 1/4"-20 tubing bolts, 0.50" long with special short square carriage that fits the square holes of the channel.

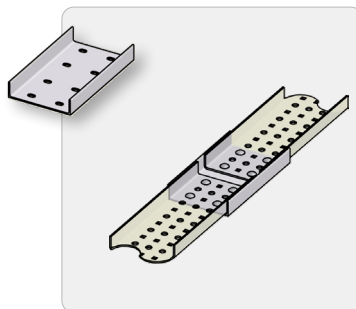
CABLE-RACE® uses only tightenable fasteners to secure tray connections and maintain the conductivity necessary for UL classification. Bolt sets are supplied with each CABLE-RACE® splice and bend. Stainless Steel bolting is standard with aluminum CABLE-RACE®. Stainless Steel bolting is optional with galvanized CABLE-RACE® for an additional cost. Contact factory for additional information.



## Splice Channel



Includes 1/4" dia. bolting



Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SC2-GC1	CV-S2MG1
Steel*	4	SC4-GC1	CV-S4MG1
	6	SC6-GC1	CV-S6MG1
Natural Finish Alum.	2	SC2-NA1	CV-S2NA1
	4	SC4-NA1	CV-S4NA1
	6	SC6-NA1	CV-S6NA1
Stainless Steel	2	SC2-SS1T4	CV-S2SS1T4
	4	SC4-SS1T4	CV-S4SS1T4
T-304	6	SC6-SS1T4	CV-S6SS1T4
Stainless Steel	2	SC2-SS1T6	CV-S2SS1T6
	4	SC4-SS1T6	CV-S4SS1T6
T-316	6	SC6-SS1T6	CV-S6SS1T6

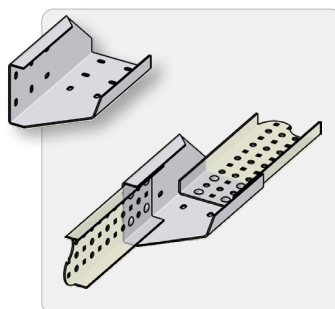
**A: 7.88"**

**Nominal Engagement: 3.5"**

## Transition Splice Right Hand



Includes 3/8" dia. bolting (same part as 2" deep, pg. 4). Cut channels so that round holes are on the end of the channel.



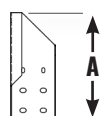
Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SCT2-GC2-RH	-
Steel*	4	SCT4-GC2-RH	-
	6	SCT6-GC2-RH	-
Natural Finish Alum.	2	SCT2-NA2-RH	-
	4	SCT4-NA2-RH	-
	6	SCT6-NA2-RH	-
Stainless Steel	2	SCT2-SS2T4-RH	-
	4	SCT4-SS2T4-RH	-
T-304	6	SCT6-SS2T4-RH	-
Stainless Steel	2	SCT2-SS2T6-RH	-
	4	SCT4-SS2T6-RH	-
T-316	6	SCT6-SS2T6-RH	-

**A: 10.50"**

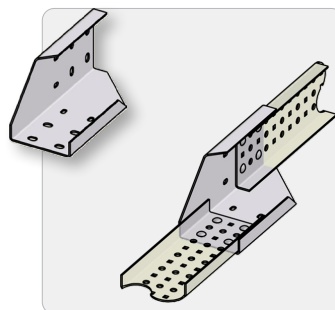
**Nominal Engagement: 3.5"**

Transition Splices are marked with "L" or "R" to indicate Left or Right

## Transition Splice Left Hand



Includes 3/8" dia. bolting (same part as 2" deep, pg. 4). Cut channels so that round holes are on the end of the channel.

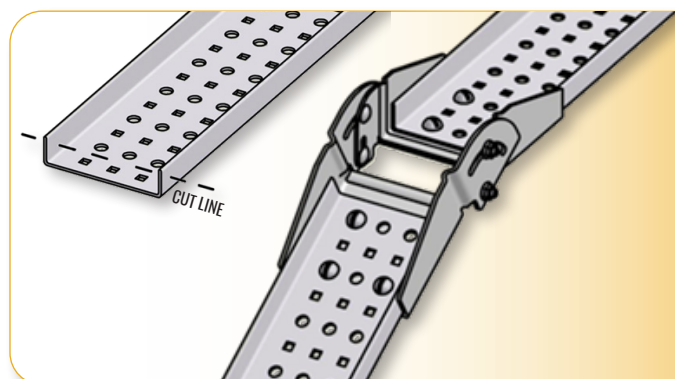


Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	SCT2-GC2-LH	-
Steel*	4	SCT4-GC2-LH	-
	6	SCT6-GC2-LH	-
Natural Finish Alum.	2	SCT2-NA2-LH	-
	4	SCT4-NA2-LH	-
	6	SCT6-NA2-LH	-
Stainless Steel	2	SCT2-SS2T4-LH	-
	4	SCT4-SS2T4-LH	-
T-304	6	SCT6-SS2T4-LH	-
Stainless Steel	2	SCT2-SS2T6-LH	-
	4	SCT4-SS2T6-LH	-
T-316	6	SCT6-SS2T6-LH	-

**A: 10.50"**

**Nominal Engagement: 3.5"**

Transition Splices are marked with "L" or "R" to indicate Left or Right



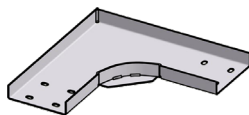
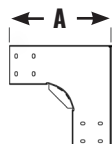
### Matching Punch Patterns (1" and 2" deep channels)

JCWC0 1" deep channels will fit with splices and bends for 2" deep channels. The punch patterns of the two tray depths are the same except for the starting holes in CABLE-RACE® stock tray sections. To connect 1" deep channels to 2" deep splices and bends with 3/8" bolting, cut 1" deep tray channels so that round holes are on the connecting ends to accommodate the 3/8" bolting provided with the specific CABLE-RACE® fitting.

#### Fittings with universal 3/8" bolting include:

- Transition splices
- Vertical adjustable bends (shown left)
- Horizontal adjustable bends
- 6" or 12" radius bends
- Special 18", 24" or larger radius bends

**Elbow Channel**  
**90° Bend**  
**3" Min. Radius**

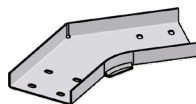
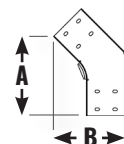


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC1-R3D90	CV-E2MG2 R3D90
Steel*	4	EC4-GC1-R3D90	CV-E4MG2 R3D90
	6	EC6-GC1-R3D90	CV-E6MG2 R3D90
Natural Finish Alum.	2	EC2-NA1-R3D90	CV-E2NA2 R3D90
	4	EC4-NA1-R3D90	CV-E4NA2 R3D90
	6	EC6-NA1-R3D90	CV-E6NA2 R3D90
Stainless Steel	2	EC2-SS1-R3D90T4	CV-E2SS2 R3D90T4
	4	EC4-SS1-R3D90T4	CV-E4SS2 R3D90T4
T-304	6	EC6-SS1-R3D90T4	CV-E6SS2 R3D90T4
Stainless Steel	2	EC2-SS1-R3D90T6	CV-E2SS2 R3D90T6
	4	EC4-SS1-R3D90T6	CV-E4SS2 R3D90T6
T-316	6	EC6-SS1-R3D90T6	CV-E6SS2 R3D90T6

**A: 7.25" plus channel width**  
**Nominal Engagement: 3.5"**

**Elbow Channel**  
**45° Bend**  
**3" Min. Radius**

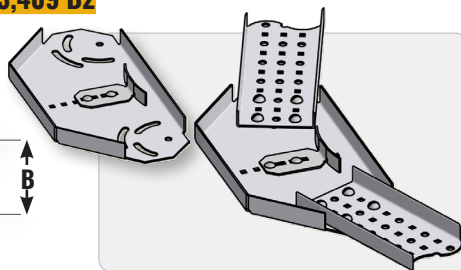
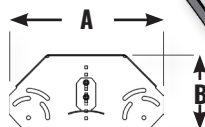


