CH-115C

CHALFANT
Manufacturing Company

Made in USA

MADE IN OHIO

Cable Tray

Ladder, Trough, Channel, Under Floor, Shielded

Chalfant Advantages

Why Chalfant?
Chalfant knows its' success over the past 75 years can be traced to providing more than just quality cable tray on time. It relates directly to the years of application know-how of Chalfant's sales representatives and factory specialists and the personal attention given to each customer's needs. Whether it's a simple, in-stock system requiring only a run of only a few sections or a complete cable routing system requiring thousands, Chalfant is prepared to help you design a system that matches your application requirements.

Early on the need for cable tray standardization was recognized and the NEMA VE-1 metal cable tray standard was published in the early 60's. NEMA VE-1 has been updated many times and the Cable Tray Standard of 1979 included a new load/span system that assured all bids were equal.

Need Something Special?
"Specials" are not special at Chalfant... Custom designs, finishes and materials have been a big part of the Chalfant success story. Examples: sandblasted tray, barriers and lighting fixtures mounted on tray; 10" high and 60" widths; cut-to-size; installed barriers and splice plates. If you can't find the right tray to meet your requirements in this catalog... call us! Chances are excellent there is an economical solution to match your needs.

A Few Chalfant Advantages.
53% faster... because you spin up Chalfant's new stainless steel splice plate fasteners within half a turn of being tight using your fingers, you cut significant labor costs on cable tray installation.

MIG Welding and Cable Load Transfer
Chalfant's aluminum ladder has an exclusive mechanical interlock design. Rungs are notched and interlock with a raised stiffener on the bottom flange of the side rail. Rungs are then MIG welded. Cable loads are transferred directly to the side rail. The Chalfant design does not rely solely on welds for load bearing.

Long Spans
Chalfant's 8HAF tray has been used on many applications of 30' to 40' spans. Our special 106HAF tray was used for a job with 55' spans and 120 lbs/ft load.

Supplemental Product Catalogs
Chalfant provides other cable tray systems to match your application requirements. The Wire Mesh Product Guide features standard 1", 2", 4" or 6" load depths with an installation time-saving TAB System and self-connecting GR-Magic cable tray. A wide range of connectors, mounting hardware and accessories are available for every solution. Standard lengths are 10' and standard widths are 2", 4", 6", 8", 12", 16", 18", 20" & 24".

Certification
Chalfant Manufacturing is active in NEMA's cable tray section— 5CT and a founding member of the Cable Tray Institute (CTI). Chalfant is also a corporate member of BICSI.

www.chalfantcabletray.com

Important: Chalfant reserves the right to CHANGE DESIGNS and/or CONFIGURATION of any product shown in this catalog.

Made in USA - applies to product lines outlined in this catalog only, additional product lines may not qualify.

Ladder Style Cable Tray

Ladder Tray was introduced in the early 1950's. Chalfant pioneered the aluminum I-Beam, MIG welded design which today includes systems that span 30 to 40 feet.
You can select from 22 aluminum models or 10 galvanized and stainless steel models. Select trough, solid bottom, expanded metal or marine rung options. Ladder Tray is up to 75% of total sales.

Series 6 Trough Cable Tray

Series 6 Trough Tray was designed in 1965 and is still very popular because of its single piece multi-purpose design. The solid bottom option is less expensive than the ventilated trough and with a cover it is permitted in plenum ceilings. Today we offer a paintable galvanized finish. Tray is available in aluminum, galvanized or stainless steel with 3", 4' or 6" load depths to 24" widths.

Series 5 Cable Tray

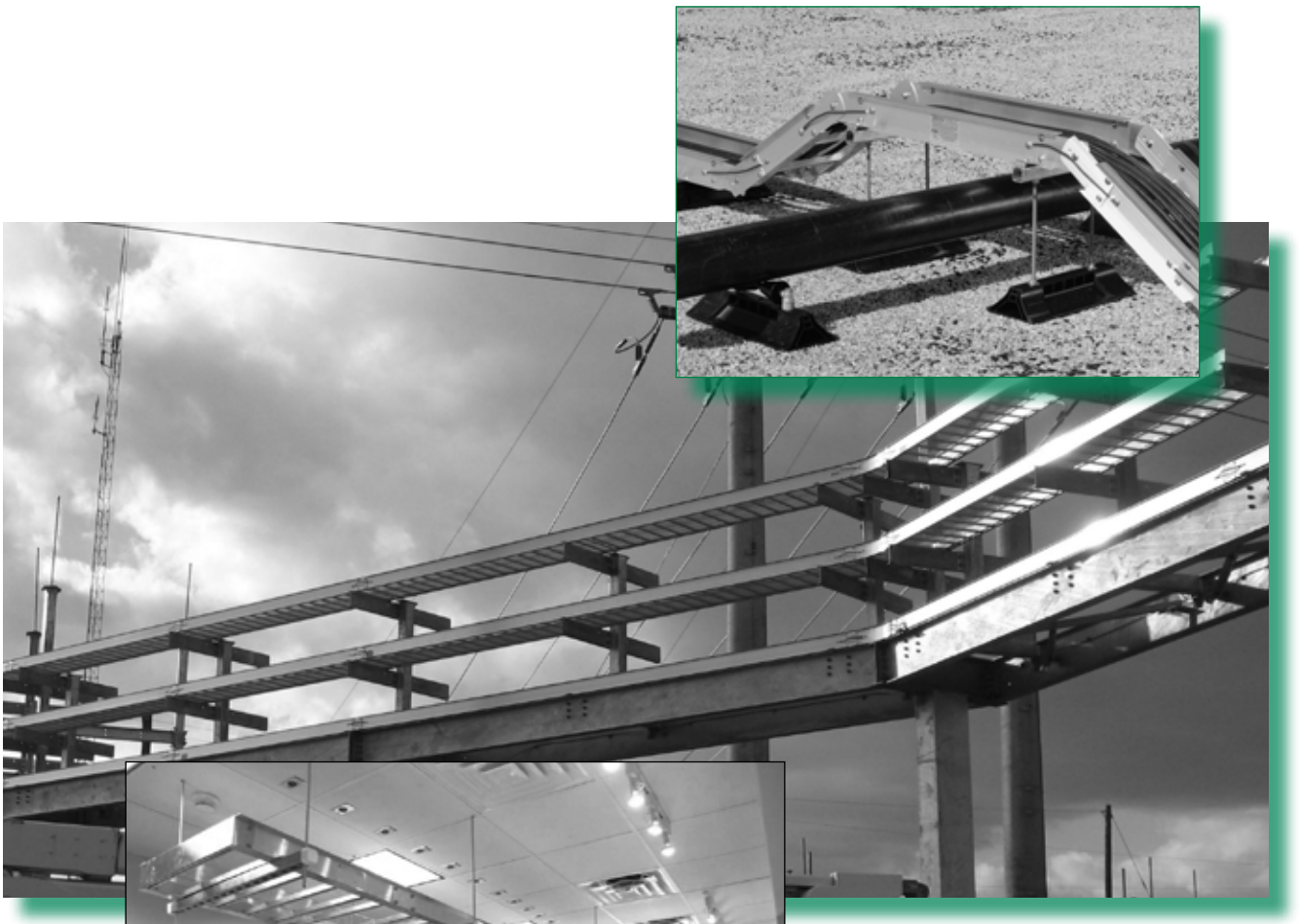
Series 5 Channel Tray is used with ladder trays in lieu of conduit to support branch circuits to motors, pumps, switchgear and etc.. It can also support low volume control or data cables. Available in 3", 4" and 6" widths in aluminum, galvanized or stainless steel.

Com-Tray

Com-Tray was introduced in 1980 to minimize field cutting. It is a unique modular bolt-together system for organizing and protecting data/computer cables under raised floors. It has an integral support splice plate that elevates the tray 6" to 8" off the sub-floor.

EMI/RFI Shielded Cable Tray

EMI/RFI Shielded Cable Tray is used by utilities and industrials to protect signal, control cables exposed to strong EMI fields. It is also used widely in national labs, military and government buildings to protect cabling from "Signal Stealing". The system has been on-site tested to 60dB @1Giga Hz.



Ladder Style Cable Tray

Typical Installations

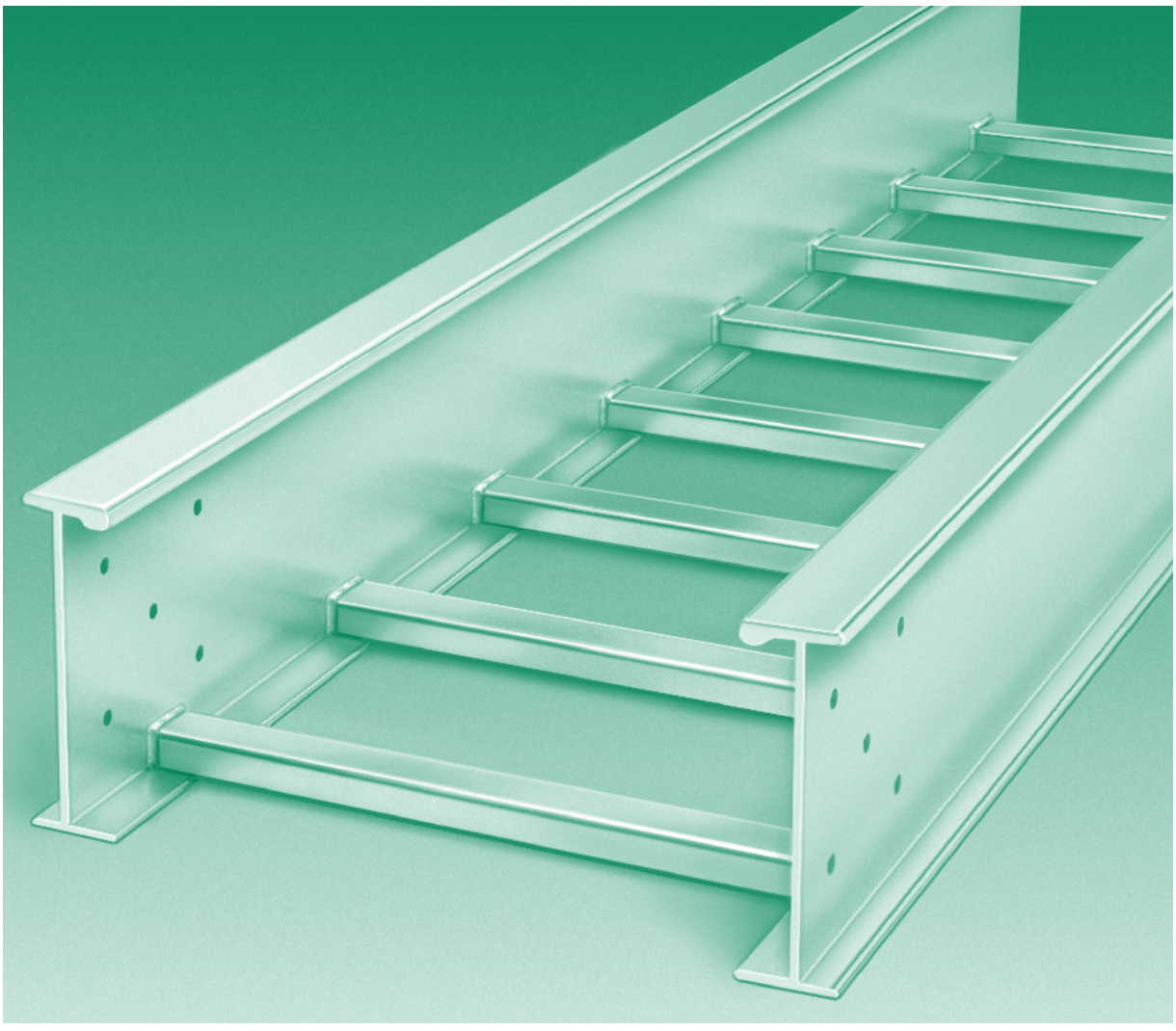
Ladder Tray®

When metal ladder cable trays came of age, they were used to support the new armored shielded power cables that were permitted outside the conduit environment. Utilities and industrial companies initiated the use of expanded metal and solid trough-styled trays for supporting power and control cable.

Cable trays quickly proved their worth as a safe, dependable and cost-effective solution to routing and supporting cables. Installed cost savings of over 50% on project after project drove the market for metal cable trays to over 80 million dollars.

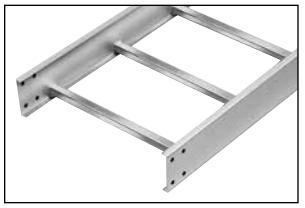
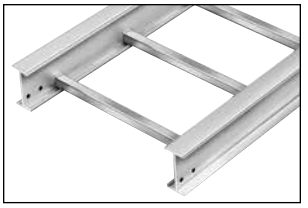
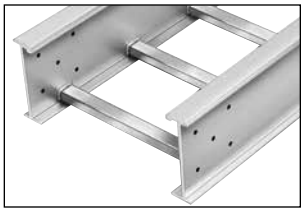
Cable Tray is *NOT A WIREWAY* and is viewed as a support for cables. This provides the designer and user many benefits.

- Full free air rating of cables, results in smaller conductors vs. conduit
- Greater fill volume allowed, results in less space
- Used in all locations except elevator shafts (the only prohibition on cable tray use)
- Used as an equipment grounding conductor (classified by UL)
- Less stress on cables during installation and operation
- Increased safety, no moisture condensation problems nor transmission of corrosive or explosive gases, as with conduit
- Simplified maintenance with the flexibility of adding or changing circuits
- Simplified engineering and construction. Add, change, modify more easily
- Used with other wiring methods
- Longer support spans up to 55' (Chalfant's standard systems to 40').

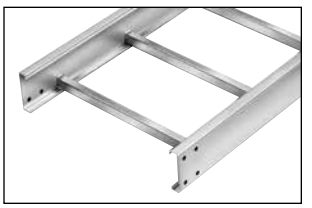
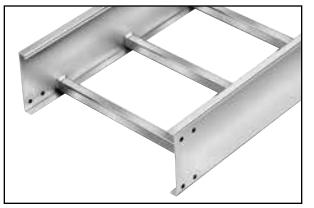
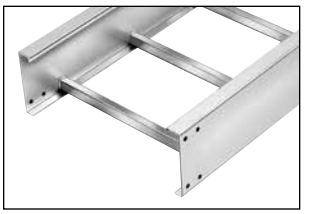


Quick Find Index

Cable Tray Straight Sections Pages 5-11

Aluminum
Description: Page 1-5
Selection: Pages 1-6 & 1-7

Steel/Stainless Steel
Description: Page 1-5
Selection: Pages 1-8 & 1-9

Fittings Pages 10-17

Horizontal Bends

90° *Page 1-10*
60° *Page 1-10*
45° *Page 1-11*
30° *Page 1-11*

Outside Vertical Bends

90° *Page 1-12*
60° *Page 1-13*
45° *Page 1-14*
30° *Page 1-15*

Inside Vertical Bends

90° *Page 1-12*
60° *Page 1-13*
45° *Page 1-14*
30° *Page 1-15*

Tees

Page 1-16

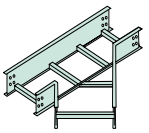
Crosses

Page 1-16

Support Riser

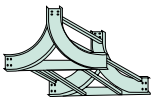
Page 1-16

Wyes



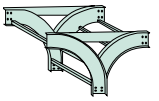
Page 1-17

Vertical Tee Up



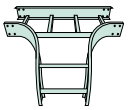
Page 1-17

Vertical Tee Down



Page 1-17

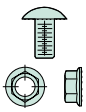
Tee with Outside Tap



Page 1-18

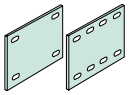
Accessories Pages 18-25

Fasteners



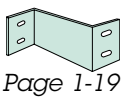
Page 1-25

Splice Plates



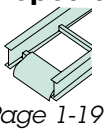
Page 1-19

Reducer Splice Plates



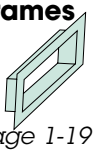
Page 1-19

Ladder Dropouts



Page 1-19

Wall Frames

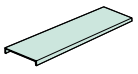


Page 1-19

Tray to Panel

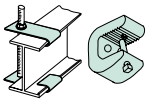
Page 1-19

Covers



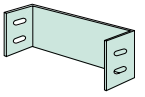
Page 1-20

Clamps



Page 1-20

Blind Ends

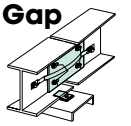


Page 1-21

Barriers

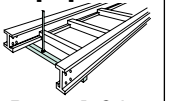
Page 1-22

Expansion Gap



Page 1-23

Support Equipment



Page 1-24

Selecting & Sizing Cable Tray Systems

1 The Cable to be Supported Determines the Type of Tray

Ladder type cable can support heavy power cables or small circuit size communication cables for control data and phone cables or a mix.

- Rung Spacing: Single conductor over 4/0 and MC cables should be used with 12" or 18" rung spacing. Smaller diameter cables require 6" or 9" rung spacing.
- Trough, solid or ventilated type tray offer protection and better support for small, lightweight instrument or data cables.

Hints:

- *Barrier strips can be used to separate voltages or power and control cables to avoid the cost of adding a second or separate tray for each.*
- *Covers are not required by the NEC Code and add to the cost of the job. However, they should be considered for protection of personnel and any debris or other material that could fall into the tray.*

2 Select which Metal and/or Material Finish Your Application Will Require

The job site and its' environment will determine which metal and/or material finish you use. Review where the tray is being used. Are there unusual corrosive conditions (like those found in some chemical and paper processing plants)? See page 1-4 for a list of various tray materials and finishes available.

Hints:

Aluminum - Most conditions are satisfied by aluminum tray which is also the most popular type. It's less expensive and an easier system to install. Unlike galvanized steel, its' finish is always smooth. Longer span tray systems are also available in aluminum. Aluminum tray is ideal for seacoast, offshore and most petrochemical and pulp mill applications.

Galvanized Steel (HDGAF ASTM A123 Class B2) - This hot dipped galvanized steel is used in outdoor, chlorine, acid or caustic areas. Steel trays can have a rough finish (VE 1-2.2.1B) which could cause cable damage. It also adds two to three weeks to delivery time. Trays with mill galvanize steel finish ASTM 653A are the least expensive and only recommended for indoor applications.

Stainless Steel trays are used in special highly corrosive environments and compare favorably with fiberglass type ladder tray.

3 Determine Type of Support

Hint: *Review the various support methods and options shown in the accessories section of this catalog on pages 1-20, 1-21, 1-24, and 1-25. The distance between each support is the support span.* You can support your cable tray system:

- from walls or vertical columns with shelf or cantilevered brackets
- with trapeze or single supports using threaded rods hung directly from building steel
- on or under pipe racks, trestles or bridges
- In utility trenches, tunnels or directly on roofs
- off the ground, using pedestal supports.

Hint: *You can save money by using a heavier duty tray that results in longer spans and reduces the number of costly supports and installation time. A heavier duty tray will also provide a deeper loading depth and a stronger, less deflective, long-span support.*

4 Determine Cable Load to be Supported

Review the number and type of cable from the job specifications and requirements. Cable fill in a tray is calculated by using data and criteria specified in NEC 392. To determine total cable weight, add all cables on a lb/ft basis.