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC1-R3D45	CV-E2MG2 R3D45
Steel*	4	EC4-GC1-R3D45	CV-E4MG2 R3D45
	6	EC6-GC1-R3D45	CV-E6MG2 R3D45
Natural Finish Alum.	2	EC2-NA1-R3D45	CV-E2NA2 R3D45
	4	EC4-NA1-R3D45	CV-E4NA2 R3D45
	6	EC6-NA1-R3D45	CV-E6NA2 R3D45
Stainless Steel	2	EC2-SS1-R3D45T4	CV-E2SS2 R3D45T4
	4	EC4-SS1-R3D45T4	CV-E4SS2 R3D45T4
T-304	6	EC6-SS1-R3D45T4	CV-E6SS2 R3D45T4
Stainless Steel	2	EC2-SS1-R3D45T6	CV-E2SS2 R3D45T6
	4	EC4-SS1-R3D45T6	CV-E4SS2 R3D45T6
T-316	6	EC6-SS1-R3D45T6	CV-E6SS2 R3D45T6

**A: 9.0" B: 4.0" plus channel width**  
**Nominal Engagement: 3.5"**

**Horizontal Elbow**  
**Adjustable Bend (0-90°)**  
**Patent No.: US 8,573,409 B2**  
**3" Min. Radius**

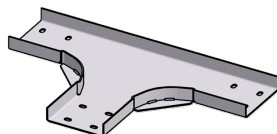
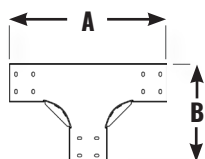


Includes 3/8" dia. bolts and locking nuts. Cut tray channels so that round holes are on the connecting ends.

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	EC2-GC1-R3DA	-
Steel*	4	EC4-GC1-R3DA	-
	6	EC6-GC1-R3DA	-
Natural Finish Alum.	2	EC2-NA1-R3DA	-
	4	EC4-NA1-R3DA	-
	6	EC6-NA1-R3DA	-
Stainless Steel	2	EC2-SS1-R3DAT4	-
	4	EC4-SS1-R3DAT4	-
T-304	6	EC6-SS1-R3DAT4	-
Stainless Steel	2	EC2-SS1-R3DAT6	-
	4	EC4-SS1-R3DAT6	-
T-316	6	EC6-SS1-R3DAT6	-

**2" Width Tray: A = 11", B = 7" (nominal dim.)**  
**4" Width Tray: A = 14", B = 8" (nominal dim.)**  
**6" Width Tray: A = 14", B = 10" (nominal dim.)**  
**Nominal Engagement: 3.5"**

**Tee Channel**  
**90° Bend**  
**3" Min. Radius**

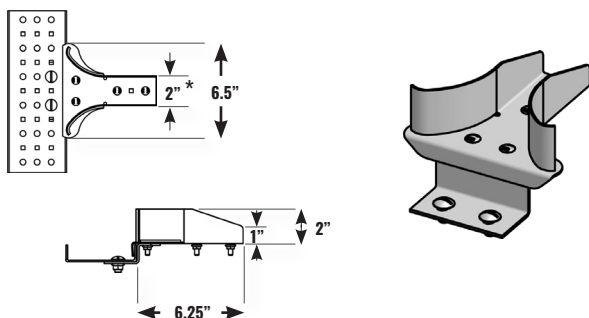


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	TC2-GC1-R3D90	CV-T2MG2 R3D90
Steel*	4	TC4-GC1-R3D90	CV-T4MG2 R3D90
	6	TC6-GC1-R3D90	CV-T6MG2 R3D90
Natural Finish Alum.	2	TC2-NA1-R3D90	CV-T2NA2 R3D90
	4	TC4-NA1-R3D90	CV-T4NA2 R3D90
	6	TC6-NA1-R3D90	CV-T6NA2 R3D90
Stainless Steel	2	TC2-SS1-R3D90T4	CV-T2SS2 R3D90T4
	4	TC4-SS1-R3D90T4	CV-T4SS2 R3D90T4
T-304	6	TC6-SS1-R3D90T4	CV-T6SS2 R3D90T4
Stainless Steel	2	TC2-SS1-R3D90T6	CV-T2SS2 R3D90T6
	4	TC4-SS1-R3D90T6	CV-T4SS2 R3D90T6
T-316	6	TC6-SS1-R3D90T6	CV-T6SS2 R3D90T6

**A: 14.25" plus channel width**  
**B: 7.25" plus channel width**  
**Nominal Engagement: 3.5"**

## Horizontal Drop-Out Fitting



Metal	Width	Part No.
Stainless Steel T-304	2	DHC2-SS2-1T4
Stainless Steel T-316		

**Nominal Engagement: 3.5"**

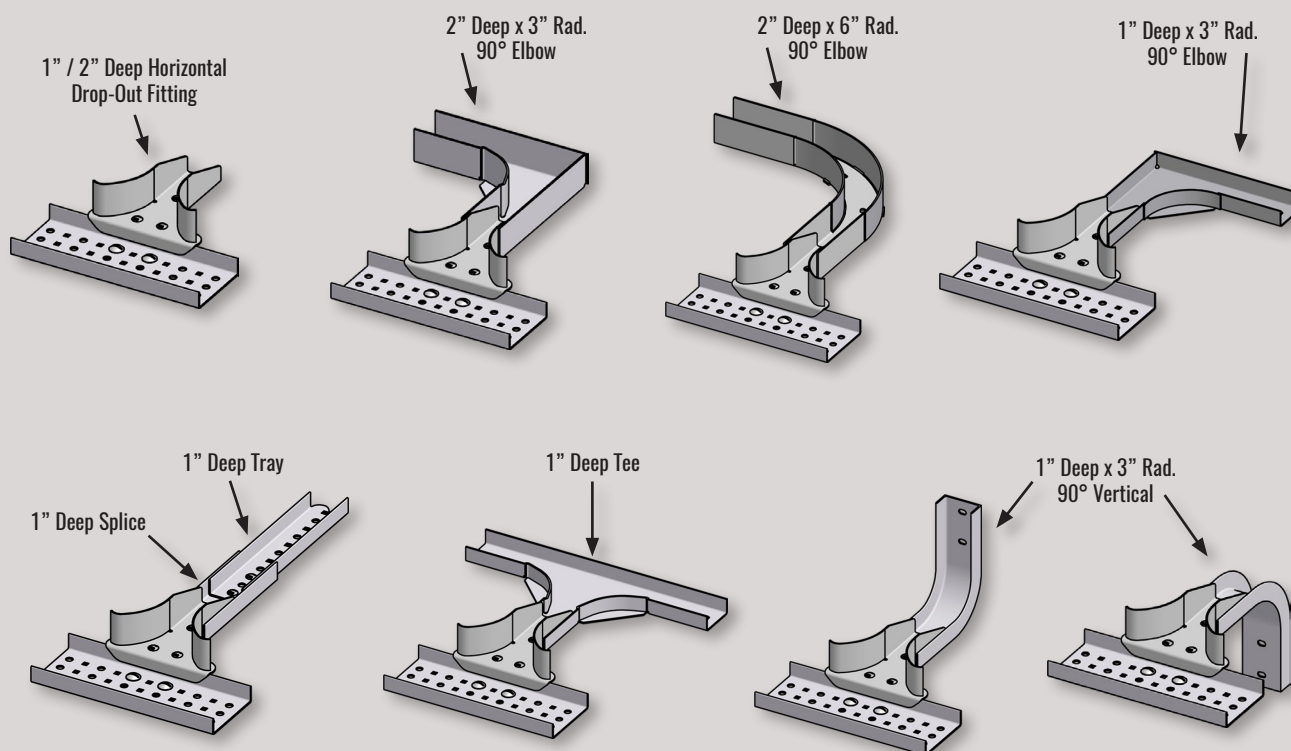
See pg. 7 for Horizontal Drop-Out Fitting for 2" deep tray

\* Same width as standard 2" wide CABLE-RACE® tray. Use with any CABLE-RACE® or TUBETRACK® fitting.

## Attachable Horizontal Drop-Out Fitting

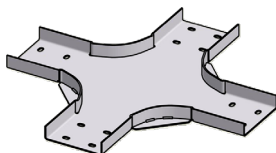
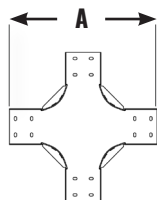
- Drop-Out to an instrumentation station or work station
- Bolt directly to any 1" deep CABLE-RACE® 2", 4", or 6" wide tray
- No need to cut or modify existing mainline tray
- Drop-Out at any point along the CABLE-RACE® main line tray
- Extend using any 2" wide CABLE-RACE® or TUBETRACK® tray fitting
- Use single Drop-Out fitting with a CABLE-RACE® fitting for desired configuration
- All CABLE-RACE® fittings include required fasteners
- Includes mounting bracket and fasteners for connection to 1" deep tray
- Available in stainless steel - fits CABLE-RACE® tray of any metal

## Examples of possible configurations using this single fitting for each Drop-Out:





**Cross Channel  
90° Bend  
3" Min. Radius**



Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	KC2-GC1-R3D90	CV-K2MG2 R3D90
Steel*	4	KC4-GC1-R3D90	CV-K4MG2 R3D90
	6	KC6-GC1-R3D90	CV-K6MG2 R3D90
Natural Finish Alum.	2	KC2-NA1-R3D90	CV-K2NA2 R3D90
	4	KC4-NA1-R3D90	CV-K4NA2 R3D90
	6	KC6-NA1-R3D90	CV-K6NA2 R3D90
Stainless Steel	2	KC2-SS1-R3D90T4	CV-K2SS2 R3D90T4
	4	KC4-SS1-R3D90T4	CV-K4SS2 R3D90T4
T-304	6	KC6-SS1-R3D90T4	CV-K6SS2 R3D90T4
Stainless Steel	2	KC2-SS1-R3D90T6	CV-K2SS2 R3D90T6
	4	KC4-SS1-R3D90T6	CV-K4SS2 R3D90T6
T-316	6	KC6-SS1-R3D90T6	CV-K6SS2 R3D90T6

**A: 14.25" plus channel width**  
**Nominal Engagement: 3.5"**

**Inside Channel Vertical  
90° Bend  
3" Radius**

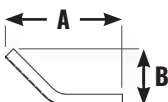


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	ICV2-GC1-R3D90	CV-I2MG1 R3D90
Steel*	4	ICV4-GC1-R3D90	CV-I4MG1 R3D90
	6	ICV6-GC1-R3D90	CV-I6MG1 R3D90
Natural Finish Alum.	2	ICV2-NA1-R3D90	CV-I2NA1 R3D90
	4	ICV4-NA1-R3D90	CV-I4NA1 R3D90
	6	ICV6-NA1-R3D90	CV-I6NA1 R3D90
Stainless Steel	2	ICV2-SS1 R3D90T4	CV-I2SS1 R3D90T4
	4	ICV4-SS1 R3D90T4	CV-I4SS1 R3D90T4
T-304	6	ICV6-SS1 R3D90T4	CV-I6SS1 R3D90T4
Stainless Steel	2	ICV2-SS1 R3D90T6	CV-I2SS1 R3D90T6
	4	ICV4-SS1 R3D90T6	CV-I4SS1 R3D90T6
T-316	6	ICV6-SS1 R3D90T6	CV-I6SS1 R3D90T6

**A: 7.25"**  
**Nominal Engagement: 3.5"**

**Inside Channel Vertical  
45° Bend  
3" Radius**

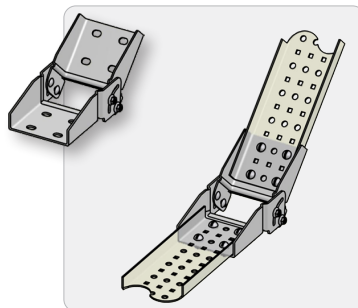


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	ICV2-GC1-R3D45	CV-I2MG1 R3D45
Steel*	4	ICV4-GC1-R3D45	CV-I4MG1 R3D45
	6	ICV6-GC1-R3D45	CV-I6MG1 R3D45
Natural Finish Alum.	2	ICV2-NA1-R3D45	CV-I2NA1 R3D45
	4	ICV4-NA1-R3D45	CV-I4NA1 R3D45
	6	ICV6-NA1-R3D45	CV-I6NA1 R3D45
Stainless Steel	2	ICV2-SS1 R3D45T4	CV-I2SS1 R3D45T4
	4	ICV4-SS1 R3D45T4	CV-I4SS1 R3D45T4
T-304	6	ICV6-SS1 R3D45T4	CV-I6SS1 R3D45T4
Stainless Steel	2	ICV2-SS1 R3D45T6	CV-I2SS1 R3D45T6
	4	ICV4-SS1 R3D45T6	CV-I4SS1 R3D45T6
T-316	6	ICV6-SS1 R3D45T6	CV-I6SS1 R3D45T6

**A: 10.75" B: 4.5"**  
**Nominal Engagement: 3.5"**

**Inside Channel Vertical  
Adjustable Bend (0-90°)  
Patent No.: US 8,167,250 B2**



Includes 3/8" dia. bolting (same part as 2" deep, page 8). Cut channels so that round holes are on the connecting end.

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	ICV2-GC2-DA	-
Steel*	4	ICV4-GC2-DA	-
	6	ICV6-GC2-DA	-
Natural Finish Alum.	2	ICV2-NA2-DA	-
	4	ICV4-NA2-DA	-
	6	ICV6-NA2-DA	-
Stainless Steel	2	ICV2-SS2-DAT4	-
	4	ICV4-SS2-DAT4	-
T-304	6	ICV6-SS2-DAT4	-
Stainless Steel	2	ICV2-SS2-DAT6	-
	4	ICV4-SS2-DAT6	-
T-316	6	ICV6-SS2-DAT6	-

**A: 6"**  
**Nominal Engagement: 3.5"**



**Outside Channel Vertical  
90° Bend  
3" Min. Radius**

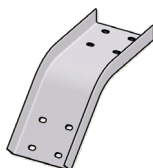


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC1-R3D90	CV-O2MG1 R3D90
Steel*	4	OCV4-GC1-R3D90	CV-O4MG1 R3D90
	6	OCV6-GC1-R3D90	CV-O6MG1 R3D90
Natural Finish Alum.	2	OCV2-NA1-R3D90	CV-O2NA1 R3D90
	4	OCV4-NA1-R3D90	CV-O4NA1 R3D90
	6	OCV6-NA1-R3D90	CV-O6NA1 R3D90
Stainless Steel	2	OCV2-SS1 R3D90T4	CV-O2SS1 R3D90T4
	4	OCV4-SS1 R3D90T4	CV-O4SS1 R3D90T4
T-304	6	OCV6-SS1 R3D90T4	CV-O6SS1 R3D90T4
Stainless Steel	2	OCV2-SS1 R3D90T6	CV-O2SS1 R3D90T6
	4	OCV4-SS1 R3D90T6	CV-O4SS1 R3D90T6
T-316	6	OCV6-SS1 R3D90T6	CV-O6SS1 R3D90T6

**A: 8.0"**  
**Nominal Engagement: 3.5"**

**Outside Channel Vertical  
45° Bend  
3" Min. Radius**

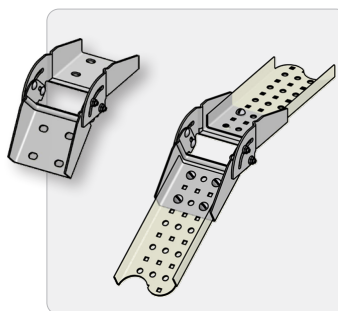
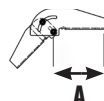