Hints:

- *Data, telephone and instrument cable should be calculated to fill tray to 50% of the tray cross section fill area (40% for solid bottom tray). In reality, because of voids, overlapping and the circular shape of the cable, a 50% fill will normally completely fill the cable tray.*
- *MC cable 4/0 or larger, rated 2000 Volts or less, can only be installed in one layer (sum of cable diameters equals tray width).*
- *Single conductor 2000 Volts or less, larger than 1000 KCM can only be installed in one layer (sum of cable diameters equals tray width).*
- *Other power cables and combinations of sizes are calculated on the sum of cable areas versus allowable fill, see table NEC 392.9 to determine tray width. NEC 392 details cable types, voltages, ampacity, etc.*

Other Loads to be Calculated:

Snow: Add 13.3 lbs/square feet for 20-inch deep wet snow.
(Example: For a 36-inch tray width - 3 X 13.3 = 39.9 lbs/sq ft.)
Ice: Add 4.7 lbs/square feet .

Concentrated Load: Add load effect (W_e) for concentrated load effect from splice boxes, heavy cable drop outs and conduit terminations supported off tray.
W_e = 2 times the concentrated load divided by the support span.
(Example: For a 200 lbs. concentrated load at a center span of 20 ft, W_e = 2 X 200/20 = 20 lbs. per ft added load.)
Once you have determined your worst case load, add it to your other cable load calculations. You now have the maximum load the tray must support.

Hints:

- *It is not necessary to specify tray rung type when using Chalfant. Chalfant rung designs can handle a minimum of 350 lbs. at any width. Chalfant uses 3 rung styles to assure this standard is maintained. For example, Strut Rung #11118 is rated at 489 lbs. at 36" wide.*

Review

You have now determined:
1. Tray type
2. Tray material and/or finish
3. Support type & span between supports
4. Total load in lbs/ft

5 Select Tray System

(For aluminum, use Selection Chart on pages 1-6,1-7, 1-8 and 1-9.) (For steel, use Selection Chart on pages 1-8 and 1-9.) Review Selection chart and the various notes in general. Start at the top of (your) support span column and work down to locate a tray system to handle your total load.

Example: You have determined you need a ladder tray (aluminum) at a 20 ft span and 100 lbs/ft load. Using Selection Chart on pages 1-6 and 1-7, go down 20 ft span column until you reach ***Tray System 46A****. This is the best tray for your application. Note: If you use a shorter span, you must choose between a 3",4" or 5" load depth.*

Order your tray using the Part No. Code on page 1-4.

Contact your Chalfant Sales Representative or the factory if you need help sizing and selecting your tray.

Ordering Codes and Options

Part Number/Ordering Codes

Once you have determined the appropriate Chalfant tray system to meet your loading depth and load/span requirements, use the following numbering systems to order straight sections, fittings and accessories.

Cable Tray Straight Sections

(Aluminum or Steel)

Example: 2A Aluminum System— 12' long, 6" wide, with 9" rung spacing

2 A 06 010 – 09 *

- **2** — Tray System Number
- **A** — Type of Material *See chart at right*
- **06** — Tray Width *6", 9", 12",18", 24", 30" 36" & 42"*
- **010** — Constant for 12' & 24' straight sections. Insert inches for special lengths: 120=10' (*Meters* 118=3); 240=20' (236=6); 360=30'
- **09** — Rung Spacing *6", 9", 12" & 18" or T, S, & X**
- ***** — Length: Blank=12', L=24'

* T=Trough Style; S=Solid Bottom; X=Expanded Metal Trough; M=Marine Rung

Cable Tray Fittings

(Aluminum or Steel)

Example: 90° Aluminum Horizontal Bend— 12" radius

2 A 06 030

- **2** — Tray System Number
- **A** — Type of Material
- **06** — Tray Width *6", 9", 12",18", 24", 30" 36" & 42"*
- **030** — Three Digit Part Number from Catalog

Accessories

Example: 4-Bolt Slotted Hole Splice Plate

2 A SP200

- **2** — Tray System Number or 9
- **A** — Type of Material
- **SP200** — Part Number from Catalog

Options

Chalfant Ladder style cable tray is available in a variety of options to satisfy your needs.

Materials/Finishes

Following is a list of various materials of construction and/or finishes that can be applied to straight sections, fittings and some accessories. Use these codes when ordering.

*** Material Code:**

A = Aluminum, High Strength 6063T6 Extrusions (5052H34 sheet)

S = Hot Dip Mill Galvanized Steel to ASTM 653A G-90 Coating, 1.05 Mils Thick

G = Hot Dip Galvanized after Fabrication to ASTM 123-B2, 2.55 Mils Thick

T = 304L Stainless Steel

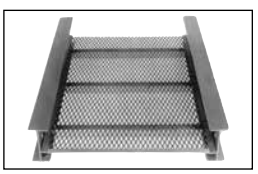
Z = 316L Stainless Steel

Other Options

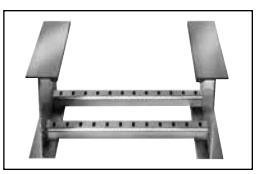
All Ladder Tray systems are easily modified to offer:

Ventilated Trough
2.5" wide rungs MIG welded on 6" centers. Also available with 9" and 12" rung spacing. To order, add letter **T**, **09T**, **or 12T** instead of rung spacing in straight section part number.

Solid Trough
A solid sheet is supported by a 12" rung spaced tray. To order, add letter "**S**" instead of rung spacing in straight section part number. For Fittings, add suffix "**S**" to the part number.



Expanded Metal Trough
A .5" diamond pattern aluminum sheet is supported by a 12" rung spaced tray. To order, add letter "**X**" instead of rung spacing in straight section part number. For Fittings, add suffix "**X**" to the part number. *See Page **1-20**.*



Marine Strut Rung
A special rung design to accommodate stainless steel banding of cables. (USCG requirement) Rung supports 460 lbs. per rung on a 36" wide system with a 1.5 safety factor. Add suffix "**M**" (rung spacing) to the part number.

Consult Factory for full technical data on individual systems, corrosion resistance charts, etc.

Straight Sections

Most Chalfant cable tray system side rails are stocked in 12' and 24' lengths. You can special order 30' lengths for 875A and 8HAF trays or 40' lengths for 103A tray. All trays meet or exceed NEMA VE-1 standards and NEC Article 392. All trays (except stainless) are classified by UL as an equipment ground conductor.

See Selection Guides for allowable grounding amps for each tray system.

Lengths: Standard– 12' and 24'

Widths: Standard– 6", 9",12", 18", 24", 30", 36" & 42"

Rung Spacing: Standard– 6", 9",12" and 18"

Rail Height	Loading Depth	Tray Systems
4"	3"	14A, 24A, 2A, 34A, 248, 346
5"	4"	15A, 35A, 45A, 258
6.3"	5" or 6"	16A, 26A, 2A, 3A, 46A, 665A, 268, 366, 364
7.4	6.4	47A, 57A
8"	7"	875A, 8HAF
10"	8.8"	103A– (Fittings have 8" siderail)

Splice Plates

Splice plates are 1/8" thick with 4-bolt slotted holes. This flat plate design permits fast, easy fit-up in the field. 665A, 47A & 57A systems have 8 bolt/plates. 8" and 10" trays have 10 bolt/plates which are 16" long, 3/16" thick. Special "time saving" stainless steel fasteners are standard.

Aluminum Cable Tray

Aluminum cable tray is the most popular tray in use today. Chalfant has a wide offering in aluminum tray from light duty commercial/institutional systems for data and telephone support to utility/industrial grade tray and extra heavy duty long span tray to 30' spans. Ideal for most corrosive atmospheres including offshore, seacoast and petro-chemical applications. N*ot recommended* for use in chlorine, caustic or high acid environments.

Rungs

Rungs are box construction 0.9" high with 7/8", 1" and 1-5/8" bearing surface. **All trays** (except 14A) **and rungs are designed to handle cable loads plus 200 lbs. of concentrated load for any tray width.** For example, strut rung #11118 can handle 489 lbs. at a 36". Low profile rungs are available in to provide a 6" load depth.

Galvanized and Stainless Steel Tray

Hot Dip Mill galvanized tray ASTM 653A G90 coating is the least expensive tray and is recommended for indoor applications only.

Hot dipped galvanized after fabrication ASTM 123 is recommended for outdoor use. It is more expensive than aluminum and requires great care in galvanizing to prevent icicles, bare patches, warpage and rough surfaces.

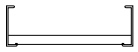
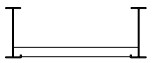
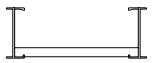
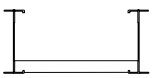
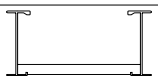
Stainless steel tray is available in 304L and 316L and is often the least expensive solution for use in highly corrosive atmospheres. It also competes favorably against fiberglass systems.

Steel Rungs

Rungs are 1" high with 3/4" bearing, 18 gauge. A special gas relief hole for HDGAF is punched on both ends to assure complete galvanizing.

Cable Tray Selection Guide

Aluminum

System No.		Height Side Rail	Load Depth	NEMA Load/Span Rating (@1.5 Safety Factor)1.5	Support Span (Simple Beam Data) 6' (1.83) m	8' (2.44) m	10' (3.05) m	12' (3.66) m
14A		4" (102)	3.2" (81)	12A 8C	**208** ❶ 0.37 ❷ .0018 ❸	**117** 0.66 .0056	**74** 1.01 .0136	**52** 1.46 .0281
24A		4" (102)	3" (76)	12B	**304** 0.43 .0014	**171** 0.79 .0046	**109** 1.22 .0112	**75** 1.58 .021
2A		4" (102)	3" (76)	16A 12C ❺	**430** .43 .0010	**243** 0.75 .0031	**153** 1.17 .0076	**108** 1.84 .0165
34A		4" (102)	3" (76)	20A 16B ❺			**220** 1.33 .0060	**152** 1.91 .0124
15A		5" (127)	4.2" (107)	12B	**336** 0.30 .0009	**189** 0.53 .0028	**121** 0.83 .0069	**84** 1.21 .0144
35A		5" (127)	5" (102)	16A 12C			**161** .083 .0052	**112** 1.21 .011
45A		5" (127)	4.1" (102)	20A 16B				**149** 1.26 .0083
16A		6.3" (160)	5.5" or 6" ❹ (140/152)	12C	**400** 0.28 .0007	**225** 0.46 .0021	**144** 0.72 .0050	**100** 1.04 .0104
29A		6.3" (160)	5.3 or 6" ❹ (137/152)	16A 12C ❺		**264** 037 .0014	**170** 0.73 .0043	**121** 1.08 .0089
26A		6.3" (160)	5.3" or 6" ❹ (137/152)	20A 16B		**342** 0.89	**220** 0.57 .0026	**152** 0.84 .0055
3A		6.3" (160)	5.3" or 6" ❹ (137/152)	20B 16C ❺				**211** 0.95 .0045
46A		6.3" (160)	5.4" or 6" ❹ (137/152)	20C				**288** 1.09 .0038
665A		6.5" (165)	5.4" or 6" ❹ (137/152)	24C ❼				**430** 1.20 .0028
47A		7.36" (187)	6.4" (163)	20C 24B				**288** 0.78 .0027
57A		7.4" (188)	6.4" (163)	24C				**425** 0.98 .0023

It is not economical to use long span tray systems for short span installation. Move up to a lighter duty system.

Key:
- ❶ = Cable Loading (lb/ft)
- ❷ = Mid Span Deflection (in)
- ❸ = K Factor (in/lb/ft)

- ❹ 6" Nominal Loading Depth per VE-1 with reinforced low profile rung
- ❺ Exceeds NEMA Loads by over 20%
- ❻ Weight shown (lbs/ft or Kg/M) for 24" width tray with 9" rung spacing

NEMA Load/Span Designations @1.5 Factor of Safety
From VE-1 Table 1

Working Load (lbs/linear ft.)	Support Span 8 Ft	12 Ft	16 Ft	20 Ft
A=50 lbs/ft	8A	12A	16A	20A
B=75 lbs/ft	8B	12B	16B	20B
C=100 lbs/ft	8C	12C	16C	20C

Support Span (Simple Beam Data)							Data (2-Rails)				
	14' (4.27) m	**16'** (4.88) m	**18'** (5.49) m	**20'** (6.10) m	**24'** ❼ (7.32) m	**30'** ❼ (9.14) m	**Ix** In^4	**Sx** In^3	**Area** In^2	**NEC 392-7(b)2 EGC AMPS**	**Tray** ❻ **Weight** Lbs Per Ft
							1.66	0.75	0.86 (555)	1000	1.79 (2.66)
							2.15	1.01	1.0 (645)	1200	1.95 (2.90)
	79 2.31 .0292	**60** 2.46 .0410					2.95	1.41	1.14 (735)	1200	2.15 (3.20)
	112 2.60 .0231	**86** 3.39 .0374	**67** 4.30 .0632	**55** 5.30 .0963			3.74	2.07	1.43 (923)	1200	2.46 (3.66)
							3.25	1.20	1.02 (658)	1200	2.00 (2.98)
	82 1.64 .020	**60** 2.03 .0338					4.36	1.63	1.19 (768)	1200	2.2 (3.27)
	110 1.71 .0155	**84** 2.23 .0264	**66** 2.83 .0424	**53** 3.49 .0646			5.57	2.29	1.46 (942)	1200	2.52 (3.75)
							4.48	1.39	1.20 (774)	1200	2.22 (3.30)
	85 1.35 .016	**64** 1.45 .0226					6.53	2.0	1.28 (826)	1200	2.33 (3.47)
	112 1.13 .0101	**85** 1.46 .0172	**67** 1.87 .0761	**55** 2.31 0.042			8.55	2.72	1.55 (1000)	1600	2.64 (3.93)
	155 1.28 .0083	**119** 1.67 .0141	**94** 2.12 .0226	**76** 2.62 .0345			10.4	3.81	1.84 (1187)	1600	2.98 (4.43)
	212 1.51 .0071	**162** 1.96 .0121	**128** 2.48 .0194	**104** 3.05 .0296	**70** 4.3 .0614		12.1	4.55	2.11 (1361)	2000	3.32 (4.94)
	316 1.61 .0051	**242** 2.11 .0087	**191** 2.65 .0139	**155** 3.29 .0212	**104** 4.58 .0440		16.96	6.24	2.87 (1852)	2000	4.23 (6.29)
	212 0.66 .0031	**162** 1.41 .0087	**128** 1.78 .0139	**104** 2.20 .0212	**72** 3.16 .0439		17.0	5.29	2.12 (1366)	2000	3.34 (4.96)
	312 1.31 .0042	**239** 1.72 .0072	**188** 2.19 .0116	**153** 2.69 .0176	**106** 3.89 .0366		20.4	6.7	2.62 (1690)	2000	3.82 (5.68)

Conversion to Metric
Meters = 0.3048 X feet
Kg/m = 1.488 X lb/ft
mm = 25.4 X inches

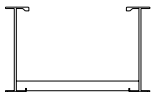
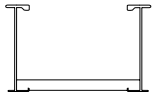
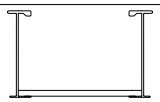
Convert Load Data
To convert into a safety factor = 2.0 multiply loading values by 0.75 (ratio of 1.5/2.0)

K x **W** = Deflection for other loads (inches)

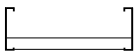
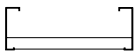
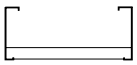
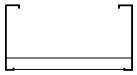
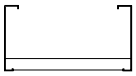
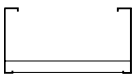
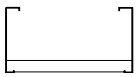
❼ NEMA does not list 24', 30' & 40' span trays.

Cable Tray Selection Guide

Aluminum

System No.		Height Side Rail	Load Depth	NEMA Load/Span Rating (@1.5 Safety Factor)1.5	Support Span (Simple Beam Data)			
							14' (4.27) m	16' (4.88) m
875A		8" (203)	7" (178)	30C ❻ 24C ❻			**484** 1.24 .0026	**370** 1.61 .0044
8HAF		8" (203)	7" (178)	30C ❻				**572** 1.75 .0031
103A		10" (254)	8.85" (225)	40C ❻				

Steel/Stainless

	System No.		Gauge	Height Side Rail	Load Depth	NEMA Load/Span Rating (@1.5 Safety Factor)	Support Span 6' (1.83) m	Support Span 8' (2.44) m
Steel	248*		18 (1.3)	4" (102)	3" (76)	12B	**340** ❶ 0.28 ❷ .00082 ❸	**191** 0.50 .0026
Steel	346*		16" (1.6)	4" (102)	3" (76)	16A 12C		**271** 0.49 .0018
Steel	258*		18 (1.3)	5" (127)	4" (102)	16A		**237** 0.36 .0015
Steel	268*		18 (1.3)	6.3" (160)	5.2" (132)	16A 12C ❹		**272** 0.22 .0008
Steel	366*		16 (1.6)	6.3" (160)	5.2" (132)	20B 16C ❹		
Steel	364*		14 (1.9)	6.3" (160)	5.3" (132)	20C 16C ❹		
Stainless Steel	248*		18 (1.2)	4" (102)	3" (76)	12B	**340** 0.28 .00082	**191** 0.50 .0026
Stainless Steel	268*		18 (1.2)	6.3 (160)	5.2" (137)	16C 12C ❹		**272** 0.57 .0008
Stainless Steel	366*		16 (1.5)	6.3" (160)	5.2" (137)	20B 16C ❹		
Stainless Steel	364*		14 (1.9)	6.3" (160)	5.3" (137)	20C 16C ❹		

*** Material Code:** **S** = Hot Dip Mill Galvanized to ASTM 653A G-90 coating 1.06 Mils Thick **G** = Hot Dip Galvanized after Fabrication to ASTM 123-B2 2.55 Mils Thick (Replaced ASTM 386)

Key:
❶ = Cable Loading (lb/ft)
❷ = Mid Span Deflection (in)
❸ = K Factor (in/lb/ft)

❹ Exceeds NEMA Loads by over 20%
❺ Weight shown (lbs/ft or Kg/M) for 24" width tray with 9" rung spacing
❻ NEMA does not list 24', 30', 35' & 40' spans

NEMA Load/Span Designations @1.5 Factor of Safety
From VE-1 Table 1

Working Load (lbs/linear ft.)	Support Span 8 Ft	12 Ft	16 Ft	20 Ft
A=50 lbs/ft	8A	12A	16A	20A
B=75 lbs/ft	8B	12B	16B	20B
C=100 lbs/ft	8C	12C	16C	20C

Support Span (Simple Beam Data)							Data (2-Rails)				
	18' (5.49) m	20' (6.10) m	24' ❻ (7.32) m	30' ❻ (9.14) m	35' ❻ (10.7) m	40' ❻ (12.2) m	Ix In^4	Sx In^3	Area In^2	NEC 392-7(b)2 EGC AMPS	Tray ❺ Weight Lbs Per Ft
	293 2.042 .007	**237** 2.52 .0106	**158** 3.43 .0217	**101** 5.35 .053			34.36	9.6	4.24 (2735)	2000	6.51 (9.69)
	450 2.21 .0049	**363** 2.72 .0075	**249** 3.87 .0155	**155** 5.87 .0379	**100** 8.34 .0834		48.08	14.3	5.32 (3432)	2000	7.52 (11.19)
		636 2.03	**441** 3.48	**282** 4.59	**207** 6.27	**159** 8.20	115.4	24.1	7.40 (4555)	2000	9.45 (14.06)

Support Span (Simple Beam Data)							Data (2-Rails)			
	10' (3.05) m	12' (3.66) m	14' (4.27) m	16' (4.88) m	18' (5.49) m	20' (6.10) m	Ix In^4	Sx In^3	NEC 392-7(b)2 EGC AMPS	Tray ❺ Weight Lbs Per Ft
	122 0.77 .0063	**85** 1.11 .0131	**62** 1.51 .0243				1.26	0.65	100	3.65 (5.43)
	171 0.75 .0044	**107** 0.97 .0091	**85** 1.43 .0168	**64** 1.83 .0286			1.81	1.00	200	4.15 (6.18)
	150 0.54 .0036	**102** 0.78 .0076	**74** 1.04 .0140	**55** 1.31 .0239			2.16	0.89	100	3.80 (5.65)
	174 0.35 .0020	**121** 0.51 .0042	**89** 0.93 .0077	**68** 0.90 .0132			3.90	1.27	200	4.27 (6.35)
	327 0.46 .0014	**225** 0.68 .0030	**164** 0.90 .0055	**125** 1.18 .0094	**96** 1.43 .0149	**78** 1.79 .0229	5.46	1.88	400	5.04 (7.50)
		282 0.68 .0024	**206** 0.91 .0044	**156** 1.15 .0074	**122** 1.45 .0119	**100** 1.81 .01	6.93	2.36	400	5.93 (8.82)
	122 0.77 .0063	**85** 1.11 .0131	**62** 1.51 .0243				1.26	0.65	**	3.65 (5.43)
	174 0.35 .0020	**121** 0.51 .0042	**89** .93 .0077	**68** .090 .0132			3.90	1.27	**	4.27 (6.35)
	327 0.46 .0014	**225** 0.68 .0030	**164** 0.90 .0055	**125** 1.18 .0094	**96** 1.43 .0149	**78** 1.79 .0229	5.46	1.88	**	5.04 (7.50)
		282 0.68 .0024	**206** 0.91 .0044	**156** 1.15 .0074	**122** 1.45 .0119	**100** 1.81 .0181	6.93	2.36	**	5.93 (8.82)

*** Material Code:** **T**= 304L Stainless Steel **Z**= 316L Stainless Steel

Conversion to Metric
Meters = 0.3048 X feet
Kg/M = 1.488 X lb/ft
mm = 25.4 X inches

Convert Load Data
To convert into a safety factor = 2.0. multiply loading values by 0.75. (ratio of 1.5/2.0)

K x **W** = Deflection for other loads (inches)

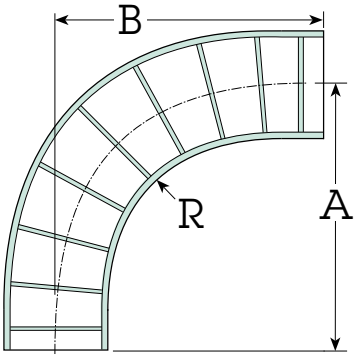
** For EGC run separate ground wire.