Includes 1/4" dia. bolting

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC1-R3D45	CV-O2MG1 R3D45
Steel*	4	OCV4-GC1-R3D45	CV-O4MG1 R3D45
	6	OCV6-GC1-R3D45	CV-O6MG1 R3D45
Natural Finish Alum.	2	OCV2-NA1-R3D45	CV-O2NA1 R3D45
	4	OCV4-NA1-R3D45	CV-O4NA1 R3D45
	6	OCV6-NA1-R3D45	CV-O6NA1 R3D45
Stainless Steel	2	OCV2-SS1 R3D45T4	CV-O2SS1 R3D45T4
	4	OCV4-SS1 R3D45T4	CV-O4SS1 R3D45T4
T-304	6	OCV6-SS1 R3D45T4	CV-O6SS1 R3D45T4
Stainless Steel	2	OCV2-SS1 R3D45T6	CV-O2SS1 R3D45T6
	4	OCV4-SS1 R3D45T6	CV-O4SS1 R3D45T6
T-316	6	OCV6-SS1 R3D45T6	CV-O6SS1 R3D45T6

**A: 11.75"** **B: 4.5"**  
**Nominal Engagement: 3.5"**

**Outside Channel Vertical  
Adjustable Bend (0-90°)  
Patent No.: US 8,167,250 B2**



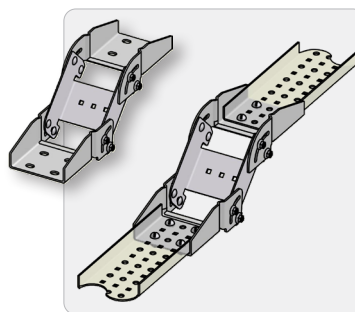
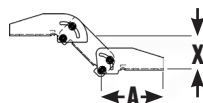
Includes 3/8" dia. bolting (same part as 2" deep, page 9). Cut channels so that round holes are on the connecting end.

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-DA	-
Steel*	4	OCV4-GC2-DA	-
	6	OCV6-GC2-DA	-
Natural Finish Alum.	2	OCV2-NA2-DA	-
	4	OCV4-NA2-DA	-
	6	OCV6-NA2-DA	-
Stainless Steel	2	OCV2-SS2-DAT4	-
	4	OCV4-SS2-DAT4	-
T-304	6	OCV6-SS2-DAT4	-
Stainless Steel	2	OCV2-SS2-DAT6	-
	4	OCV4-SS2-DAT6	-
T-316	6	OCV6-SS2-DAT6	-

**A: 5.25"**  
**Nominal Engagement: 3.5"**



**Offset Channel Vertical  
Adjustable Bend (0-90°)  
Patent No.: US 8,167,250 B2**



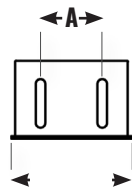
Includes 3/8" dia. bolting (same part as 2" deep, page 9). Cut channels so that round holes are on the connecting end.

Metal	Width	Part No.	Cover Part No.
Hot-Dip Galv.	2	OCV2-GC2-DDA5	-
Steel*	4	OCV4-GC2-DDA5	-
	6	OCV6-GC2-DDA5	-
Natural Finish Alum.	2	OCV2-NA2-DDA5	-
	4	OCV4-NA2-DDA5	-
	6	OCV6-NA2-DDA5	-
Stainless Steel	2	OCV2-SS2-DDA5T4	-
	4	OCV4-SS2-DDA5T4	-
T-304	6	OCV6-SS2-DDA5T4	-
Stainless Steel	2	OCV2-SS2-DDA5T6	-
	4	OCV4-SS2-DDA5T6	-
T-316	6	OCV6-SS2-DDA5T6	-

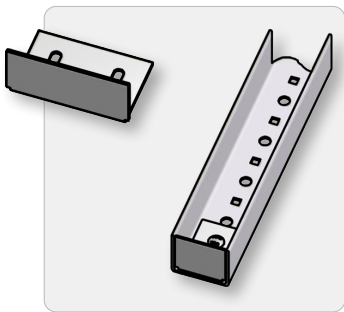
**A: 6"**  
**Nominal Engagement: 3.5"**  
**X: Offset at 45° (shown) 3.25"**  
**Max. offset (bends at 90°) 5"**



Channel End Cover



Includes 1/4" dia. bolting

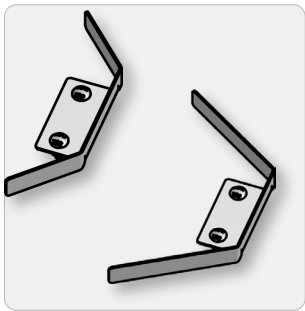
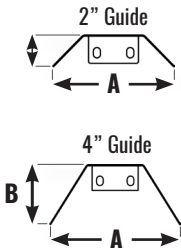


Metal	Width	A	Part No.
Stainless Steel	2	0	CVE-CH2SS1T4
Steel	4	2	CVE-CH4SS1T4
T-304	6	4	CVE-CH6SS1T4
Stainless Steel	2	0	-
Steel	4	2	-
T-316	6	4	-

Channel End Covers are used where there is a requirement to enclose the end of a CABLE-RACE® tray. CABLE-RACE® End Covers are adjustable to make flush with the end of the tray.



Reduction Guide

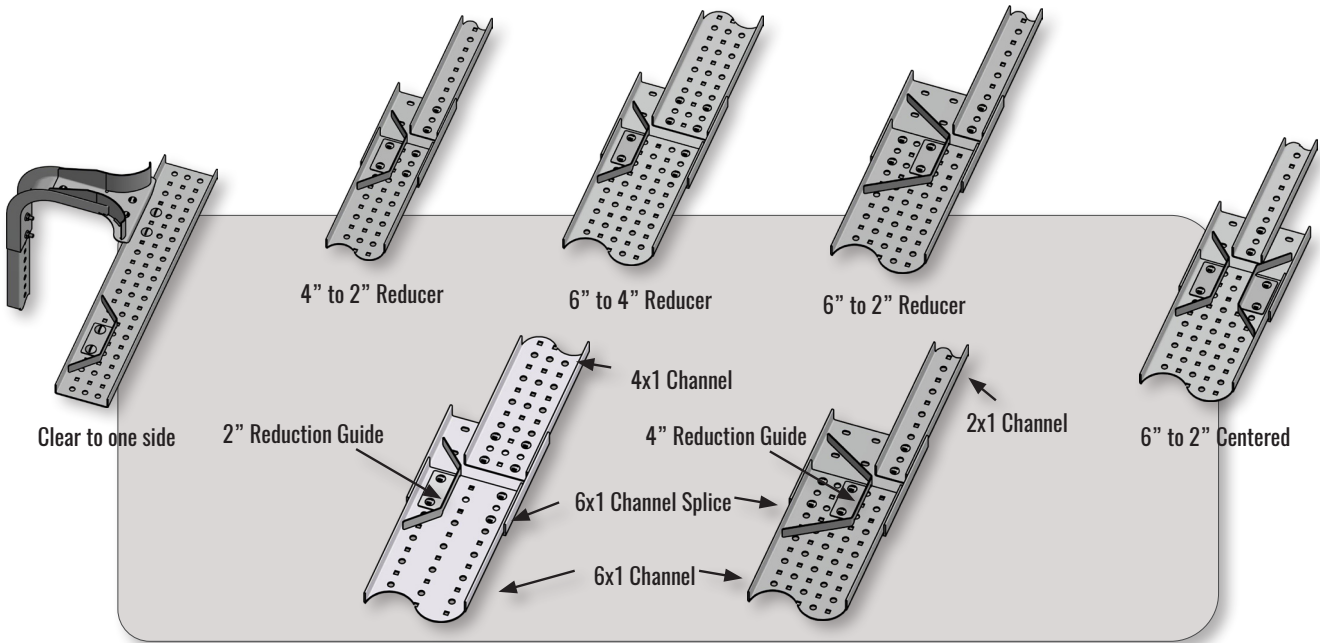


Metal	Width	A	B	Part No.
Stainless Steel	2	7.3"	2"	REG2SS1-T4RHLH
Steel	4	8.5"	4"	REG4SS1-T4RHLH
T-304				
Stainless Steel	2	7.3"	2"	-
Steel	4	8.5"	4"	-
T-316				

Use with standard CABLE-RACE® splice fittings. Reduction Guides are adjustable to a desired flange alignment. Each deflector can be used for either right hand or left hand reduction. Fasteners included with each Reduction Guide.