Fittings

90° & 60° Horizontal Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies, with the exception of 8" & 10" trays that have 8" tangents and 10 bolt splice plates. 8" trays available in 36" & 48" radius. 7" trays in 24" radius. Consult factory for fitting dimensions.

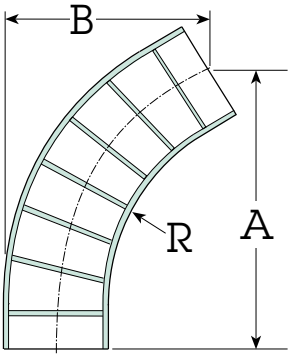
90° Horizontal Bend



Number of rungs vary depending on radius.

R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	18 (457)	18 (457)	++ * 06030
	9	19.5 (495)	19.5 (495)	++ * 09030
	12	21 (533)	21 (533)	++ * 12030
	18	24 (610)	24 (610)	++ * 18030
	24	27 (686)	27 (686)	++ * 24030
	30	30 (762)	30 (762)	++ * 30030
	36	33 (838)	33 (838)	++ * 36030
	42	36 (914)	36 (914)	++ * 42030
	48	39 (991)	39 (991)	++ * 48030
24" (610)	6	30 (762)	30 (762)	++ * 06032
	9	31.5 (800)	31.5 (800)	++ * 09032
	12	33 (838)	33 (838)	++ * 12032
	18	36 (914)	36 (914)	++ * 18032
	24	39 (991)	39 (991)	++ * 24032
	30	42 (1067)	42 (1067)	++ * 30032
	36	45 (1143)	45 (1143)	++ * 36032
	42	48 (1219)	48 (1219)	++ * 42032
	48	51 (1295)	51 (1295)	++ * 48032
36" (914)	6	42 (1067)	42 (1067)	++ * 06033
	9	43.5 (1105)	43.5 (1105)	++ * 09033
	12	45 (1143)	45 (1143)	++ * 12033
	18	48 (1219)	48 (1219)	++ * 18033
	24	51 (1295)	51 (1295)	++ * 24033
	30	54 (1372)	54 (1372)	++ * 30033
	36	57 (1448)	57 (1448)	++ * 36033
	42	60 (1524)	60 (1524)	++ * 42033
	48	63 (1600)	63 (1600)	++ * 48033
48" (1219)	6	54 (1372)	54 (1372)	++ * 06034
	9	55.5 (1410)	55.5 (1410)	++ * 09034
	12	57 (1448)	57 (1448)	++ * 12034
	18	60 (1524)	60 (1524)	++ * 18034
	24	63 (1600)	63 (1600)	++ * 24034
	30	66 (1676)	66 (1676)	++ * 30034
	36	69 (1753)	69 (1753)	++ * 36034
	42	72 (1829)	72 (1829)	++ * 42034
	48	75 (1905)	75 (1905)	++ * 48034

60° Horizontal Bend



R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	16.7 (424)	13.1 (333)	++ * 06025
	9	18.0 (457)	15.4 (390)	++ * 09025
	12	19.2 (488)	17.6 (447)	++ * 12025
	18	21.6 (549)	22.1 (561)	++ * 18025
	24	24.1 (612)	26.6 (676)	++ * 24025
	30	26.5 (673)	31.1 (790)	++ * 30025
	36	29.0 (737)	35.6 (904)	++ * 36025
	42	31.4 (798)	40.1 (1019)	++ * 42025
	48	33.9 (861)	44.6 (1133)	++ * 48025
24" (610)	6	26.5 (673)	19.1 (485)	++ * 06027
	9	27.8 (706)	21.4 (544)	++ * 09027
	12	29.0 (737)	23.6 (599)	++ * 12027
	18	31.4 (798)	28.1 (714)	++ * 18027
	24	33.9 (861)	32.6 (828)	++ * 24027
	30	36.3 (922)	38.1 (968)	++ * 30027
	36	38.8 (985)	41.6 (1057)	++ * 36027
	42	41.2 (1046)	46.1 (1171)	++ * 42027
	48	43.7 (1110)	50.6 (1285)	++ * 48027
36" (914)	6	36.3 (922)	25.1 (638)	++ * 06028
	9	37.6 (955)	27.4 (695)	++ * 09028
	12	38.8 (986)	29.6 (752)	++ * 12028
	18	41.2 (1147)	34.1 (866)	++ * 18028
	24	43.7 (1110)	38.6 (980)	++ * 24028
	30	46.1 (1171)	43.1 (1095)	++ * 30028
	36	48.6 (1234)	47.6 (1209)	++ * 36028
	42	51.0 (1295)	52.1 (1323)	++ * 42028
	48	53.5 (1359)	56.6 (1438)	++ * 48028
48" (1219)	6	46.1 (1171)	31.1 (790)	++ * 06029
	9	47.3 (1201)	33.4 (847)	++ * 09029
	12	48.6 (1234)	35.6 (904)	++ * 12029
	18	51.0 (1295)	40.1 (1019)	++ * 18029
	24	53.5 (1359)	44.6 (1133)	++ * 24029
	30	55.9 (1420)	49.1 (1247)	++ * 30029
	36	58.4 (1483)	53.6 (1361)	++ * 36029
	42	60.8 (1544)	58.1 (1476)	++ * 42029
	48	63.3 (1608)	62.6 (1590)	++ * 48029

W=Widths in Inches (mm)

6" (152)
9" (229)
12" (305)
18" (457)
24" (610)
30" (762)
36" (914)
42" (1067)
48" (1176)

H=Side Rail Height in Inches (mm)

4" (101)
5" (127)
6.3" (160)
7.3" (179) *Consult Factory*
8" (203) *Consult Factory*

For Steel Fitting Part Numbers Use:

4" High Tray ++ = 246 *
5" High Tray ++ = 256 *
6" High Tray ++ = 266 *

For Covers and Barriers

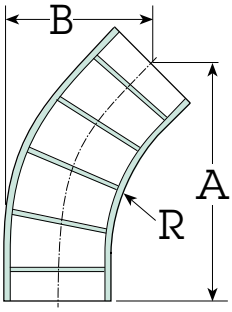
See Accessories Section, Pages ***1-20–1-22***

++ *Tray System* ***Type of Material*** *— See Page* ***1-4*** *for Selection.*

45° & 30° Horizontal Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

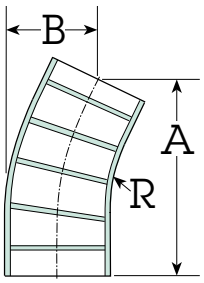
45° Horizontal Bend



Number of rungs vary depending on radius.

R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	15.7 (400)	9.51 (242)	ǂǂ * 06020
	9	16.8 (426)	11.45 (291)	ǂǂ * 09020
	12	17.9 (455)	13.39 (340)	ǂǂ * 12020
	18	20.0 (507)	17.27 (439)	ǂǂ * 18020
	24	22.1 (561)	21.15 (537)	ǂǂ * 24020
	30	24.2 (615)	25.03 (636)	ǂǂ * 30020
	36	26.3 (669)	28.91 (734)	ǂǂ * 36020
	42	28.5 (723)	32.79 (833)	ǂǂ * 42020
	48	30.6 (777)	36.6 (9300)	ǂǂ * 48020
24" (610)	6	24.2 (615)	13.0 (331)	ǂǂ * 06022
	9	25.3 (642)	14.9 (380)	ǂǂ * 09022
	12	26.3 (669)	16.9 (430)	ǂǂ * 12022
	18	28.5 (723)	20.8 (528)	ǂǂ * 18022
	24	30.6 (777)	24.7 (626)	ǂǂ * 24022
	30	32.7 (831)	28.5 (725)	ǂǂ * 30022
	36	34.8 (884)	32.4 (823)	ǂǂ * 36022
	42	36.9 (938)	36.3 (922)	ǂǂ * 42022
	48	39.1 (993)	40.2 (1021)	ǂǂ * 48022
36" (914)	6	32.7 (831)	16.5 (420)	ǂǂ * 06023
	9	33.8 (857)	18.5 (469)	ǂǂ * 09023
	12	34.8 (884)	20.4 (519)	ǂǂ * 12023
	18	36.9 (938)	24.3 (617)	ǂǂ * 18023
	24	39.1 (992)	28.2 (716)	ǂǂ * 24023
	30	41.2 (1046)	32.1 (814)	ǂǂ * 30023
	36	43.3 (1100)	35.9 (913)	ǂǂ * 36023
	42	45.4 (1154)	39.8(1011)	ǂǂ * 42023
	48	47.6 (1208)	43.7(1110)	ǂǂ * 48023
48" (1219)	6	41.2 (1046)	20.1 (510)	ǂǂ * 06024
	9	42.2 (1073)	22.0 (559)	ǂǂ * 09024
	12	43.3 (1100)	23.9 (608)	ǂǂ * 12024
	18	45.4 (1154)	27.8 (706)	ǂǂ * 18024
	24	47.6 (1208)	31.7 (805)	ǂǂ * 24024
	30	49.7 (1262)	35.6 (903)	ǂǂ * 30024
	36	51.8 (1315)	39.5 (1002)	ǂǂ * 36024
	42	53.9 (1369)	43.3 (1100)	ǂǂ * 42024
	48	56.0 (1422)	47.2 (1199)	ǂǂ * 48024

30° Horizontal Bend



R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	13.1 (333)	6.51 (165)	ǂǂ * 06015
	9	13.9 (353)	8.21 (209)	ǂǂ * 09015
	12	14.6 (371)	9.91 (252)	ǂǂ * 12015
	18	16.6 (422)	13.31 (338)	ǂǂ * 18015
	24	17.6 (447)	16.72 (425)	ǂǂ * 24015
	30	19.1 (485)	20.12 (511)	ǂǂ * 30015
	36	20.6 (523)	23.52 (597)	ǂǂ * 36015
	42	22.1 (561)	26.52 (674)	ǂǂ * 42015
	48	23.65 (601)	30.32 (770)	ǂǂ * 48015
24" (610)	6	19.1 (485)	8.12 (206)	ǂǂ * 06017
	9	19.9 (505)	8.95 (227)	ǂǂ * 09017
	12	20.6 (523)	11.52 (293)	ǂǂ * 12017
	18	22.1 (561)	14.92 (379)	ǂǂ * 18017
	24	23.6 (599)	18.32 (465)	ǂǂ * 24017
	30	25.1 (638)	21.79 (553)	ǂǂ * 30017
	36	26.1 (663)	25.13 (638)	ǂǂ * 36017
	42	28.1 (714)	28.53 (725)	ǂǂ * 42017
	48	29.1 (739)	31.93 (811)	ǂǂ * 48017
36" (914)	6	25.1 (638)	9.73 (247)	ǂǂ * 06018
	9	25.9 (658)	11.43 (290)	ǂǂ * 09018
	12	26.6 (676)	13.13 (334)	ǂǂ * 12018
	18	28.1 (714)	16.53 (420)	ǂǂ * 18018
	24	29.6 (752)	19.93 (506)	ǂǂ * 24018
	30	31.1 (790)	23.33 (593)	ǂǂ * 30018
	36	32.6 (828)	26.75 (679)	ǂǂ * 36018
	42	34.1 (866)	30.14 (766)	ǂǂ * 42018
	48	35.6 (904)	33.54 (852)	ǂǂ * 48018
48" (1219)	6	31.1 (790)	11.33 (288)	ǂǂ * 06019
	9	31.9 (810)	13.03 (331)	ǂǂ * 09019
	12	32.6 (828)	14.74 (374)	ǂǂ * 12019
	18	34.1 (866)	18.14 (461)	ǂǂ * 18019
	24	35.6 (904)	21.54 (547)	ǂǂ * 24019
	30	37.1 (942)	24.94 (633)	ǂǂ * 30019
	36	38.6 (980)	28.34 (720)	ǂǂ * 36019
	42	40.1 (1019)	31.74 (806)	ǂǂ * 42019
	48	41.6 (10570	35.15 (893)	ǂǂ * 48019

For Steel Fitting Part Numbers Use:
4" High Tray ǂǂ = 246 *
5" High Tray ǂǂ = 256 *
6" High Tray ǂǂ = 266 *

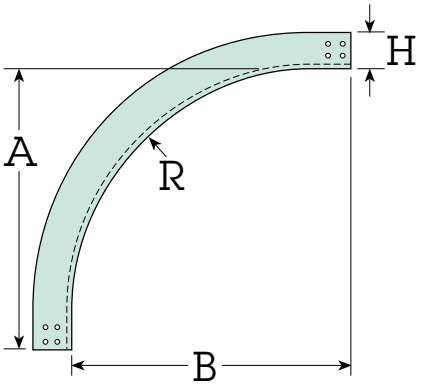
For Covers and Barriers
See Accessories Section, Pages ***1-20–1-22***

ǂǂ *Tray System* ***Type of Material*** *— See Page* ***1-4*** *for Selection.*

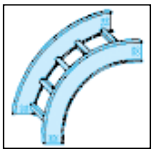
90° Outside & Inside Vertical Bend Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

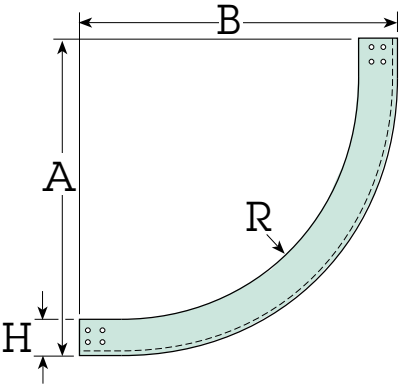
90° Outside Bend

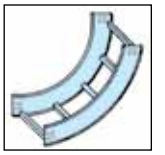


Number of rungs vary depending on radius.



90° Inside Bend





R	W	Outside Vertical Bend Dimensions A	Outside Vertical Bend Dimensions B	Outside Vertical Bend Part Number	Inside Vertical Bend H@4" A	Inside Vertical Bend H@4" B	Inside Vertical Bend H@5" A	Inside Vertical Bend H@5" B	Inside Vertical Bend H@6.3" A	Inside Vertical Bend H@6.3" BNumber	Inside Vertical Bend Part Number
12" (305)	6	15 (381)	15 (381)	‡‡ * 06050	19 (483)	19 (483)	20 (508)	20 (508)	22.3 (566)	22.3 (566)	‡‡ * 06070
	9			‡‡ * 09050							‡‡ * 09070
	12			‡‡ * 12050							‡‡ * 12070
	18			‡‡ * 18050							‡‡ * 18070
	24			‡‡ * 24050							‡‡ * 24070
	30			‡‡ * 30050							‡‡ * 30070
	36			‡‡ * 36050							‡‡ * 36070
	42			‡‡ * 42050							‡‡ * 42070
	48			‡‡ * 48050							‡‡ * 48070
24" (610)	6	27 (686)	27 (686)	‡‡ * 06052	31 (787)	31 (787)	32 (813)	32 (813)	34.3 (871)	34.3 (871)	‡‡ * 06072
	9			‡‡ * 09052							‡‡ * 09072
	12			‡‡ * 12052							‡‡ * 12072
	18			‡‡ * 18052							‡‡ * 18072
	24			‡‡ * 24052							‡‡ * 24072
	30			‡‡ * 30052							‡‡ * 30072
	36			‡‡ * 36052							‡‡ * 36072
	42			‡‡ * 42052							‡‡ * 42072
	48			‡‡ * 48052							‡‡ * 48072
36" (914)	6	39 (991)	39 (991)	‡‡ * 06053	43 (1092)	43 (1092)	44 (1118)	44 (1118)	46.3 (1176)	46.3 (1176)	‡‡ * 06073
	9			‡‡ * 09053							‡‡ * 09073
	12			‡‡ * 12053							‡‡ * 12073
	18			‡‡ * 18053							‡‡ * 18073
	24			‡‡ * 24053							‡‡ * 24073
	30			‡‡ * 30053							‡‡ * 30073
	36			‡‡ * 36053							‡‡ * 36073
	42			‡‡ * 42053							‡‡ * 42073
	48			‡‡ * 48053							‡‡ * 48073
48" (1219)	6	51 (1295)	51 (1295)	‡‡ * 06054	55 (1397)	55 (1397)	56 (1422)	56 (1422)	58.3 (1481)	58.3 (1481)	‡‡ * 06074
	9			‡‡ * 09054							‡‡ * 09074
	12			‡‡ * 12054							‡‡ * 12074
	18			‡‡ * 18054							‡‡ * 18074
	24			‡‡ * 24054							‡‡ * 24074
	30			‡‡ * 30054							‡‡ * 30074
	36			‡‡ * 36054							‡‡ * 36074
	42			‡‡ * 42054							‡‡ * 42074
	48			‡‡ * 48054							‡‡ * 48074

W=Widths in Inches (mm)

6" (152)
9" (229)
12" (305)
18" (457)
24" (610)
30" (762)
36" (914)
42" (1067)
48" (1176)

H=Side Rail Height in Inches (mm)

4" (101)
5" (127)
6.3" (160)
7.3" (179) *Consult Factory*
8" (203) *Consult Factory*

For Steel Fitting Part Numbers Use:

4" High Tray ‡‡ = 246 *
5" High Tray ‡‡ = 256 *
6" High Tray ‡‡ = 266 *

For Covers and Barriers

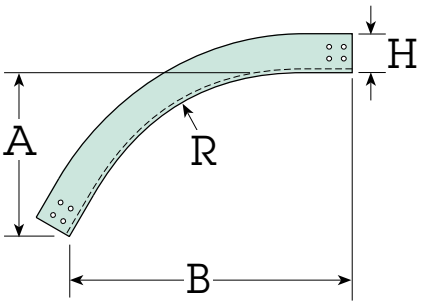
*See Accessories Section, Pages **1-20–1-22***

‡‡ *Tray System* *****Type of Material— *See Page **1-4** for Selection.*

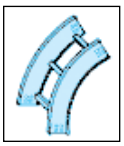
60° Outside & Inside Vertical Bend Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

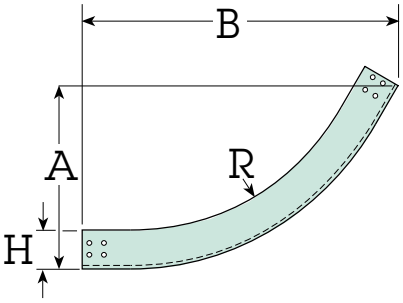
60° Outside Bend



Number of rungs vary depending on radius.