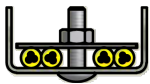
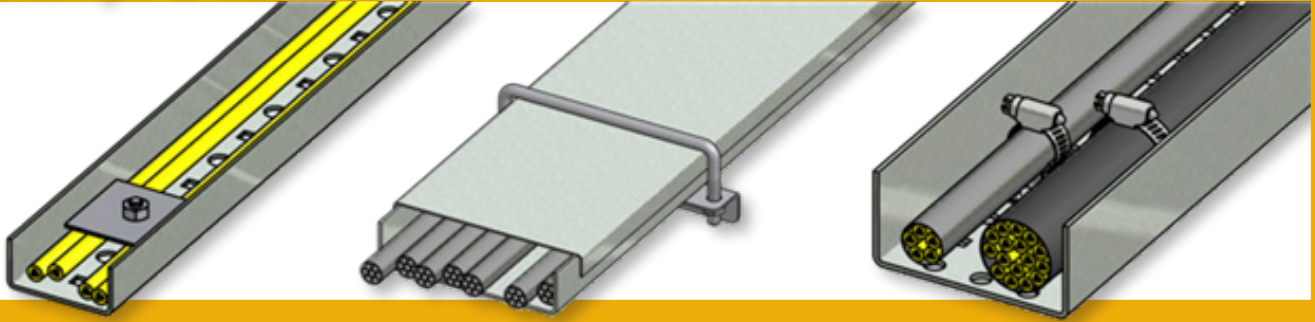


Examples of Reduction Options:

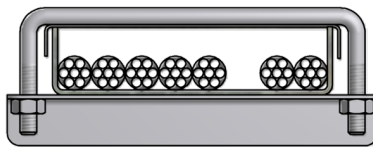




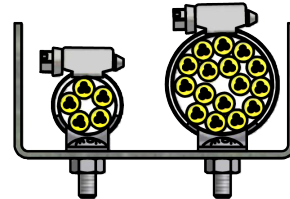
# Clamps & Hardware



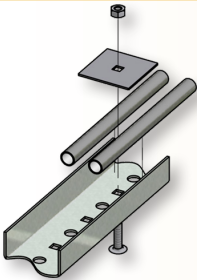
- Clamp: FC2-SS4-1
- Bolt: 1/4" dia. X 1"
- Cables: 1/4" dia
- Channel: 2" x 1"



- Clamp: CCC4-SS4-1
- Cables: 1/2" dia.
- Channel: 4" x 1"
- Cover: 4" channel



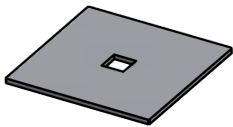
- Clamps: BLC1-SS4-0.75  
BLC1-SS4-1.50
- Cables: 3/4" dia., 1-1/2" dia.
- Channel: 4" x 2"



## Fastening Clamps

Cables are fastened into CABLE-RACE® using JCWCO Flat Cable Clamps and 1/4"-20 Bolts. Bolts have special short-square carriage to fit the hole and assist in speed of assembly. Fasteners are included with flat clamps.

## Flat Clamp



Includes Fasteners



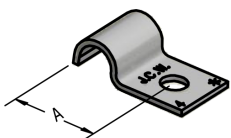
- Clamp: FC2-SS4-1
- Tubing Bolt: 1/4" dia. X 1"
- Cables: 1/4" dia.
- Channel: 2" x 1"

## EXAMPLES

Channel Width	Channel Depth	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel
2	1	FC2-SS4-1	FC2-SS6-1
	2	FC2-SS4-2	FC2-SS6-2
4	1	FC4-SS4-1	FC4-SS6-1
	2	FC4-SS4-2	FC4-SS6-2
6	1	FC6-SS4-1	FC6-SS6-1
	2	FC6-SS4-2	FC6-SS6-2

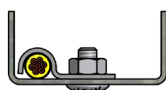
1" long Tubing Bolts with nuts are provided with flat clamps for 1" deep tray. 2" long Tubing Bolts with nuts are provided with flat clamps for 2" deep tray.

## Single Clamp 1 Cable



Fasteners not included

## For Universal Applications



- Clamp: YC1-SS4-375
- Tubing Bolt: 1/4" dia.
- Cable: 3/8" dia.
- Channel: 2" x 1"

No. of Tubes	Nominal Tube OD	Part No. 304 Stainless Steel	Part No. 316 Stainless Steel	Dim. A	Bag Qty.
1	0.250	YC1-SS4-250	YC1-SS6-250	0.79	25
	0.375	-	YC1-SS6-375	0.95	
	0.500	-	YC1-SS6-500	1.08	
	0.750	-	YC1-SS6-750	1.33	
	1.000	-	YC1-SS6-1000	1.61	
	1.500	-	YC1-SS6-1500	2.25	
	2.000	-	YC1-SS6-2000	2.75	

1/4", 3/8" YC1 clamps fit in 2" wide CABLE-RACE® tray. Bagged at 25 or shipped in bulk. Order in multiples of 25. 1/4" Fasteners are not included - Order fasteners separately.

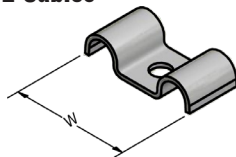






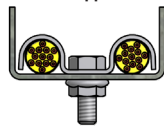
## Clamps

### Duplex Clamp 2 Cables



Fasteners not included

#### EXAMPLES For Universal Applications



- Clamp: DPC2-SS4-500
- Hex Bolt: 1/4" dia. x 3/4"
- Cable: 1/2" dia.
- Channel: 2" x 1"

No. of Cables	Nominal Tube OD	Part No. 304 Stainless Steel	Part No. 316 Stainless Steel	Dim. W	Bag Qty.
2	0.250	-	DPC2-SS6-250	1.54	25
	0.375	-	DPC2-SS6-375	1.60	
	0.500	-	DPC2-SS6-500	1.86	
	0.750	-	DPC2-SS6-750	2.52	10
	1.000	-	DPC2-SS6-1000	3.03	

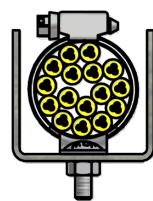
1/4", 3/8", and 1/2" DPC2 clamps fit in 2" wide CABLE-RACE® tray.  
Bagged at 25 per bag or shipped in bulk. Order in multiples of 25.  
1/4" Fasteners are not included - Order fasteners separately.



### Bundle Lock Clamp



Includes fasteners



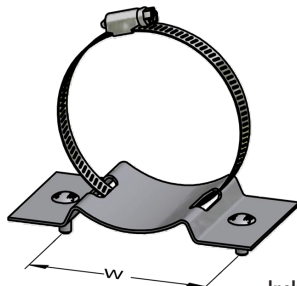
- Clamp: BLC1-SS4-150
- Bolt: Included
- Bundle: 1-1/2" dia.
- Channel: 2" x 2"

No. of Bundles	Min. OD of Bundle	Max OD of Bundle	Part No. 304 Stainless Steel	Bag Qty.
1	0.625	0.750	BLC1-SS4-0.75	10
	0.750	0.875	BLC1-SS4-0.87	
	0.875	1.000	BLC1-SS4-1.00	
	1.000	1.250	BLC1-SS4-1.25	
	1.250	1.500	BLC1-SS4-1.50	
	1.375	1.750	BLC1-SS4-1.75	
	1.750	2.000	BLC1-SS4-2.00	
	2.000	2.250	BLC1-SS4-2.25	
	2.250	2.750	BLC1-SS4-2.75	
	2.750	3.500	BLC1-SS4-3.50	

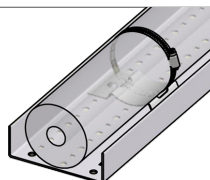
Four piece set includes clamp, saddle, bolt, and nut.  
Bagged 10 sets per bag. Order in multiples of 10.

CAUTION: Consider linear thermal expansion.

### Bundle Lock Clamp Large, Anchor



Includes fasteners

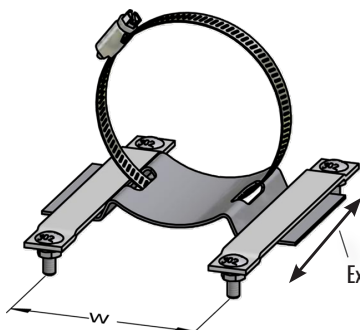


No. of Bundles	Min. OD Bundle	Max OD Bundle	Part No. 304 Stainless Steel 3-Directional	Dim. W
1	1.5"	2.4"	BLC1W-SS4-200	4"
	2.3"	3.1"	BLC1W-SS4-250	4"
	2.8"	3.4"	BLC1W-SS4-300	4"
	3.3"	4.1"	BLC1W-SS4-350	4"
	3.8"	4.6"	BLC1W-SS4-400	4"

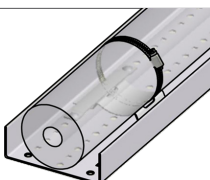
Anchor clamp holds larger bundles in horizontal or vertical runs of 6" x 2" CABLE-RACE® channel tray. This 3-directional clamp locks bundle in place along tray.  
Fasteners included for CABLE-RACE® 6" x 2" tray.

Anchor clamp - CAUTION: Consider thermal expansion

### Bundle Lock Clamp Large, Expansion



Includes fasteners

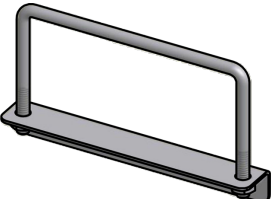
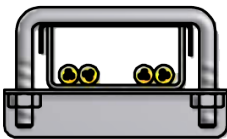


No. of Bundles	Min. OD Bundle	Max OD Bundle	Part No. 304 Stainless Steel 2-Directional	Dim. W	Expansion Range
1	1.5	2.4	BLC1W-S4-200-E2	4"	2"
	2.3	3.1	BLC1W-S4-250-E2	4"	2"
	2.8"	3.4"	BLC1W-S4-300-E2	4"	2"
	3.3"	4.1"	BLC1W-S4-350-E2	4"	2"
	3.8"	4.6"	BLC1W-S4-400-E2	4"	2"
	1.5	2.4	BLC1W-S4-200-E4	4"	4"
	2.3	3.1	BLC1W-S4-250-E4	4"	4"
	2.8"	3.4"	BLC1W-S4-300-E4	4"	4"
	3.3"	4.1"	BLC1W-S4-350-E4	4"	4"
	3.8"	4.6"	BLC1W-S4-400-E4	4"	4"

Expansion clamp holds larger bundles in horizontal or vertical runs of 6" x 2" CABLE-RACE® channel tray. This 2-directional clamp holds bundle in place along tray but allows for linear thermal expansion.

Fasteners included for CABLE-RACE® 6" x 2" tray.



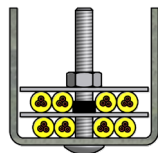
		EXAMPLES			
<div>Channel Cover Clamp</div> <div></div> <div>Sold Separately from Cover</div>	<div></div> <div><ul style="list-style-type: none"><li>• Clamp: CCC2-SS4-1</li><li>• Channel: 2" x 1"</li></ul></div>	Channel Width	Channel Depth	Part No. Cover Clamp for Channel	Part No. Cover Clamp for Fittings
		2	1	CCC2-SS4-1	FCC2-SS4-1
			2	CCC2-SS4-2	FCC2-SS4-2
		4	1	CCC4-SS4-1	FCC4-SS4-1
			2	CCC4-SS4-2	FCC4-SS4-2
		Four piece set includes base, U-bolt, and two hex nuts, all in 300 series stainless steel. Straight length covers (10 ft. and 12 ft. long) usually require three Channel Cover Clamps ("CCC"), and fitting covers usually require one Fitting Cover Clamp ("FCC") per end. Bases are marked with "C" or "F" to indicate Channel or Fitting.			



**JCWC Tubing Bolt**  
1/4" Dia., 20 NC Thread



EXAMPLES

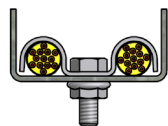


Tubing Bolt 2" long  
Nuts sold separately

Bolt Length	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
0.50	TBZN-250X0.50	TBSS4-250X0.50	TBSS6-250X0.50	25
0.75	TBZN-250X0.75	TBSS4-250X0.75	TBSS6-250X0.75	
1.00	-	TBSS4-250X1.00	TBSS6-250X1.00	
1.25	TBZN-250X1.25	TBSS4-250X1.25	TBSS6-250X1.25	
1.50	-	TBSS4-250X1.50	TBSS6-250X1.50	
2.00	TBZN-250X2.00	TBSS4-250X2.00	TBSS6-250X2.00	
3.00	TBZN-250X3.00	TBSS4-250X3.00	TBSS6-250X3.00	

Special short square carriage fits in square holes in punch pattern.  
Bagged 25 per bag, or shipped in bulk. Order in multiples of 25.  
Low profile JCWC Tubing Bolts are provided with all standard 1" deep CABLE-RACE® tray fittings and Flat Clamps.

**Hex Head Bolts**  
1/4" Dia., 20 NC Thread



Hex Head Bolt 3/4" Long with  
Flange Lock Nut  
Nuts sold separately

1/4" Diameter

Bolt Length	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
0.75	-	MBSS4-250X0.75	-	25
1.00	-	MBSS4-250X1.00	-	
1.50	-	MBSS4-250X1.50	-	
2.00	-	MBSS4-250X2.00	-	

3/8" Diameter

1.50	-	MBSS4-375X1.50	-	25
2.00	-	MBSS4-375X2.00	-	
2.50	-	MBSS4-375X2.50	-	
3.00	-	MBSS4-375X3.00	-	
3.50	-	MBSS4-375X3.50	-	
4.00	-	MBSS4-375X4.00	-	
5.00	-	MBSS4-375X5.00	-	

Bagged 25 per bag, or shipped in bulk. Order in multiples of 25.

**Truss-Head Bolts**  
3/8" Dia., 16 NC Thread  
Slotted



Bolt Length	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
0.75	THBZN-375X0.75	THBSS4-375X0.75	THBSS6-375X0.75	25
1.00	THBZN-375X1.00	-	THBSS6-375X1.00	

Bagged 25 per bag, or shipped in bulk. Order in multiples of 25.

Low profile JCWC Truss Head Bolts are provided with all standard 2" deep CABLE-RACE® tray fittings. Order additional bolts with nuts and hardware to be used for mounting 1" and 2" deep tray, spares, etc.

**Hex & Flange Lock Nuts**



Nut Size 0.250"


Type	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
Hex Nut	HN-ZN-250	HN-SS4-250	HN-SS6-250	25
Locking Flange	HNFL-ZN-250	HNFL-SS4-250	HNFL-SS6-250	


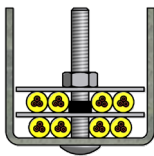
Nut Size 0.375"

Type	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
Hex Nut	HN-ZN-375	HN-SS4-375	HN-SS6-375	25
Locking Flange	HNFL-ZN-375	HNFL-SS4-375	HNFL-SS6-375	

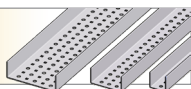
Bagged 25 per bag, or shipped in bulk. Order in multiples of 25.



		EXAMPLES	Washer Size 0.250"				
Washers			Type	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
			Flat	FLW-ZN-250	FLW-SS4-250	FLW-SS6-250	25
			Lock	LKW-ZN-250	LKW-SS4-250	LKW-SS6-250	
			Washer Size 0.375"				
			Type	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
			Flat	FLW-ZN-375	FLW-SS4-375	FLW-SS6-375	25
			Lock	LKW-ZN-375	LKW-SS4-375	LKW-SS6-375	
Bagged 25 per bag, or shipped in bulk. Order in multiples of 25.							