60° Inside Bend



R	W	Outside Vertical Bend Dimensions A	Outside Vertical Bend Dimensions B	Outside Vertical Bend Part Number	Inside Vertical Bend H@4" A	Inside Vertical Bend H@4" B	Inside Vertical Bend H@5" A	Inside Vertical Bend H@5" B	Inside Vertical Bend H@6.3" A	Inside Vertical Bend H@6.3" B	Inside Vertical Bend Part Number
12" (305)	6	8.6 (218)	14.9 (378)	‡‡ * 06045	10.6 (269)	18.35 (466)	11.1 (282)	19.22 (488)	12.7 (323)	21.1 (536)	‡‡ * 06065
	9			‡‡ * 09045							‡‡ * 09065
	12			‡‡ * 12045							‡‡ * 12065
	18			‡‡ * 18045							‡‡ * 18065
	24			‡‡ * 24045							‡‡ * 24065
	30			‡‡ * 30045							‡‡ * 30065
	36			‡‡ * 36045							‡‡ * 36065
	42			‡‡ * 42045							‡‡ * 42065
	48			‡‡ * 42045							‡‡ * 48065
24" (610)	6	14.6 (371)	25.3 (642)	‡‡ * 06047	16.6 (422)	28.74 (730)	17.1 (434)	29.61 (752)	18.7 (475)	31.5 (800)	‡‡ * 06067
	9			‡‡ * 09047							‡‡ * 09067
	12			‡‡ * 12047							‡‡ * 12067
	18			‡‡ * 18047							‡‡ * 18067
	24			‡‡ * 24047							‡‡ * 24067
	30			‡‡ * 30047							‡‡ * 30067
	36			‡‡ * 36047							‡‡ * 36067
	42			‡‡ * 42047							‡‡ * 42067
	48			‡‡ * 48047							‡‡ * 48067
36" (914)	6	20.60 (523)	35.68 (907)	‡‡ * 06048	22.6 (579)	39.14 (994)	23.1 (587)	40.01 (1016)	24.7 (627)	41.9 (1064)	‡‡ * 06068
	9			‡‡ * 09048							‡‡ * 09068
	12			‡‡ * 12048							‡‡ * 12068
	18			‡‡ * 18048							‡‡ * 18068
	24			‡‡ * 24048							‡‡ * 24068
	30			‡‡ * 30048							‡‡ * 30068
	36			‡‡ * 36048							‡‡ * 36068
	42			‡‡ * 42048							‡‡ * 42068
	48			‡‡ * 48048							‡‡ * 48068
48" (1219)	6	26.6 (676)	46.1 (1170)	‡‡ * 06049	28.6 (726)	49.53 (1258)	29.1 (739)	50.4 (1280)	30.7 (780)	52.2 (1328)	‡‡ * 06069
	9			‡‡ * 09049							‡‡ * 09069
	12			‡‡ * 12049							‡‡ * 12069
	18			‡‡ * 18049							‡‡ * 18069
	24			‡‡ * 24049							‡‡ * 24069
	30			‡‡ * 30049							‡‡ * 30069
	36			‡‡ * 36049							‡‡ * 36069
	42			‡‡ * 42049							‡‡ * 42069
	48			‡‡ * 48049							‡‡ * 48069

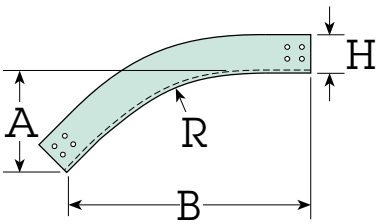
For Steel Fitting Part Numbers Use:
4" High Tray ‡‡ = 246 *
5" High Tray ‡‡ = 256 *
6" High Tray ‡‡ = 266 *
For Covers and Barriers
*See Accessories Section, Pages **1-20–1-22***

‡‡ *Tray System* ***Type of Material— *See Page **1-4** for Selection.*

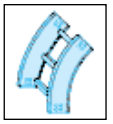
45° Outside & Inside Vertical Bend Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

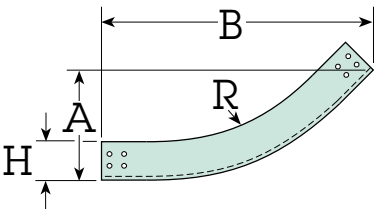
45° Outside Bend

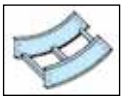


Number of rungs vary depending on radius.



45° Inside Bend





R	W	Outside Vertical Bend Dimensions A	Outside Vertical Bend Dimensions B	Outside Vertical Bend Part Number	Inside Vertical Bend H@4" A	Inside Vertical Bend H@4" B	Inside Vertical Bend H@5" A	Inside Vertical Bend H@5" B	Inside Vertical Bend H@6.3" A	Inside Vertical Bend H@6.3" B	Inside Vertical Bend Part Number
12" (305)	6	5.6 (143)	13.6 (356)	++ * 06040	6.8 (173)	16.4 (417)	7.1 (180)	17.1 (435)	7.8 (198)	18.8 (478)	++ * 06060
	9			++ * 09040							++ * 09060
	12			++ * 12040							++ * 12060
	18			++ * 18040							++ * 18060
	24			++ * 24040							++ * 24060
	30			++ * 30040							++ * 30060
	36			++ * 36040							++ * 36060
	42			++ * 42040							++ * 42060
	48			++ * 48040							++ * 48060
24" (610)	6	9.2 (232)	22.1 (561)	++ * 06042	10.3 (262)	24.92 (633)	10.6 (270)	25.6 (651)	11.3 (287)	27.3 (693)	++ * 06062
	9			++ * 09042							++ * 09062
	12			++ * 12042							++ * 12062
	18			++ * 18042							++ * 18062
	24			++ * 24042							++ * 24062
	30			++ * 30042							++ * 30062
	36			++ * 36042							++ * 36062
	42			++ * 42042							++ * 42062
	48			++ * 48042							++ * 48062
36" (914)	6	12.7 (322)	30.6 (777)	++ * 06043	13.8 (351)	33.4 (849)	14.1 (359)	34.12 (867)	14.8 (376)	35.7 (907)	++ * 06063
	9			++ * 09043							++ * 09063
	12			++ * 12043							++ * 12063
	18			++ * 18043							++ * 18063
	24			++ * 24043							++ * 24063
	30			++ * 30043							++ * 30063
	36			++ * 36043							++ * 36063
	42			++ * 42043							++ * 42063
	48			++ * 48043							++ * 48063
48" (1219)	6	16.2 (411)	39.1 (922)	++ * 06044	17.4 (441)	41.9 (1064)	17.6 (448)	42.6 (1082)	18.03 (465)	44.2 (1123)	++ * 06064
	9			++ * 09044							++ * 09064
	12			++ * 12044							++ * 12064
	18			++ * 18044							++ * 18064
	24			++ * 24044							++ * 24064
	30			++ * 30044							++ * 30064
	36			++ * 36044							++ * 36064
	42			++ * 42044							++ * 42064
	48			++ * 48044							++ * 48064

W=Widths in Inches (mm)

6" (152)
9" (229)
12" (305)
18" (457)
24" (610)
30" (762)
36" (914)
42" (1067)
48" (1176)

H=Side Rail Height in Inches (mm)

4" (101)
5" (127)
6.3" (160)
7.3" (179) *Consult Factory*
8" (203) *Consult Factory*

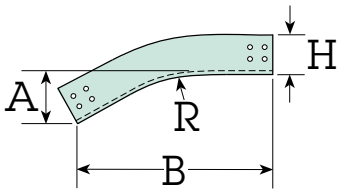
For Steel Fitting Part Numbers Use:
4" High Tray ++ = 246 *
5" High Tray ++ = 256 *
6" High Tray ++ = 266 *
For Covers and Barriers
*See Accessories Section, Pages **1-20–1-22***

++ Tray System ***Type of Material*** *— See Page **1-4** for Selection.*

30° Outside & Inside Vertical Bend Fittings

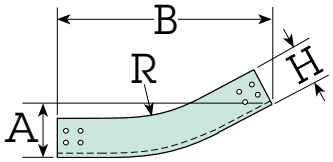
All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation. Each fitting and straight section comes with a pair (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

30° Outside Bend



Number of rungs vary depending on radius.

30° Inside Bend



R	W	Outside Vertical Bend Dimensions A	Outside Vertical Bend Dimensions B	Outside Vertical Bend Part Number	Inside Vertical Bend H@4" A	Inside Vertical Bend H@4" B	Inside Vertical Bend H@5" A	Inside Vertical Bend H@5" B	Inside Vertical Bend H@6.3" A	Inside Vertical Bend H@6.3" B	Inside Vertical Bend Part Number
12" (305)	6	3.2 (79)	11.6 (295)	‡‡ * 06035	3.7 (93)	13.6 (345)	3.8 (96)	14.1 (358)	3.9 (100)	14.8 (375)	‡‡ * 06055
	9			‡‡ * 09035							‡‡ * 09055
	12			‡‡ * 12035							‡‡ * 12055
	18			‡‡ * 18035							‡‡ * 18055
	24			‡‡ * 24035							‡‡ * 24055
	30			‡‡ * 30035							‡‡ * 30055
	36			‡‡ * 36035							‡‡ * 36055
	42			‡‡ * 42035							‡‡ * 42055
	48			‡‡ * 48035							‡‡ * 48055
24" (610)	6	4.7 (120)	17.6 (447)	‡‡ * 06037	5.3 (133)	19.6 (498)	5.4 (137)	20.1 (511)	5.6 (141)	20.8 (527)	‡‡ * 06057
	9			‡‡ * 09037							‡‡ * 09057
	12			‡‡ * 12037							‡‡ * 12057
	18			‡‡ * 18037							‡‡ * 18057
	24			‡‡ * 24037							‡‡ * 24057
	30			‡‡ * 30037							‡‡ * 30057
	36			‡‡ * 36037							‡‡ * 36057
	42			‡‡ * 42037							‡‡ * 42057
	48			‡‡ * 48037							‡‡ * 48057
36" (914)	6	6.32 (161)	23.60 (599)	‡‡ * 06038	6.9 (174)	25.6 (650)	7.0 (178)	26.1 (663)	7.2 (182)	27.1 (688)	‡‡ * 06058
	9			‡‡ * 09038							‡‡ * 09058
	12			‡‡ * 12038							‡‡ * 12058
	18			‡‡ * 18038							‡‡ * 18058
	24			‡‡ * 24038							‡‡ * 24058
	30			‡‡ * 30038							‡‡ * 30058
	36			‡‡ * 36038							‡‡ * 36058
	42			‡‡ * 42038							‡‡ * 42058
	48			‡‡ * 48038							‡‡ * 48058
48" (1219)	6	7.93 (201)	29.60 (752)	‡‡ * 06039	8.5 (215)	31.6 (803)	8.6 (218)	32.1 (815)	8.8 (223)	32.8 (832)	‡‡ * 06059
	9			‡‡ * 09039							‡‡ * 09059
	12			‡‡ * 12039							‡‡ * 12059
	18			‡‡ * 18039							‡‡ * 18059
	24			‡‡ * 24039							‡‡ * 24059
	30			‡‡ * 30039							‡‡ * 30059
	36			‡‡ * 36039							‡‡ * 36059
	42			‡‡ * 42039							‡‡ * 42059
	48			‡‡ * 48039							‡‡ * 48059

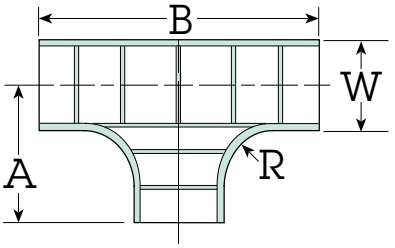
For Steel Fitting Part Numbers Use:
4" High Tray ‡‡ = 246 *
5" High Tray ‡‡ = 256 *
6" High Tray ‡‡ = 266 *
For Covers and Barriers
See Accessories Section, Pages ***1-20–1-22***

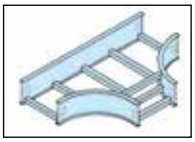
‡‡ *Tray System* ***Type of Material*** *— See Page* ***1-4*** *for Selection.*

Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation.

Tee



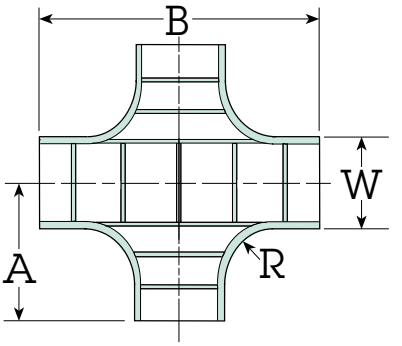


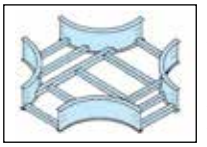
Each Tee fitting comes with two pairs (4) of splice plates and sixteen (16) 9TBN302 nut and bolt assemblies.

R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	18 (457)	36 (914)	‡‡ * 06085
	9	19.5 (495)	39 (991)	‡‡ * 09085
	12	21 (533)	42 (1067)	‡‡ * 12085
	18	24 (610)	48 (1549)	‡‡ * 18085
	24	27 (686)	54 (1372)	‡‡ * 24085
	30	30 (762)	60 (1524)	‡‡ * 30085
	36	33 (838)	66 (1676)	‡‡ * 36085
	42	36 (914)	72 (1829)	‡‡ * 42085
	48	39 (991)	78 (1981)	‡‡ * 48085
24" (610)	6	30 (762)	60 (1524)	‡‡ * 06087
	9	31.5 (800)	63 (1600)	‡‡ * 09087
	12	33 (838)	66 (1676)	‡‡ * 12087
	18	36 (914)	72 (1829)	‡‡ * 18087
	24	39 (991)	78 (1981)	‡‡ * 24087
	30	42 (1067)	84 (2134)	‡‡ * 30087
	36	45 (1143)	90 (2286)	‡‡ * 36087
	42	48 (1219)	96 (2438)	‡‡ * 42087
	48	51 (1295)	102 (2591)	‡‡ * 48087
36" (914)	6	42 (1067)	84 (2134)	‡‡ * 06088
	9	43.5 (1105)	87 (2210)	‡‡ * 09088
	12	45 (1143)	90 (2286)	‡‡ * 12088
	18	48 (1219)	96 (2438)	‡‡ * 18088
	24	51 (1295)	102 (2591)	‡‡ * 24088
	30	54 (1372)	108 (2743)	‡‡ * 30088
	36	57 (1448)	114 (2896)	‡‡ * 36088
	42	60 (1524)	120 (3048)	‡‡ * 42088
	48	63 (1600)	126 (3200)	‡‡ * 48088
48" (1219)	6	54 (1372)	108 (2743)	‡‡ * 06089
	9	55.5 (1410)	111 (2819)	‡‡ * 09089
	12	57 (1448)	114 (2896)	‡‡ * 12089
	18	60 (1524)	120 (3048)	‡‡ * 18089
	24	63 (1600)	126 (3200)	‡‡ * 24089
	30	66 (1676)	132 (3353)	‡‡ * 30089
	36	69 (1753)	138 (3505)	‡‡ * 36089
	42	72 (1829)	144 (3658)	‡‡ * 42089
	48	75 (1905)	150 (3810)	‡‡ * 48089

Expansion & Reducer Tees *can be custom fabricated at standard Tee pricing. Specify various widths counter clockwise (using drawing above) starting at left.*

Cross



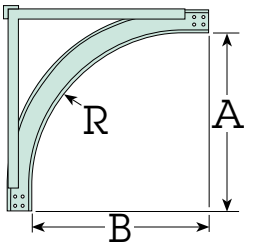


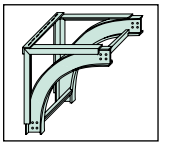
Each Cross fitting comes with three pairs (6) of splice plates and twenty four (24) 9TBN302 nut and bolt assemblies.

R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6	18 (457)	36 (914)	‡‡ * 06080
	9	19.5 (495)	39 (991)	‡‡ * 09080
	12	21 (533)	42 (1067)	‡‡ * 12080
	18	24 (610)	48 (1549)	‡‡ * 18080
	24	27 (686)	54 (1372)	‡‡ * 24080
	30	30 (762)	60 (1524)	‡‡ * 30080
	36	33 (838)	66 (1676)	‡‡ * 36080
	42	36 (914)	72 (1829)	‡‡ * 42080
	48	39 (991)	78 (1981)	‡‡ * 48080
24" (605)	6	30 (762)	60 (1524)	‡‡ * 06082
	9	31.5 (800)	63 (1600)	‡‡ * 09082
	12	33 (838)	66 (1676)	‡‡ * 12082
	18	36 (914)	72 (1829)	‡‡ * 18082
	24	39 (991)	78 (1981)	‡‡ * 24082
	30	42 (1067)	84 (2134)	‡‡ * 30082
	36	45 (1143)	90 (2286)	‡‡ * 36082
	42	48 (1219)	96 (2438)	‡‡ * 42082
	48	51 (1296)	102 (2591)	‡‡ * 48082
30" (762)	6	42 (1067)	84 (2134)	‡‡ * 06083
	9	43.5 (1105)	87 (2210)	‡‡ * 09083
	12	45 (1143)	90 (2286)	‡‡ * 12083
	18	48 (1219)	96 (2438)	‡‡ * 18083
	24	51 (1295)	102 (2591)	‡‡ * 24083
	30	54 (1372)	108 (2743)	‡‡ * 30083
	36	57 (1448)	114 (2896)	‡‡ * 36083
	42	60 (1524)	120 (3048)	‡‡ * 42083
	48	63 (1600)	126 (3200)	‡‡ * 48083
48" (1219)	6	54 (1372)	108 (2743)	‡‡ * 06084
	9	55.5 (1410)	111 (2819)	‡‡ * 09084
	12	57 (1448)	114 (2896)	‡‡ * 12084
	18	60 (1524)	120 (3048)	‡‡ * 18084
	24	63 (1600)	126 (3200)	‡‡ * 24084
	30	66 (1676)	132 (3353)	‡‡ * 30084
	36	69 (1753)	138 (3505)	‡‡ * 36084
	42	72 (1829)	144 (3658)	‡‡ * 42084
	48	63 (1600)	150 (3810)	‡‡ * 48084

Expansion & Reducer Crosses *can be custom fabricated. Specify various widths counter clockwise (using drawing above) starting at left.*

90° Vertical Support Riser





Each Riser comes with a pair of (2) splice plates and eight (8) 9TBN302 nut and bolt assemblies.

R	W	Dimensions A	Dimensions B	Part Number
12" (305)	6			‡‡ * 06090
	9			‡‡ * 09090
	12			‡‡ * 12090
	18	15 (381)	15 (381)	‡‡ * 18090
	24			‡‡ * 24090
	30			‡‡ * 30090
	36			‡‡ * 36090
	42			‡‡ * 42090
	48			‡‡ * 48090
24" (610)	6			‡‡ * 06092
	9			‡‡ * 09092
	12			‡‡ * 12092
	18	27 (686)	27 (686)	‡‡ * 18092
	24			‡‡ * 24092
	30			‡‡ * 30092
	36			‡‡ * 36092
	42			‡‡ * 42092
	48			‡‡ * 48092
36" (914)	6			‡‡ * 06093
	9			‡‡ * 09093
	12			‡‡ * 12093
	18	39 (991)	39 (991)	‡‡ * 18093
	24			‡‡ * 24093
	30			‡‡ * 30093
	36			‡‡ * 36093
	42			‡‡ * 42093
	48			‡‡ * 48093
48" (1219)	6			‡‡ * 06094
	9			‡‡ * 09094
	12			‡‡ * 12094
	18	51(1295)	51(1295)	‡‡ * 18094
	24			‡‡ * 24094
	30			‡‡ * 30094
	36			‡‡ * 36094
	42			‡‡ * 42094
	48			‡‡ * 48094

For Steel Fitting Part Numbers Use:
4" High Tray ‡‡ = 246 *
5" High Tray ‡‡ = 256 *
6" High Tray ‡‡ = 266 *

For Covers and Barriers
See Accessories Section, Pages ***1-20–1-22***

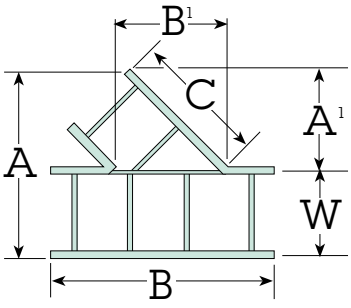
‡‡ *Tray System*

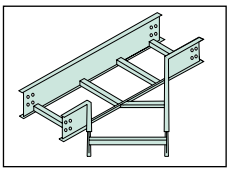
* *Type of Material— See Page* ***1-4*** *for Selection.*

Fittings

All Ladder Tray Fittings have rungs on 9" centers with 3" tangents for easy fit-up during installation.

Left or Right Hand Wye





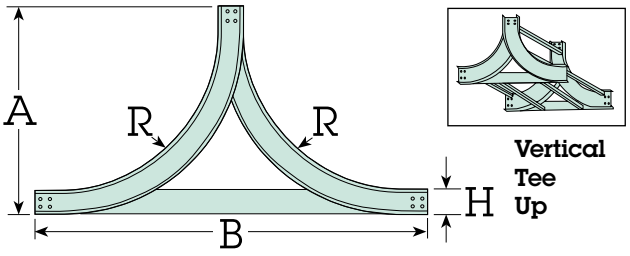
Number of rungs vary depending on tray width.

W	B[1]	B	C	A[1]	A	Part Number
6"	8.49 (216)	15.73 (400)	12 (305)	4.24 (108)	14.49 (368.0)	‡‡ * W 172 RIGHT Hand or ‡‡ * W 173 LEFT Hand
9"	12.73 (323)	22.09 (561)	18 (457)	6.36 (162)	21.73 (551.9)	
12"	16.97 (431)	28.45 (723)	24 (610)	8.48 (215)	28.97 (735.8)	
18"	25.45 (647)	41.19 (1046)	36 (914)	12.73 (323.3)	43.46 (1103.9)	
24"	33.94 (862)	53.91 (1369)	48 (1219)	16.97 (431.0)	57.94 (1471.7)	
30"	42.43 (1078)	66.64 (1693)	60 (1524)	21.21 (538.7)	72.43 (1839.7)	
36"	50.91 (1293)	79.37 (2016)	72 (1829)	25.46 (646.7)	86.41 (2194.8)	
42"	59.40 (1509)	92.10 (2339)	84 (2134)	29.20 (741.7)	101.4 (2575.6)	
48"	67.90 (1725)	104.34 (2650)	96 (2438)	33.94 (862.1)	115.9 (2943.9)	

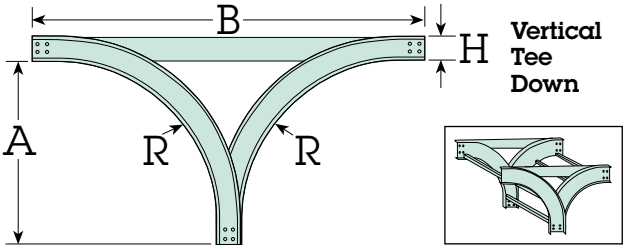
Special Wyes can be made with two different tray widths. Consult factory.

Each Wye is furnished with two pairs (4) of splice plates and eight (8) 9TBN302 nut and bolt assemblies.

Vertical Tee



Vertical Tee Up



Vertical Tee Down

R	Dimensions/Side Rail Height=H 4" A	4" B	5" A	5" B	6" A	6" B	Part Number
12" (305)	15 (381)	34 (864)	15 (381)	35 (889)	15 (381)	36.3 (922)	‡‡ * W 095
	19 (483)	34 (864)	20 (508)	35 (889)	22.3 (566)	36.3 (922)	‡‡ * W 095U
24" (610)	27 (686)	58 (1473)	27 (686)	59 (1499)	27 (686)	60.3 (1532)	‡‡ * W 097
	31 (787)	58 (1473)	32 (813)	59 (1499)	34.3 (871)	60.3 (1532)	‡‡ * W 097U
36" (914)	39 (991)	82 (2083)	39 (991)	83 (2108)	39 (846)	84.3 (2141)	‡‡ * W 098
	43 (1092)	82 (2083)	44 (1118)	83 (2108)	46.3 (1176)	84.3 (2141)	‡‡ * W 098U
48"	51 (1295)	106 (2692)	51 (1295)	107 (2718)	51 (1295)	108.3 (2751)	‡‡ * W 099
	55 (1397)	106 (2692)	56 (1422)	107 (2718)	58.3 (1481)	108.3 (2751)	‡‡ * W 099U

Each Vertical Tee is furnished with two (2) pairs of splice plates and sixteen (16) 9TBN302 nut and bolt assemblies.

Fitting Reducers

Fitting Reducers are available in right hand, left hand or concentric styles as a special order. Consult Factory. Chalfant strongly recommends the use of **offset splice plate reducers** which are 1/3 the cost and 1/2 the labor to install while doing the same job.
See Page **1-19** in the Accessories Section.

Fitting Covers

Covers— Available in Flanged and Flat styles only.

See page **1-20** in the Accessories Section.

To order covers substitute the "Tray System" number (‡‡) with a **7** for the Flanged style cover or a **67** for a Flat cover style.

Example:
Tray part Number. 2 A 06050
7 Flanged / **67** Flat

Barriers— Available for Horizontal and Vertical fittings.

See page **1-22** in the Accessories Section.

To order Vertical Barriers substitute the "Tray System" number (‡‡) with an **8**. and substitute "BS", as shown.

Example:
Tray part Number. 2 A 06050 + [Barrier Height]
8 **BS**

For Horizontal Barriers— See Page **1-22** and specify part number 8 * BS340-A.

‡‡ *Tray System*

* *Type of Material— See Page **1-4** for Selection.*

Cable Tray Accessories

Chalfant's complete line of accessories are designed to be used with the following Cable Tray Systems:

How to Order

Example: 4-Bolt Slotted Hole Splice Plate

2	A	SP200
Tray System Number	Type of Material *See material codes* *	Part Number from Catalog

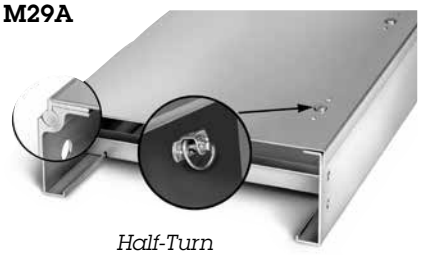
*** Material Code:**

A =Aluminum, High Strength 6063T6 Extrusions (5052H34 sheet)
S = Hot Dip Mill Galvanized Steel to ASTM 653A G-90 Coating, 1.05 Mils Thick
G =Hot Dip Galvanized after Fabrication to ASTM 123-B2 2.55 Mils Thick (replaced ASTM 386)
T = 304L Stainless Steel
Z = 316L Stainless Steel

Cable Tray Accessories

Integral Hinged Cover

M24A
M29A

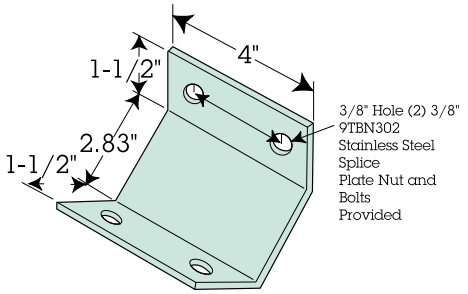


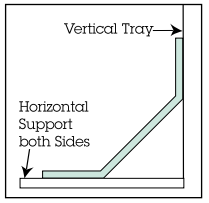
Half-Turn Spring Latch

Available in 24A and 29A systems in twelve foot standard lengths. Material is 6063 Aluminum Alloy.

Heavy-Duty Vertical Hold Down Bracket

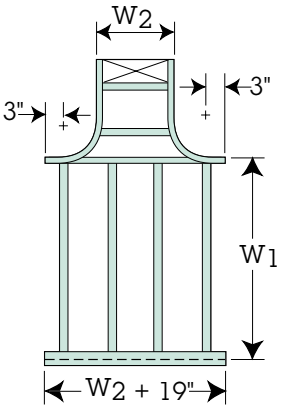
9SHD590



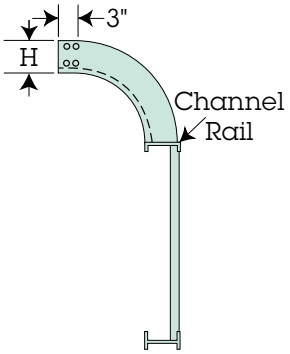


Tee with Drop-Out

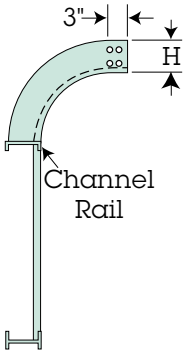
24A $W_1$085-VOT-W_2 (vertical outside tap)
24A $W_1$085-VIT-W_2 (vertical inside tap)

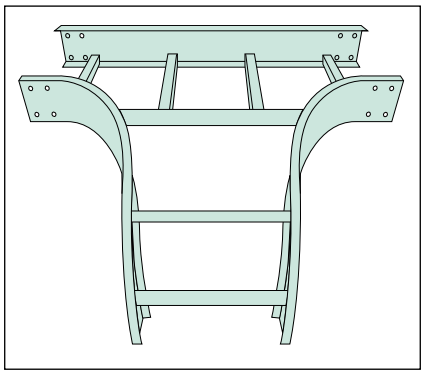


Tee with Inside Tap (Up)



Tee with Outside Tap (Down)





W_1 = Width of Horizontal Run
W_2 = Width of Vertical Tap

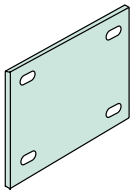
Available in any tray size in systems 2A through 665A. Material is 6063 Aluminum Alloy. See page 1-6 for selection.

Cable Tray Splice Plates and Adapters

Note: All splice plates are shipped in pairs with necessary stainless steel hardware.

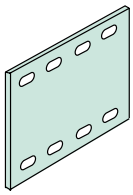
4 Bolt Splice Plate

‡‡ * **SP200**



8 Hole Long Splice Plate

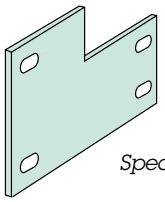
‡‡ * **SP209**



Note: Anti-oxide compound is not needed behind plates— Per NEMA VE-2.

Adapter Splice Plate

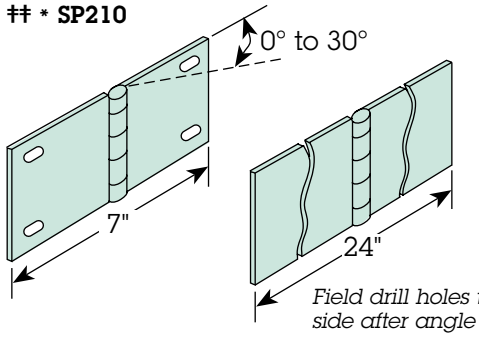
9 * SP286 8" to 6"
9 * SP265 6" to 5"
9 * SP264 6" to 4"
9 * SP254 5" to 4"



Special Order

Horizontal Adjustable Splice Plate

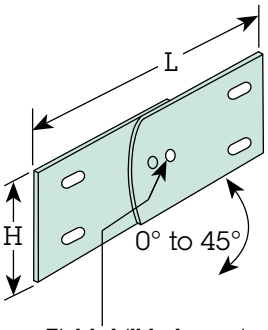
‡‡ * **SP210**



Field drill holes this side after angle is set.

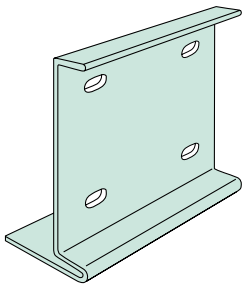
Vertical Adjustable Splice Plate

‡‡ * **SP212**



Field drill hole next to pivot point after angle is set.

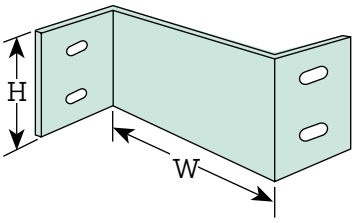
Mid-Span Splice Plate



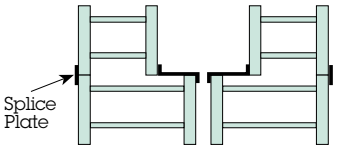
Aluminum splice plates are shipped in pairs with stainless steel hardware.

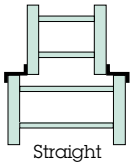
Rail Height	Tray Series	Part Number
6"	665A	665AWASP200
7"	47A	47AWASP200
	57A	57AWASP200

Reducer Splice Plates



Nominal Dimensions		Part Numbers	
H	W	Offset	Straight
"H" varies with loading depth of specified straight sections.	3"	‡‡ * 03236	‡‡ * 03237
	6"	‡‡ * 06236	‡‡ * 06237
	9"	‡‡ * 09236	‡‡ * 09237
	12"	‡‡ * 12236	‡‡ * 12237
	18"	‡‡ * 18236	‡‡ * 18237
	21"	‡‡ * 21236	‡‡ * 21237
	24"	‡‡ * 24236	‡‡ * 24237
	27"	‡‡ * 27236	‡‡ * 27237
	30"	‡‡ * 30236	‡‡ * 30237

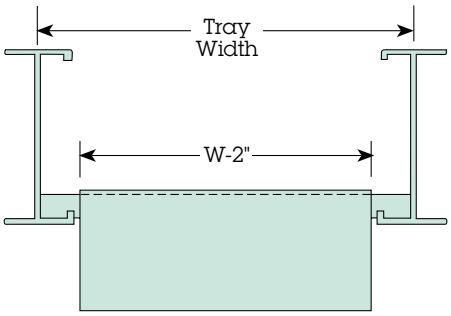


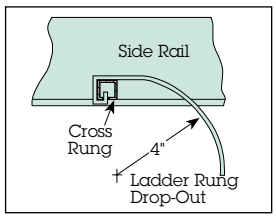


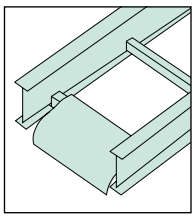
Where application calls for a left or right hand reduction, Chalfant reducing splice plates are sold with a standard splice plate ‡‡ * **SP200**. For a concentric straight reduction, the dimension "W" is the total reduction.