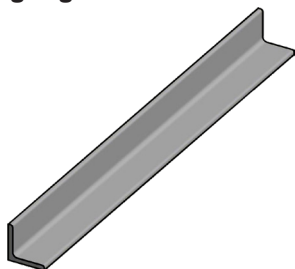
Nuts, Specialty 1/4" Dia., 20 NC Thread		  Round Nut holds bolt and lower clamp in place for assembly.	Nut Type	Part No. Zinc Plated Steel	Part No. 18-8 Stainless Steel	Part No. 316 Stainless Steel	Bag Qty.
			Wing	WN-ZN-250	WN-SS4-250	WN-SS6-250	25
			Round	-	RN-SS4-250	-	
			Knurled	KN-ZN-250	-	-	
Round nuts are used to secure bolt or lower layers of cables as additional layers are added. They are 0.16" high.							
All nuts bagged 25 per bag, or shipped in bulk. Order in multiples of 25.							





## Supplementary Materials

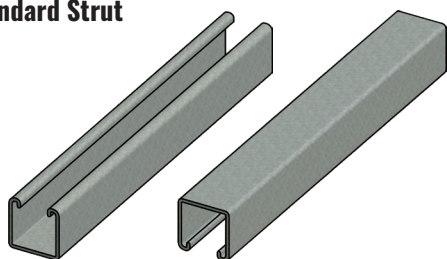
### Framing Angle



Width	Metal	Part No.
2"	A-36 HRS Hot-Dip Galvanized Steel	A2FR25GCU-240
3"	A-36 HRS Hot-Dip Galvanized Steel	A3FR25GCU-240

1/4" thick, 20' length.  
Non-perforated, hot-dip galvanized A-36 HRS structural steel angle for field fabrication.

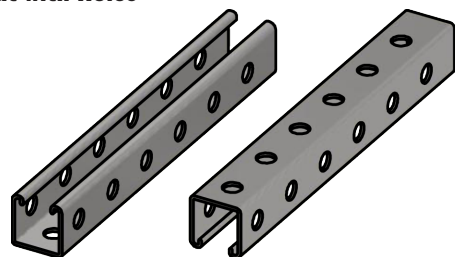
### Standard Strut



Metal	Part No.	Length
Hot-Dip Galv. Steel	ST200-GC	20'
Pre-Galv. Steel	ST200-PG	
Stainless Steel T-304	ST200-S4	10'
Stainless Steel T-316	ST200-S6	

1-5/8" x 1-5/8" x 12ga.  
Standard Strut with no holes.

### Strut with Holes

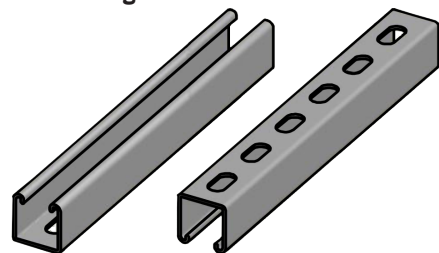


Metal	Part No.	Length
Hot-Dip Galv. Steel	ST200-GC-H3	20'
Pre-Galv. Steel	ST200-PG-H3	

1-5/8" x 1-5/8" x 12ga.  
Standard strut with 9/16" round holes (all sides) on 1-7/8" centers.

Will fit JCWCO Strut Connectors & Strut Bases in 90° orientation without drilling holes. See pages 26-27.

### Strut with Elongated Holes



Metal	Part No.	Length
Hot-Dip Galv. Steel	ST200-GC-EH	20'
Pre-Galv. Steel	ST200-PG-EH	
Stainless Steel T-304	ST200-S4-EH	10'
Stainless Steel T-316	ST200-S6-EH	

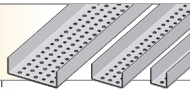
1-5/8" x 1-5/8" x 12ga.  
Standard strut with oblong slots (9/16" x 1-1/8") on 2" centers.

### Grating Mounts



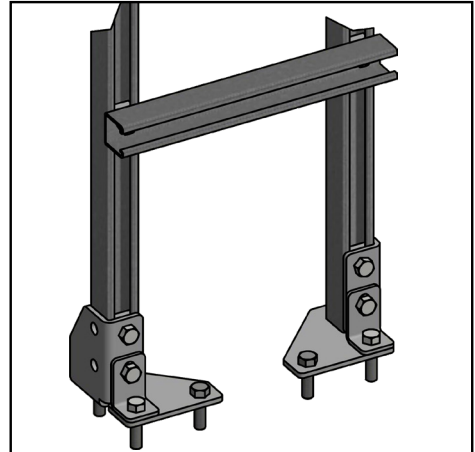
Metal	Part No.
Hot-Dip Galv. Steel	IM-GMGC-500X3.0
Stainless Steel T-316	IM-GMS6-500X3.0

1/2" x 3" stud. Withstands up to 1,000 lb. upward pulling force.  
Fastener assembly used as a stable base on which to mount other devices to a grating surface.

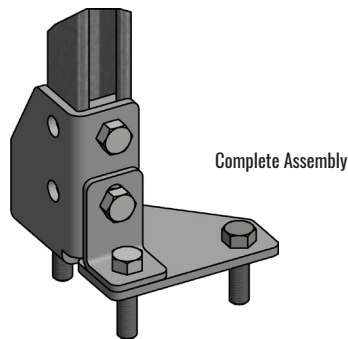


### Strut Stand Bases

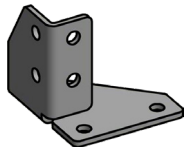
- Our new Strut Stand Bases allow for fast and easy field fabrication of strut stands, saving you time and money.
- No welds
- Pre-cut or field cut standard strut to desired length.
- Fits Unistrut® P1000, P1000T, P1000H3, standard 1-3/8" x 1-5/8" strut or equivalent.
- Available to purchase as individual components or a complete assembly.
- Assembly includes (2) 1/2-13 x 1 1/2" bolts, (2) 1/2" spring nuts, and angle brace.
- Anchor Fasteners and Strut are not included.



#### Strut Stand Base Left Hand



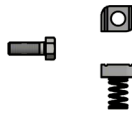
Complete Assembly



(1) Stand Base



(4) Angle Brace



(5) Bolt and  
(6) Spring Nut

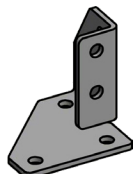
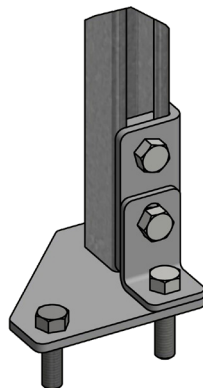
Metal	Complete Assy. Part No.
Hot-Dip Galv. Steel	STBA-GCL-B2878Y
Stainless Steel T-304	-
Stainless Steel T-316	-

Great for skid building. Can be purchased as individual components or complete assembly. For Individual Components, use item numbers at left and see page 27 for associated Part Number.

Complete assembly includes hardware: (2) 1/2-13 x 1-1/2" bolts and (2) 1/2" Spring Nuts. Anchor Fasteners and Strut sold separately.

#### Strut Stand Base Right Hand

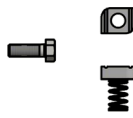
Complete Assembly



(2) Stand Base



(4) Angle Brace

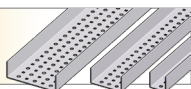


(5) Bolt and  
(6) Spring Nut

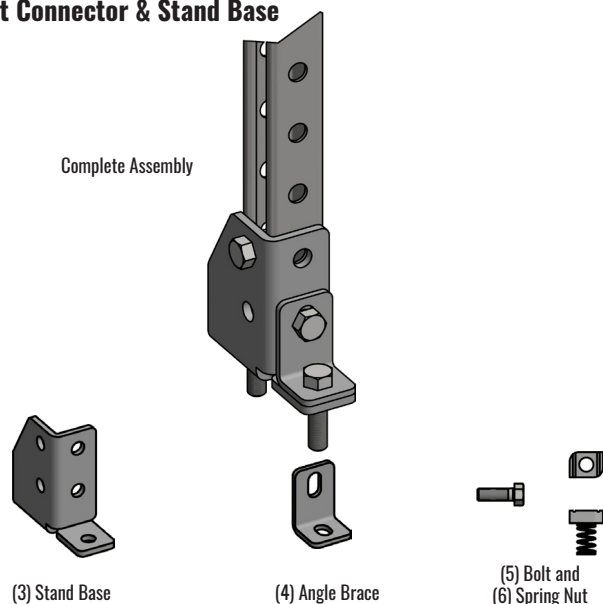
Metal	Complete Assy. Part No.
Hot-Dip Galv. Steel	STBA-GCR-B2886Y
Stainless Steel T-304	-
Stainless Steel T-316	-

Great for skid building. Can be purchased as individual components or complete assembly. For Individual Components, use item numbers at left and see page 27 for associated Part Number.