Ladder Rung Drop-Out

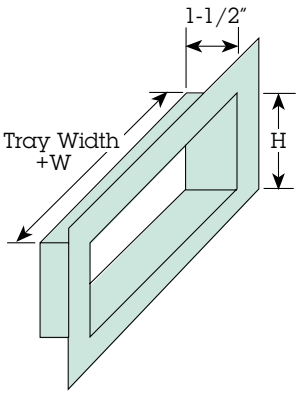
9 * W198







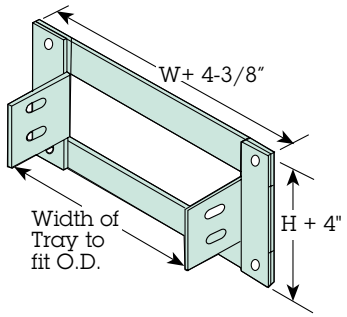
Wall Frame-- 1 Tier



Rail Height	H	W	Part Number
4"	4.0"	2.50"	94*W495
5"	5.4375	2.50"	95*W495
6"	6.875	2.50"	96*W495

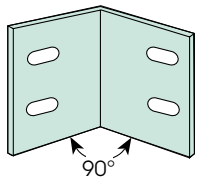
Tray to Panel Frame

9HSW244



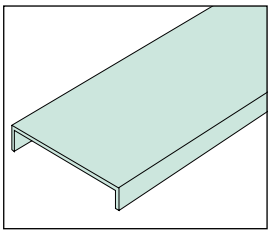
90° Alternate Tray to Box Connector

‡‡ * **SP213**

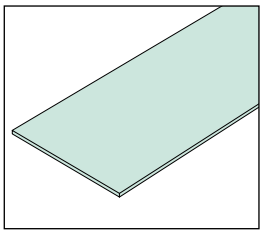


‡‡ *Tray System*
* *Type of Material— See Page* ***1-18*** *for Selection.*

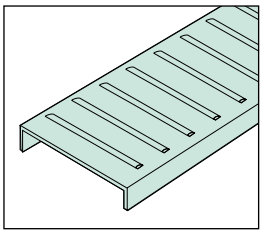
Covers and Accessories



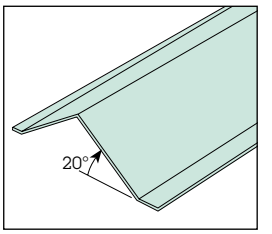
Standard Cover▲
7 * W 010



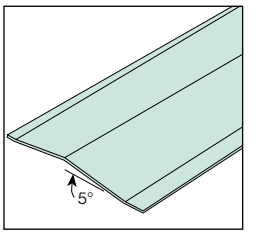
Flat Cover▲
67 * W 010



Louvered Cover▲
7 * W 010-V



Peak Cover-- 20°
7 * W 010-P

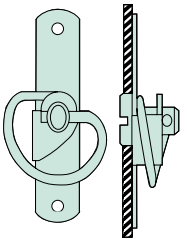


Rain Peaked Cover
7 * W 010-RP

Note: Standard cover length is 12'. ▲Also available with installed spring latches— See Below and Page 1-18. W=Width

Spring Latch

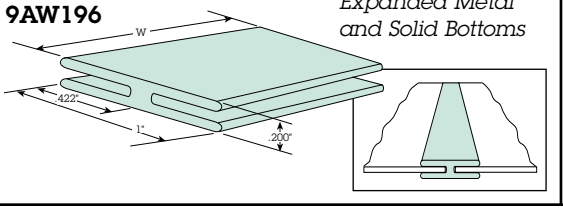
▲Option for Covers



H Joint

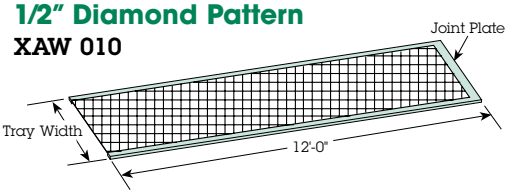
9AW196

For Covers, Expanded Metal and Solid Bottoms



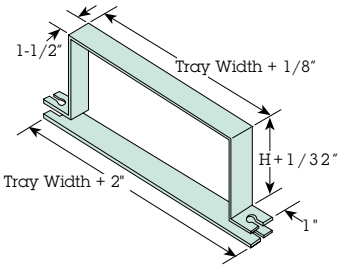
Aluminum Expanded Metal Bottom-- 1/2" Diamond Pattern

XAW 010



Heavy Duty Cover Strap

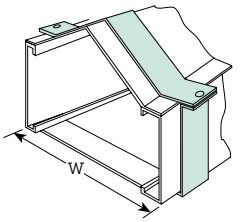
7 * W69H



Peaked Cover Heavy Duty Strap

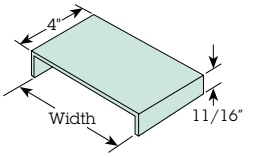
7 * W69H-RP
7 * W69H-P

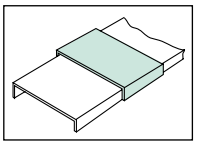
RP=5° Slope
P=20° Slope



Cover Joint Strap

7 * W196

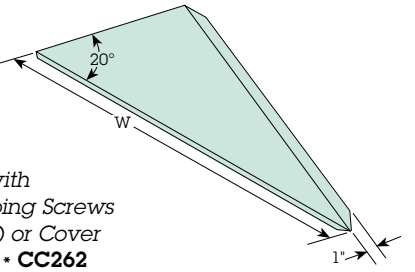




Installs with Self-Tapping Screws (Pg. 1-25) or Cover Clamp **7 * CC262**

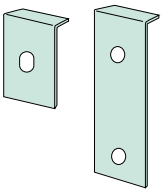
Peaked Cover Blind End

7 * W245

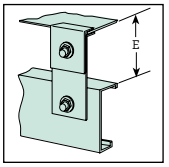


Raised Cover Clamp-- Channel

7 * CC70C

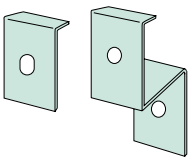


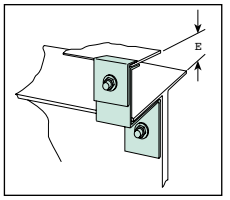
E=1", 2", 3" Elevated



Raised Cover Clamp-- I-Beam

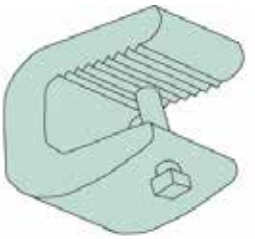
7 * CC70E



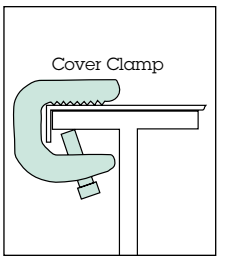


Aluminum Cover Clamp or Conduit Bracket

7ACC262

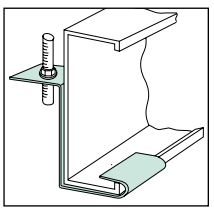


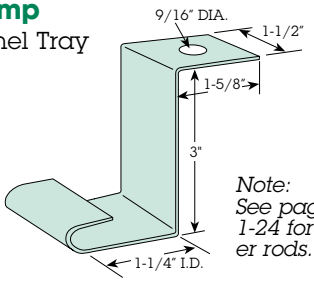
For galvanized steel order 7SCC262



Hanger Rod Clamp

9SHC239 All Channel Tray

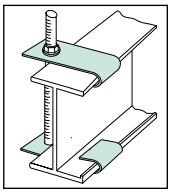




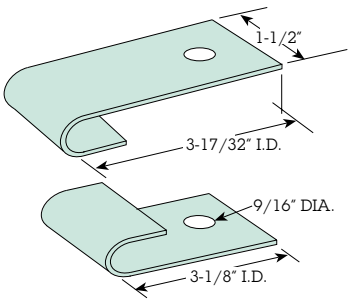
Note: See page 1-24 for hanger rods.

Hanger Rod Clamp

9SHC257 3A, 26A & 46A Tray
9SHC249 2A,34A & 35A Tray

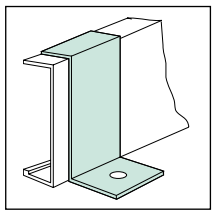


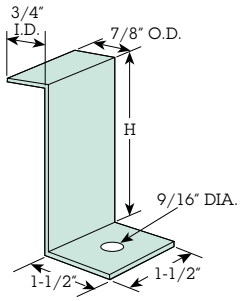
Note: See page 1-24 for hanger rods.



Wall Bracket Clamp-- Channel

9S0H248



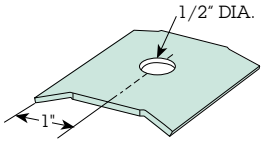


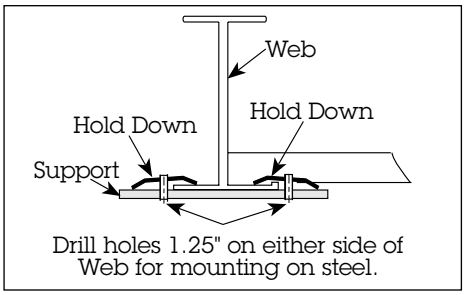
For I-Beam— **9S ‡‡ A248**

H=4" (2A Systems)
5" (35A Systems)
6" (3A Systems)

Hold Down Clamp

9 * BC250

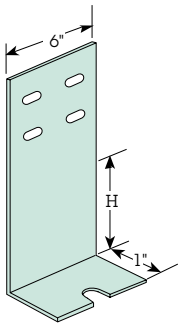


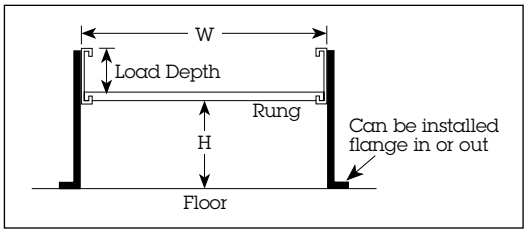


Used on either side with aluminum I-beam. Installs on inside of C-Channel.

Raised Support Splice Plate

‡‡ * SP200-H

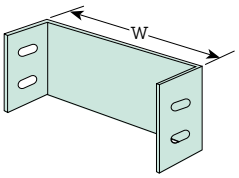




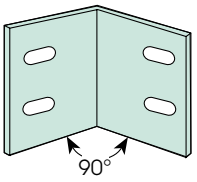
Used on C-Channel side rails, only.
U.S. Patent 4,596,095

Blind End

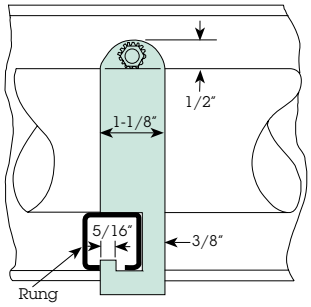
‡‡ * W245



‡‡ * SP213



Stainless Steel Ladder Rung Cable Clamp

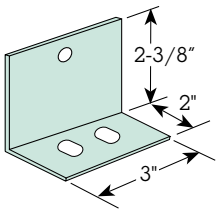


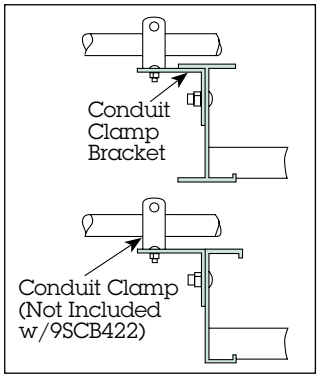
O. D. of Cable	Part Numbers
1.00"-1.25"	9TLC288
1.25"-1.50"	9TLC289
1.50"-1.75"	9TLC290
1.75"-2.00"	9TLC291
2.00"-2.25"	9TLC292
2.25"-2.50"	9TLC293
2.50"-2.75"	9TLC294
2.75"-3.00"	9TLC295
3.00"-3.25"	9TLC296
3.25"-3.50"	9TLC297
3.50"-3.75"	9TLC298
3.75"-4.00"	9TLC299
4.00"-4.25"	9TLC300
4.25"-4.50"	9TLC301
4.50"-4.75"	9TLC302

1/4" adjustment on all clamps.
20 ga. stainless steel with 1/4"-20-1" bolt and locknut.

Optional Conduit Clamp Bracket

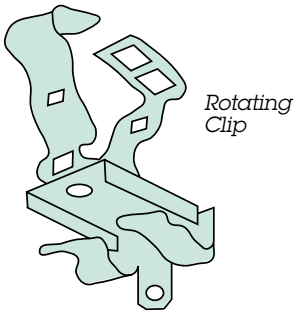
9SCB422

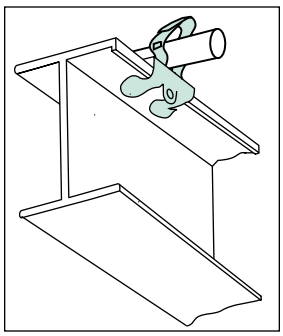




Universal Clamp & Conduit Clip

9SCB423 (1/2" to 3/4" Conduit)



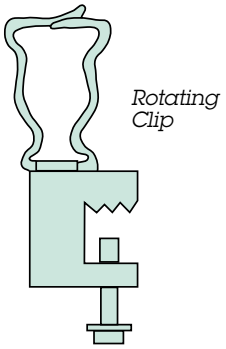


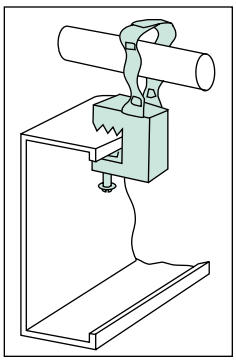
Caddy Design for I-Beam

‡‡ *Tray System*
* *Type of Material— See Page 1-18 for Selection.*

Beam Clamps

9SCB424 (1/2" to 3/4" Conduit)**





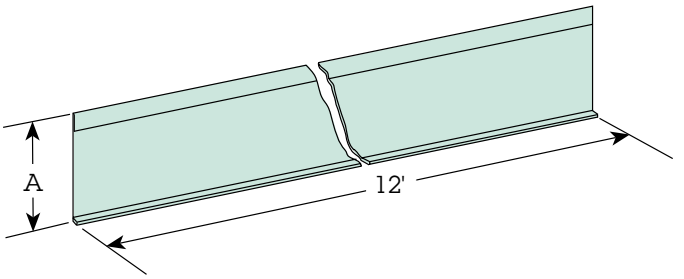
Caddy Design for C-Channel
***Call factory for other conduit sizes.*

Barriers and Separators

Barrier Strip-- Straight

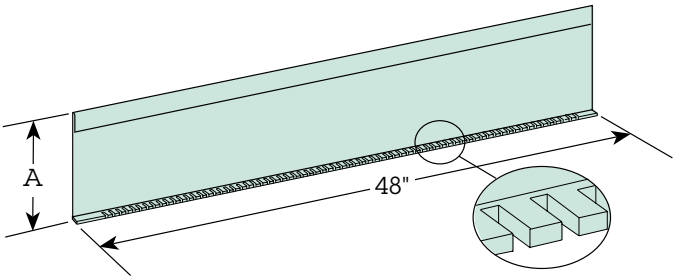
8 * BS010-A

*(For 3 meter length order: **8 * BS118-A**)*



Horizontal Adjustable Barrier-- Hand Formed

8 * BS340-A



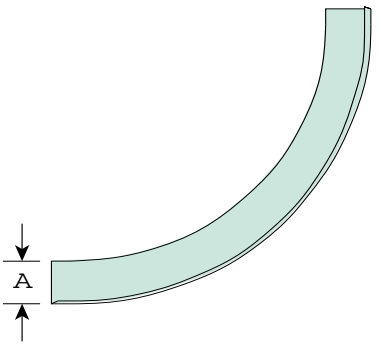
All barriers are supplied with (4) 9STK774 magnetic steel self tapping screws.

A= 3 for 3" and 4" Load Depths
5 for 5" and 6" Load Depths

90° Inside Vertical Barrier

12"- 8 * BS07 ǂ -A
24"- 8 * BS07 ǂ -A
36"- 8 * BS07 ǂ -A
48"- 8 * BS07 ǂ -A

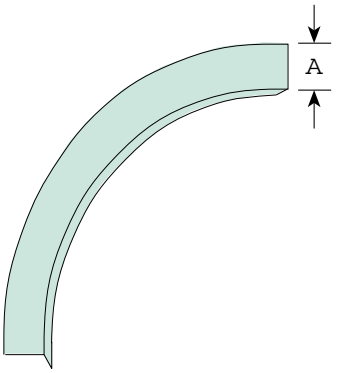
0=12" Radius
2=24" Radius
3=36" Radius
4=48" Radius



90° Outside Vertical Barrier

12"- 8 * BS05 ǂ -A
24"- 8 * BS05 ǂ -A
36"- 8 * BS05 ǂ -A
48"- 8 * BS05 ǂ -A

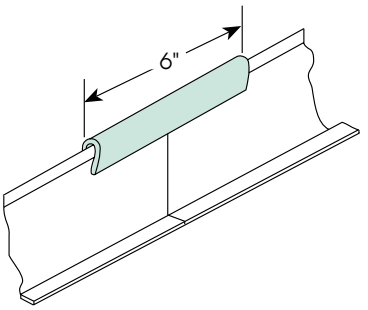
0=12" Radius
2=24" Radius
3=36" Radius
4=48" Radius



*For 30°, 45° and 60° Vertical Barriers, See Page **1-17***

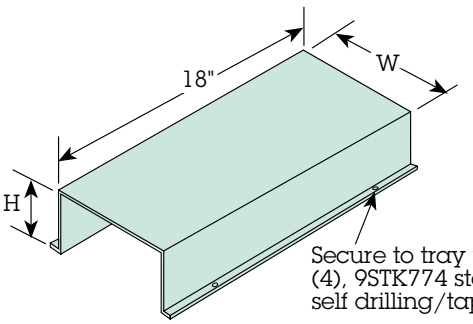
Barrier Alignment Joint Strip (Nylon)

8N06196

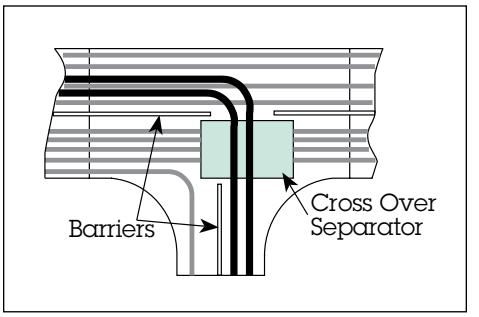


Cross Over Separator

8HSW



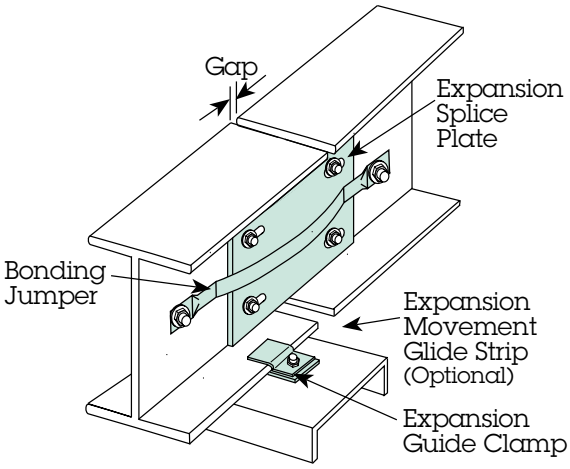
H=2" or 4"
S=16 Gauge Steel-ASTM-653A
W=6" or 12"



ǂ *Tray System*
***** *Type of Material—*
*See Page **1-18** for Selection.*

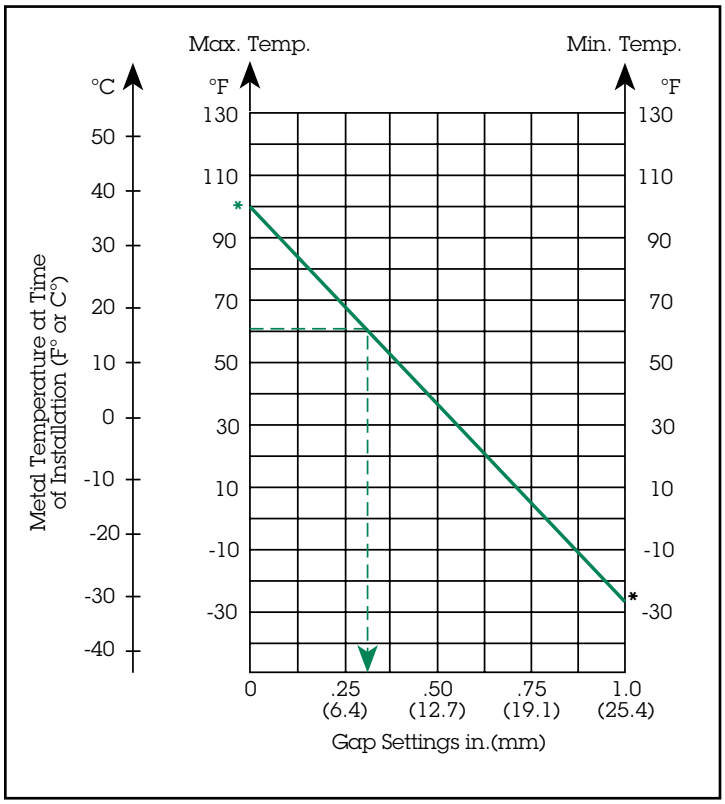
Expansion Joint Components/Gap Setting

Tray Expansion Gap Setting



Maximum Spacing Between Expansion Joints that Provide for One Inch (25.4) Movement

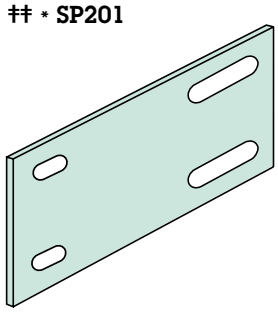
Temperature Differential		Steel		Aluminum	
F°	C°	Ft.	m	Ft.	m
25	(-4)	512	(156)	260	(79.2)
50	(10)	256	(78)	130	(39.6)
75	(24)	171	(52.1)	87	(26.5)
100	(38)	128	(39.0)	65	(19.8)
125	(51)	102	(31.1)	52	(15.8)
150	(65)	85	(25.9)	43	(13.1)
175	(79)	73	(22.2)	37	(11.3)



* *Input temperature Max/Min for your location.*

Expansion Splice Plate

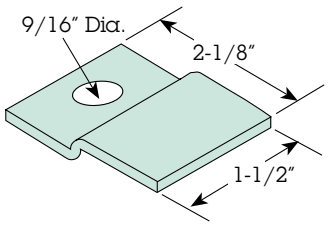
†† * SP201



Furnished in pairs (2) with (4) 9TBN302 nut & bolt assemblies and (4) 9SEB519 shoulder bolts, washers and nyloc hex nuts.

Expansion Guide Clamp

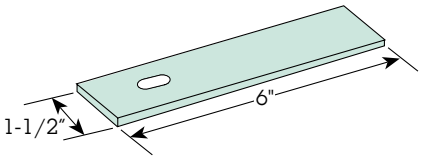
9 * EX253



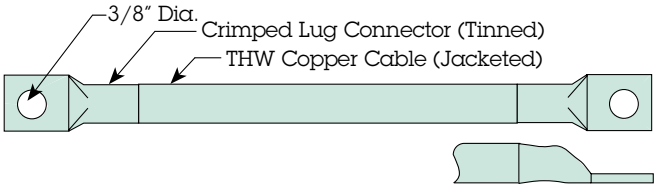
†† *Tray System*
* *Type of Material— See Page* ***1-18*** *for Selection.*

Expansion Movement Glide Strip--Isolation Pad

9NPG259



Bonding Jumper



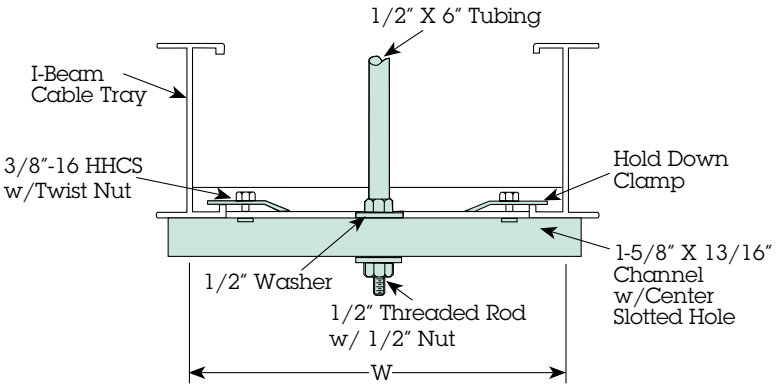
Cable Size	Rated Amps	Part Number
#6	200	9CBJ200
#1	600	9CBJ600
2/0	1000	9CBJ1000
4/0	1600	9CBJ1600

Furnished with (2) 38" fasteners. Field drill mounting holes. Allow for 1" expansion.

Support Equipment

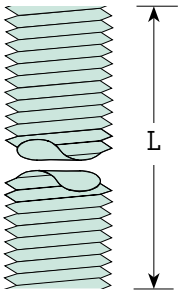
Single Center Support for Ladder Tray

9SW263



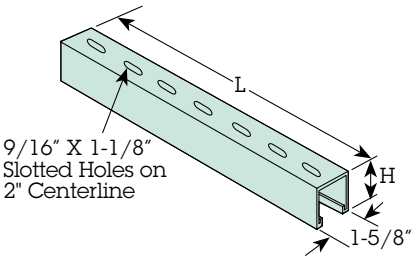
Note: All items are supplied except for 1/2" threaded rod.

Hanger Rods



L	Part Number 3/8"-16	1/2"-13
12"	9S12310	9S12312
24"	9S24310	9S24312
36"	9S36310	9S36312
48"	9S48310	9S48312
72"	9S72310	9S72312
120"	9S120310	9S120312

Trapeze Support Bracket

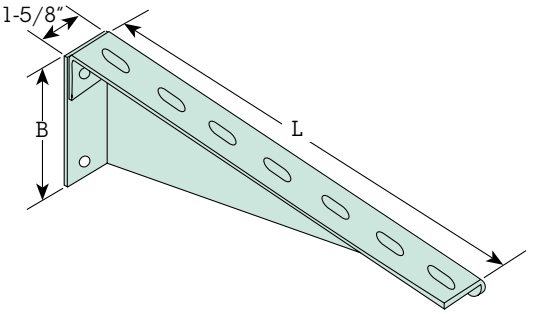


Tray Width	L	H	Usable Load (lbs.)	Part* Number
6	12"	0.8125	985	9S12323
9	15"	0.8125	830	9S15323
12	18"	0.8125	680	9S18323
18	24"	0.8125	495	9S24323
24	30"	1.625	1050	9S30323
30	36"	1.625	880	9S36323
36	42"	1.625	600	9S42323

Standard Channel Strut		Part* Number
Length 10'	Single	9S10570
	Double	9S10572
20'	Single	9S20570
	Double	9S20572

Note: Hanger rods and hardware not included.

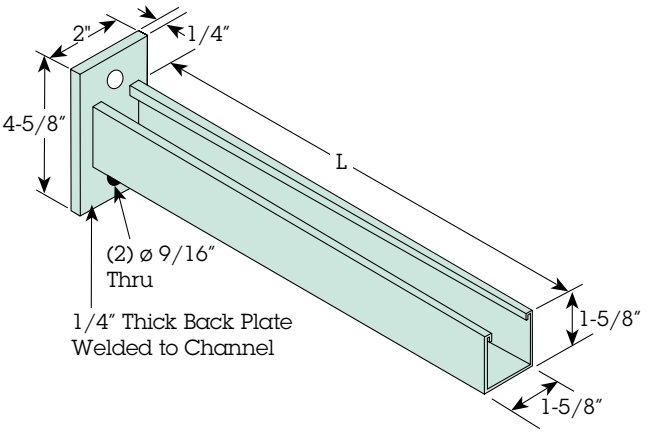
Shelf Style Wall Bracket



Tray Width	L	B	Uniform Load (lbs.)	Part* Number
6 & 9	10"	3.00	300	9S10322
12	16"	4.50	300	9S16322
18	22"	6.00	300	9S22322
24	28"	7.50	300	9S28322

Important: Allowance must be made for expansion if temperature extremes exist.

Medium Duty Strut Channel Bracket

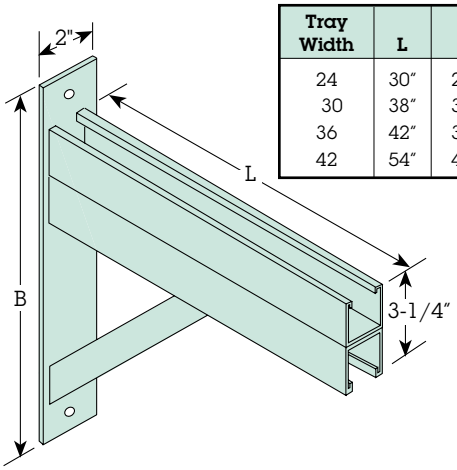


Tray Width	L	Uniform Load (lbs.)	Ga	Part* Number
6 & 9	12"	1500	12	9S12580
12	18"	750	12	9S18580
18	24"	500	12	9S24580
24	30"	250	12	9S30580

F.O.S. = 2.5
Securely mounted to wall with proper hardware.

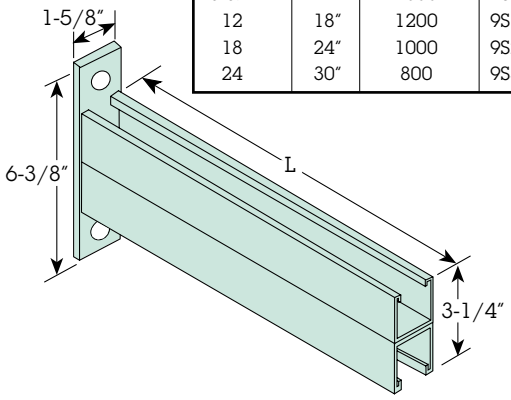
** For hot dipped ASTM 123 galvanized steel after fabrication: specify "G" for material designation.*

Heavy Duty Wall Bracket



Tray Width	L	B	Uniform Load (lbs.)	Part Number
24	30"	27.25	3000	9S30321
30	38"	35.25	2800	9S38321
36	42"	39.25	2500	9S42321
42	54"	49.25	2000	9S54321

Double Channel Bracket

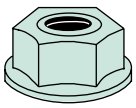


Tray Width	L	Uniform Load (lbs.)	Part Number
6 & 9	12"	2000	9S12582
12	18"	1200	9S18582
18	24"	1000	9S24582
24	30"	800	9S30582

Other Accessories

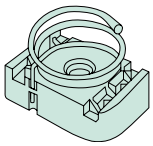
Flanged Washer/Hex Nut

9S38309 3/8" - 16
9S12309 1/2" - 13



Twist Nut

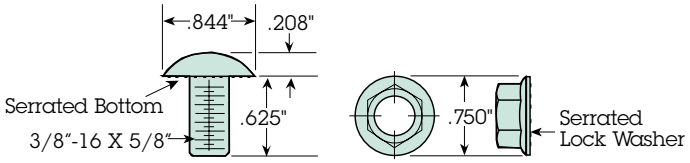
9S38575 - 3/8" - 16
9S12575 - 1/2" - 13



Splice Plate Nut & Bolt Assembly

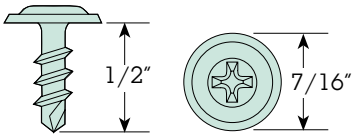
9TBN302 304SS

This is Chalfant's exclusive standard splice plate nut and bolt assembly. Made from 304SS, it has a round truss head— serrated and integral flanged serrated lock washer hex nut. Bolt is torqued properly at 20 ft. lbs.



Self-Drilling/Tapping Screw

9STK774 Special Dorri Tech™ Coating, Steel (Magnetic)



For Covers, Barriers and Solid Bottom Installations

Misc. Accessories

9S38574	3/8"	16 X 1" Hex Head Machine Bolt
9S12574	1/2"	13 X 1" Hex Head Machine Bolt
9S12576	1-5/8"	Square Washer for Strut
9S38307	3/8"	Washer
9S12307	1/2"	Washer
9S38318	3/8"	16 Beam Clamp - Malleable Iron Plated
9S12318	1/2"	13 Beam Clamp - Malleable Iron Plated
9SVB227	"L"	Vertical Tray Bracket

Series 6
Trough Cable Tray
Typical Installations

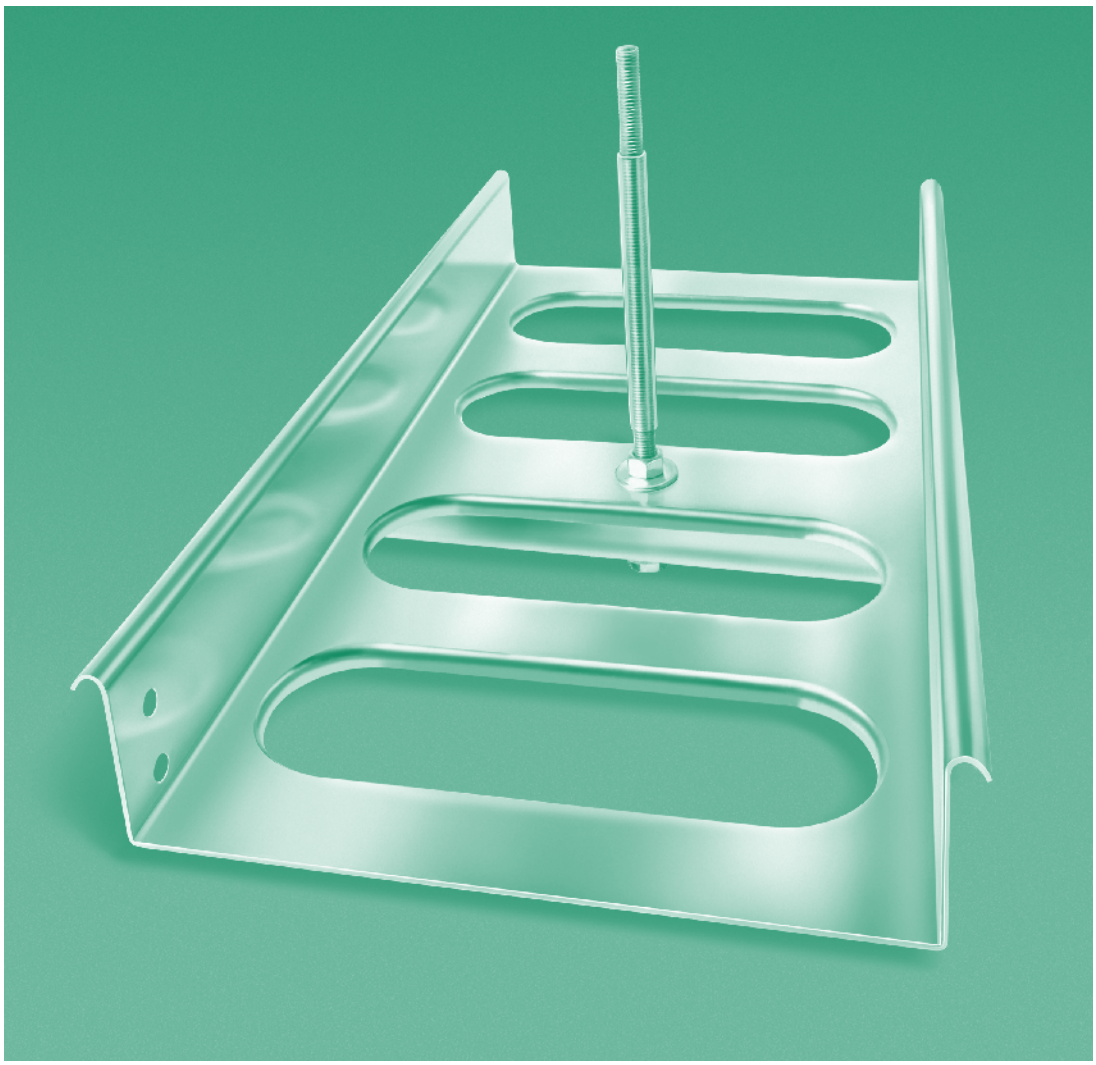
Series 6 Trough Cable Tray

Since it was introduced in the 50's, Chalfant's Series 6 Cable Tray has become the preferred choice for many hospitals, schools, universities, laboratories, airports, retail stores and offices as well as industrial and plant applications. Series 6 Cable Tray is extremely versatile and adaptable to your special needs and is very easy to specify and install. Popular models are available from stock in Cleveland and several other locations throughout the U.S.A.

- Takes up to 25 percent less space than ladder or corrugated bottom designs.
- Has an installed cost of 40 to 60 percent less than conduit.
- One-piece design provides rigidity.
- Easy to design, modify or extend.
- Available in galvanized or plain steel, aluminum or stainless steel.
- Can be painted or coated with fusion bonded epoxy.
- Can be custom cut to length
- Barriers can be installed to reduce field labor costs.

Other custom modifications available:

- Special widths.
- Special load depths from 2" to 8".
- Manufactured with 90° flanges inboard or outboard.
- Can be punched with special holes and knock-outs.



Straight Sections

Series 6 tray is also available in a solid bottom design. Custom size and positioned knockout holes can be provided.

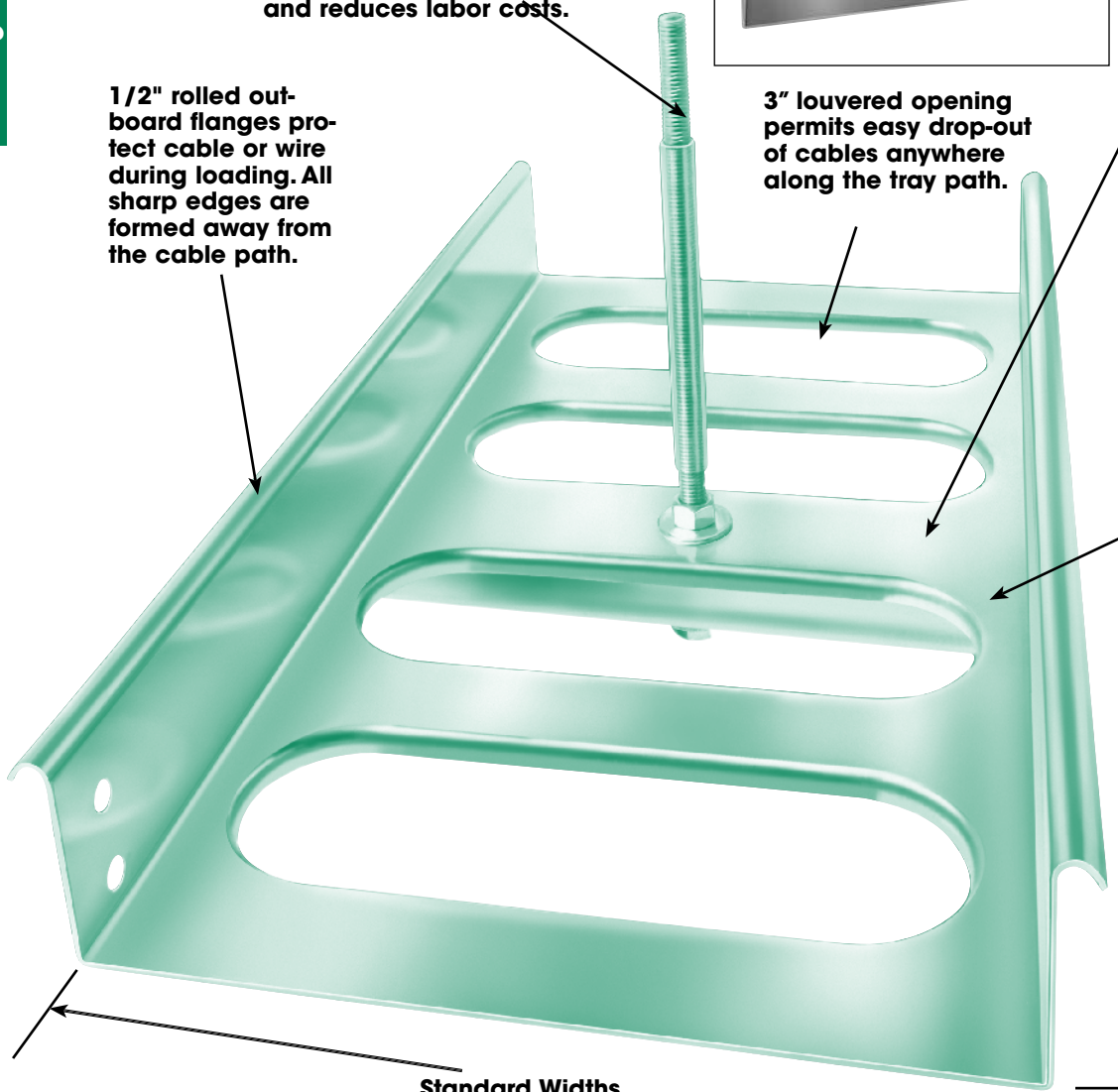
Single center support option allows cable to be easily loaded from either side. Saves on installation materials and reduces labor costs.

3" cable bearing surface on 6" centers- ideal for small diameter instrumentation and fiber optic cables.

1/2" rolled outboard flanges protect cable or wire during loading. All sharp edges are formed away from the cable path.

3" louvered opening permits easy drop-out of cables anywhere along the tray path.