Complete assembly includes hardware: (2) 1/2-13 x 1-1/2" bolts and (2) 1/2" Spring Nuts. Anchor Fasteners and Strut sold separately.



## Strut Connector & Stand Base



Metal	Complete Assy. Part No.
Hot-Dip Galv. Steel	STBA-GC-A5100Y
Stainless Steel T-304	-
Stainless Steel T-316	-

Great for skid building. Can be purchased as individual components or complete assembly. For Individual Components, use item numbers at left and see below for associated Part Number.

Complete assembly includes hardware: (2) 1/2-13 x 1-1/2" bolts and (2) 1/2" Spring Nuts. Anchor Fasteners and Strut sold separately.

## Strut Stand Bases - Individual Components

1

Stand Base - LEFT HAND

Metal	Part No.
Hot-Dip Galv. Steel	STB-GC-B2877-LH
Stainless Steel T-304	-
Stainless Steel T-316	-

2

Stand Base - RIGHT HAND

SR


Metal	Part No.
Hot-Dip Galv. Steel	STB-GC-B2885-RH
Stainless Steel T-304	-
Stainless Steel T-316	-

3


Stand Base - STANDARD

Metal	Part No.
Hot-Dip Galv. Steel	STB-GC-A5099
Stainless Steel T-304	-
Stainless Steel T-316	-

4



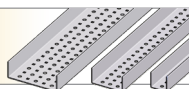
Angle Brace



Metal	Part No.
Hot-Dip Galv. Steel	STBB-GC-A5087
Stainless Steel T-304	-
Stainless Steel T-316	-

5		Hex Head Bolt	
		Metal	Part No.
		Zinc-Plated Steel	MBZN-500X1.50

6		Strut Nut		
		Metal	Part No. Strut Nut (w/ Spring)	Part No. Strut Nut (No Spring)
		Zinc-Plated Steel	STSN-ZN-500	STN-ZN-500
		Stainless Steel T-304	STSN-S4-500	STN-S4-500
		Stainless Steel T-316	STSN-S6-500	STN-S6-500



**CABLE-RACE® Channels:**  
Complete Support and Protection System for low-voltage control, signal,  
data, and communications cables.

**UL Classification CYNW.E240501**

Where CABLE-RACE® Channels and Channel Fittings are used as a Ventilated Bottom Channel Cable Tray for the support of low voltage control, signal, data, communications, or other low voltage type cables, the CABLE-RACE® Channels and Channel Fittings may be installed per the applicable sections of NEMA Standard VE 2-2000, and NEC-2002 Article 392 for Ventilated Bottom Channel Cable Trays, or per customer's engineering specifications.

Where CABLE-RACE® Channels are cut to length in the field, any burr created by the cutting process should be removed before installing the Channel Fitting.

The following table is provided for customer installation information:

TABLE OF CROSS-SECTIONAL AREA OF METAL RATING FOR CABLE-RACE® CHANNELS AND CHANNEL FITTINGS CORRESPONDING TO NEC-2002 TABLE 392.7(B)					
WIDTH	JCWCO PART NO.	Minimum Cross-Sectional Area of Metal in. <sup>2</sup> Rating	WIDTH	JCWCO PART NO.	Minimum Cross-Sectional Area of Metal in. <sup>2</sup> Rating
1	CH1-GC1	0.2	4	CH4-GC2	0.4
	CH1-NA1	0.2		CH4-NA2	0.4
				CH4-SS2T4-144-6	0.2
				CH4-SS2T6-144-6	0.2
2	CH2-GC1	0.2			
	CH2-NA1	0.2	6	CH6-GC1	0.4
	CH2-SS1T4-144-6	0.2		CH6-NA1	0.4
	CH2-SS1T6-144-6	0.2		CH6-SS1T4-144-6	0.2
				CH6-SS1T6-144-6	0.2
2	CH2-GC2	0.4			
	CH2-NA2	0.4	6	CH6-GC2	0.7
	CH2-SS2T4-144-6	0.2		CH6-NA2	0.7
	CH2-SS2T6-144-6	0.2		CH6-SS2T4-144-6	0.4
				CH6-SS2T6-144-6	0.4
4	CH4-GC1	0.2			
	CH4-NA1	0.2			
	CH4-SS1T4-144-6	0.2			
	CH4-SS1T6-144-6	0.2			
<p>All CABLE-RACE® Channel Fittings meet or exceed the minimum cross-sectional area rating of their corresponding Channel Tray listed above. The width of CABLE-RACE® Channel Fittings is slightly greater than the corresponding Channel to permit the Channel to bolt inside the fitting. All CABLE-RACE® Channel Fittings are supplied with bolting hardware for proper field assembly. Assembly diagrams available on request.</p> <p>UL® classification of the JCWCO CABLE-RACE® system is meant to include the straight lengths of Channel and corresponding Channel Fittings with bolting hardware. Tray Covers, Cover Hold-Down Clamps, Tube and Cable Clamps, non-standard tray or tray components, and other miscellaneous tray accessories are not covered by the UL® classification. UL® classification CYNW.E240501 is for cable tray classified as to its suitability as an equipment grounding conductor only.</p>					



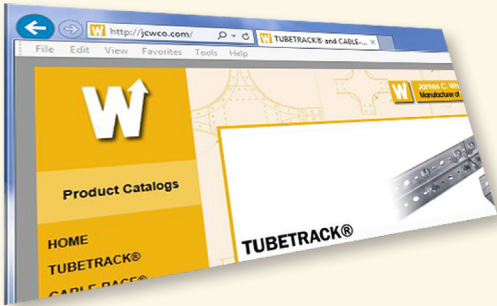
# CABLE-RACE® Weights Table

JAMES C. WHITE CO., INC. CABLE-RACE® CHANNELS - WEIGHT PER FT. (LB.)					
Depth	Width	Part NO.	CARBON STEEL H.D. GALVANIZED AFTER FABRICATION (GC) (LB./FT.)	ALUMINUM (NA) (LB./FT.)	STAINLESS STEEL 304 & 316 (SS) (LB./FT.)
1	2	CH2-**1	1.04	0.40	(16 ga.) 0.78
	4	CH4-**1	1.52	0.58	(16 ga.) 1.13
	6	CH6-**1	1.98	0.79	(16 ga.) 1.56
2	2	CH2-**2	2.05	0.64	(16 ga.) 1.19
	4	CH4-**2	2.58	0.82	(16 ga.) 1.55
	6	CH6-**2	3.48	1.15	(16 ga.) 1.97

\*\* = GC, NA, or SS

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Weight information is also available on the company website ([www.JCWCO.com](http://www.JCWCO.com)) under the “Load & Deflection Information” link. Find and click on the interactive program to also find calculations for span planning of CABLE-RACE® structural straight lengths.



Select a desired TUBETRACK® part:

1"x1" CHANNEL- PART# CH1-GC1 - 14 gage (0.068")

Select a desired support spacing:

4 ft

Enter desired actual live load:

5 #/ft

LIVE LOAD consist of the uniform weight lb/ft of wires, tubing, clamps, fasteners, snow, ice, wind and any other loading possibilities except the uniform lb/ft of the bare TUBETRACK®.

Calculate

Material Data

Part Number/Description = GALVANIZED CARBON STEEL ("GC") CHANNEL 1"x1" CHANNEL- PART# CH1-GC1 - 14 gage (0.068")

Fy = 36 ksi

E = 29000 ksi

Member Weight = 0.76 #/ft