Edges are die formed to eliminate the need for cutting holes and installing grommets required with corrugated systems.



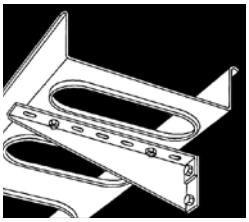
Standard full 3" load depth. Also available in 4" or 6" depths.

Standard Widths
6", 9", 12", 18", 24"

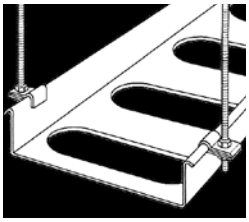
- UL Classified as an equipment grounding conductor.
- Build to NEMA VE-1-2015 standards.
- Meets NEC Article 392-5.
- Made in the U.S.A.

Mounting/Application Flexibility

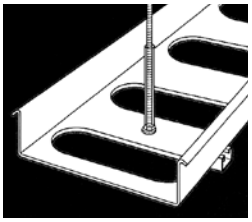
Series 6 can be supported directly on roof trusses or wall brackets up to a 12' span or can be mounted to the floor or elevated off the floor using Chalfant's patented integral support splice plates. It can also be suspended using hanger rods to single or trapeze supports.



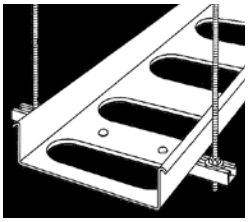
Wall Brackets--
Use either a strut style or (shelf) wall bracket. Mounts directly to wall or strut on wall. Tray can also be directly bolted to bracket (as shown) for indoor applications. Allowance must be made for expansion if temperature extremes exist.



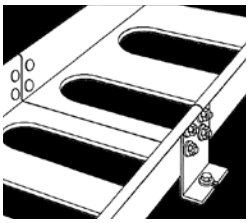
Hanger Rod Clamps—
Use two (2), threaded rods and hanger rod clamps that directly attach to tray side rails. Unique 2-piece clamp design gets tighter when loaded and has a clean look from the bottom. Saves space in cramped, above drop ceiling installations.



Single Center Support--
Use 1/2" rod. Has the lowest installed costs. Field drill 1/2" hole centered on rung. Good for up to 12' support spans. 6" plastic tubing installs over rod inside tray to protect cabling.



Trapeze, with strut--
Use two (2), threaded rods with tray directly supported by strut. Fasten tray to strut by means of wall bracket clamp or bolt directly to strut by field drilling hole in bottom of tray.



Pedestal Splice Plate-
Mount tray to floor or vertical runs up walls or off floors up to a 10" elevation using Chalfant's patented integral splice plate. Series 6 can also be used with Chalfant's under floor COM-TRAY system or in place of it.

How to Order

Once you have selected the Series 6 Model to meet your requirements, use the number system shown to order straight sections, fittings and accessories which are detailed on the following pages.

Example: The following part number is for a 12" wide louvered tray in galvanized steel with a 3" loading depth.

6S12010

6 S 12 010-S

Tray Depth	*Tray Material*	*Tray Width*	*Tray Length or Fitting Code*	*Solid Bottom*
6 = 3" LD 64= 4" LD 66= 6" LD 6*= Special DepthS 2" to 8"	S = Gal ASTM 653A, G90 A = Aluminum 5052H34 T = Stainless 304 Z = Stainless 316 L = Galvenneal*, ASTM 653A, A-60	6", 9", 12", 18" or 24"	118=3m 120=10'	

** Galvenneal steel is a Walmart and Lowe's Spec.— Paintable without etching*

Part Numbers for Standard
3" (76) X 12' (3,658) Straight Sections

Load Depth	Tray Width	Part Number		
		Ventilated	Solid	Cover
3" Standard	6" (152)	6 * 06010	6 * 06010-S	67 * 06010
	9" (229)	6 * 09010	6 * 09010-S	67 * 09010
	12" (305)	6 * 12010	6 * 12010-S	67 * 12010
	18" (457)	6 * 18010	6 * 18010-S	67 * 18010
	24" (610)	6 * 24010	6 * 24010-S	67 * 21010

** Indicates type of material, See "Order Code" above.*

Notes:
- ***Dimensions given in inches. For metric conversion multiply inches X 25.4 = (mm).***
- *Solid bottom designs are 6 to 13 percent less cost than louvered models.*
- *Each straight section and fitting comes with a pair of splice plates and eight (8), 9TBN302 nut and bolt assemblies.*

Maximum Loading & Deflection

The charts below were developed from actual NEMA VE-1-1991 Simple Beam Testing of two, 24" wide tray samples for each style. Maximum load data provided is at a Safety Factor = 1.5. This data has been plotted to give you better understanding of the performance of various designs. The charts also permit you to quickly determine your simple beam deflection for your load/span conditions.

Aluminum is often preferred because of its ease of installation. Aluminum is 3 times as deflective and not as strong as a steel design at a 12' span. However, at 6 or 8 ft. spans, aluminum is capable of carrying even the heaviest loads.

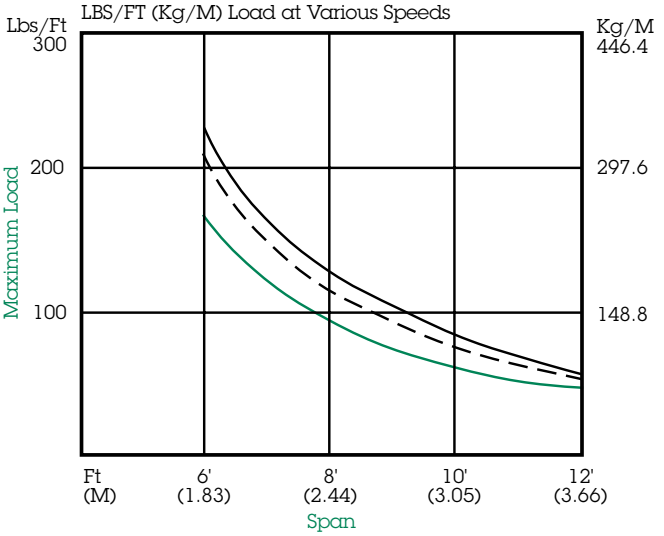
Notes:
- Simple beam tests—actual installed deflection about 1/2 to 1/3 that of simple beam.
- Load capacity for narrow widths are slightly lower because system moment of inertial and system modules are a function of width of tray.

Tray Depth
3" — — — 4" ——— 6"

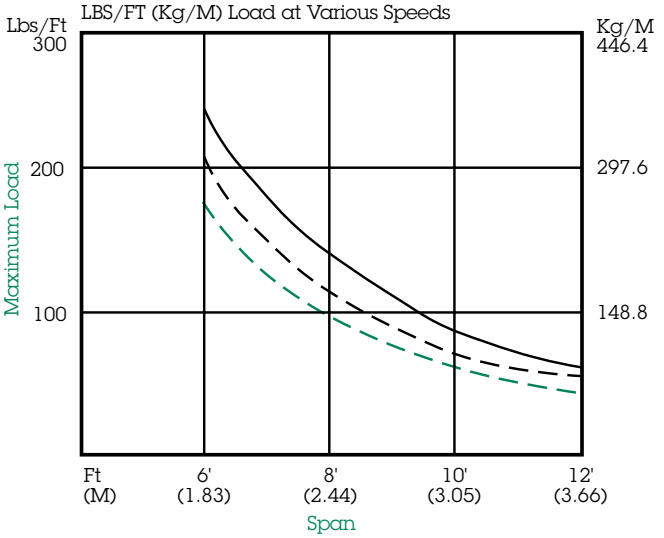
Aluminum

Maximum Loading

Ventilated Bottom*
LBS/FT (Kg/M) Load at Various Speeds



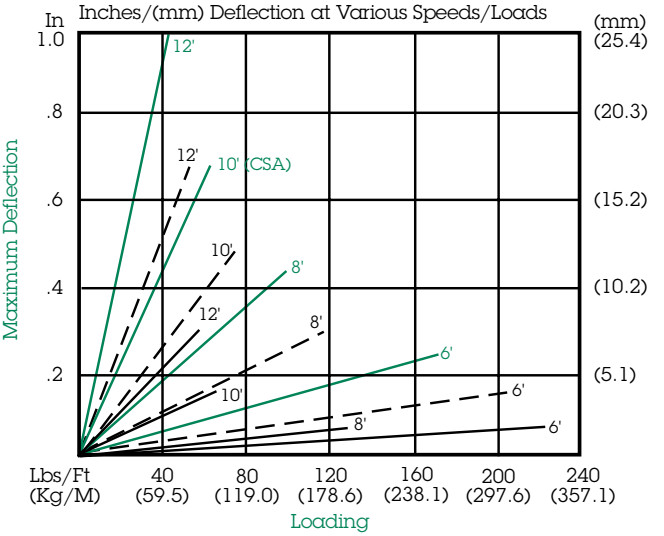
Solid Bottom*
LBS/FT (Kg/M) Load at Various Speeds



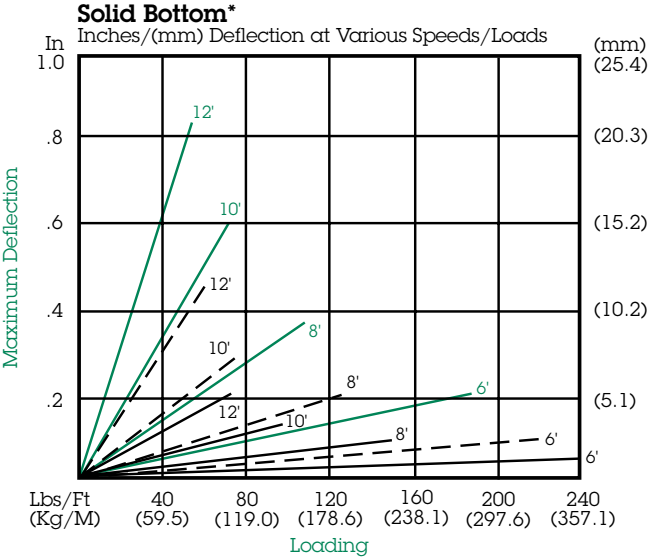
*Aluminum .063 & .080

Maximum Deflection

Ventilated Bottom*
Inches/(mm) Deflection at Various Speeds/Loads



Solid Bottom*
Inches/(mm) Deflection at Various Speeds/Loads



*Aluminum .063 & .080

NEMA Class Ratings

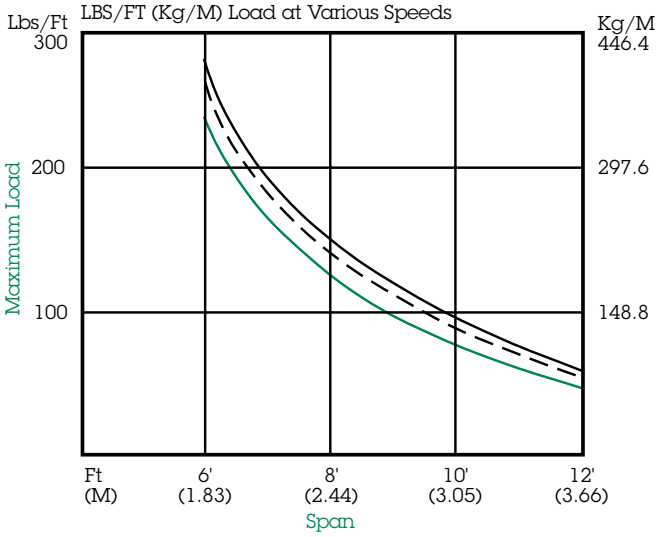
	Aluminum .063 & .080*		Steel	
	Tray	Rated for:	Tray	Rated for:
Ventilated Bottom	6A	10A, 8B, 6C	6S	12A, 10B, 8C
	64A	12A, 10B, 8C	64S	12A, 10B, 8C
	66A	12A, 10B, 8C	66S	12A, 10B, 8C
Solid Bottom	6A	12A, 10A, 8C	6S	12B, 10C
	64A	12A, 10B, 8C	64S	12B, 10C
	66A	12A, 10B, 8C	66S	12C, 10C

* Load ratings for aluminum .063 & .050 are available from the factory.

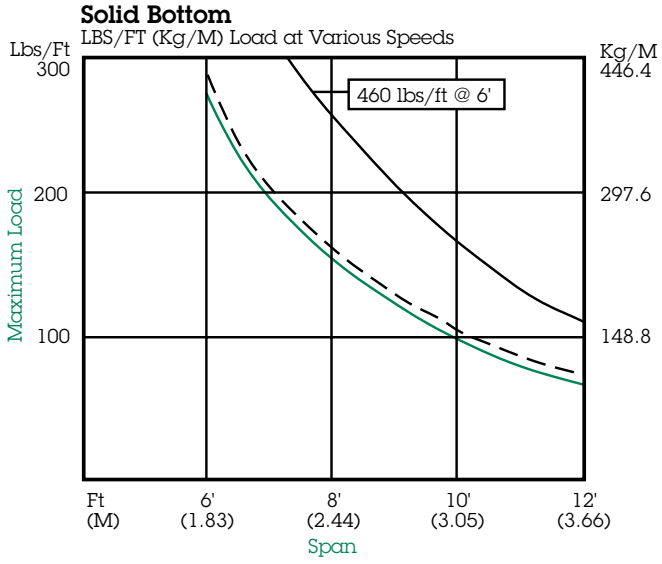
Steel

Maximum Loading

Ventilated Bottom

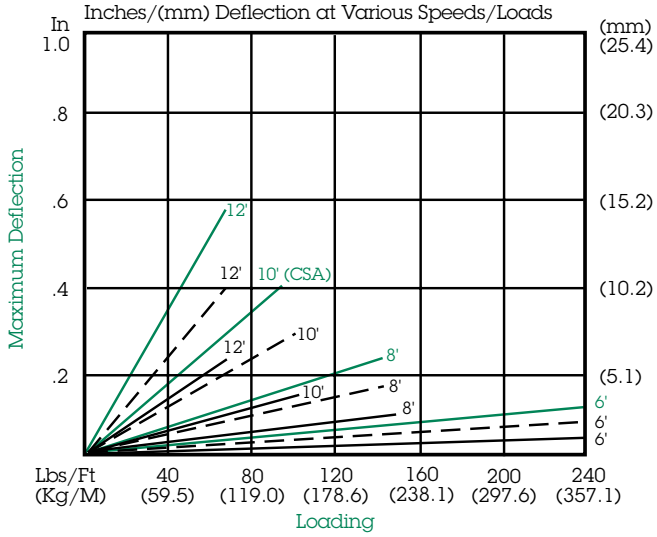


Solid Bottom

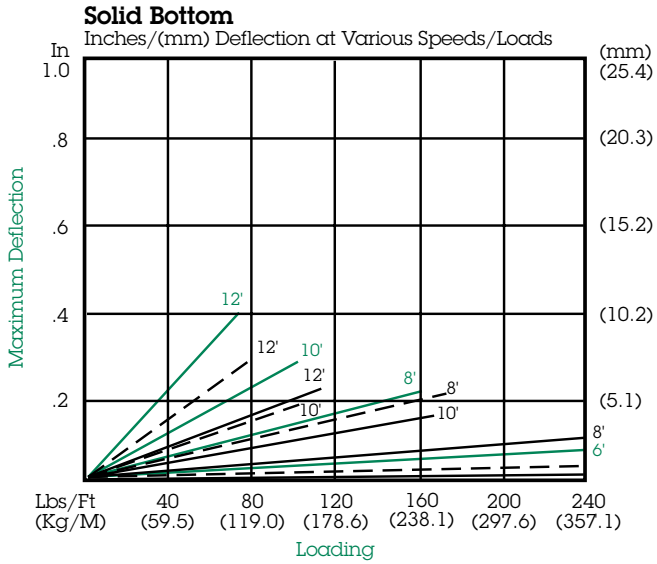


Maximum Deflection

Ventilated Bottom



Solid Bottom

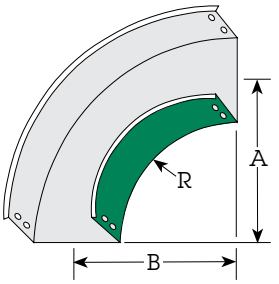


90° & 45° Fittings

Series 6 fittings are solid bottom with a 3" tangent for easy fit-up during installation. Bottoms are MIG welded on the outside to eliminate any weld splatter or roughness. 12" bend radius fittings are recommended for the majority of low voltage and communications cables. 30° and 60° bends are also available.

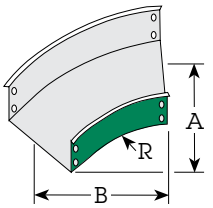
▪ *See pages 1-12 to 1-15 in the Ladder Tray Section for Vertical Fitting Dimensions for 64* and 66* systems.*

90° Horizontal Bend



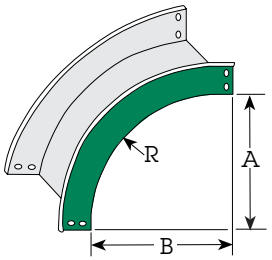
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number	Cover Number
12 (305)	6	18 (457)	18 (457)	6 • 06030	67 • 06030
	9	19.5 (495)	19.5 (495)	6 • 09030	67 • 09030
	12	21 (533)	21 (533)	6 • 12030	67 • 12030
	18	24 (610)	24 (610)	6 • 18030	67 • 18030
	24	27 (686)	27 (686)	6 • 24030	67 • 24030
24 (610)	6	30 (762)	30 (762)	6 • 06032	67 • 06032
	9	31.5 (800)	31.5 (800)	6 • 09032	67 • 09032
	12	33 (838)	33 (838)	6 • 12032	67 • 12032
	18	36 (914)	36 (914)	6 • 18032	67 • 18032
	24	39 (991)	39 (991)	6 • 24032	67 • 24032

45° Horizontal Bend

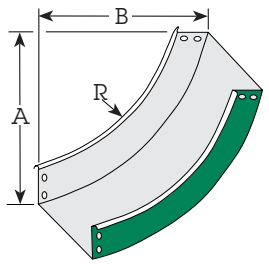


Radius R	Tray Width	Dimensions A	Dimensions B	Part Number	Cover Number
12 (305)	6	15.73 (400)	9.51 (242)	6 • 06020	67 • 06020
	9	16.79 (400)	11.45 (291)	6 • 09020	67 • 09020
	12	17.91 (455)	13.39 (340)	6 • 12020	67 • 12020
	18	19.97 (507)	17.27 (439)	6 • 18020	67 • 18020
	24	22.09 (561)	21.15 (537)	6 • 24020	67 • 24020
24 (610)	6	24.21 (615)	13.03 (331)	6 • 06022	67 • 06022
	9	25.27 (642)	14.97 (380)	6 • 09022	67 • 09022
	12	26.33 (669)	16.91 (430)	6 • 12022	67 • 12022
	18	28.45 (723)	20.79 (528)	6 • 18022	67 • 18022
	24	30.58 (777)	24.66 (626)	6 • 24022	67 • 24022

90° Outside

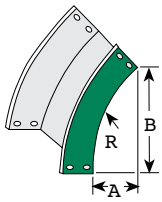


90° Inside

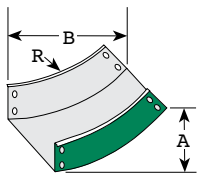


Radius R	Tray Width	Outside Vertical Bend: Part Number A	Outside Vertical Bend: Part Number B	Outside Vertical Bend: Part Number Bend	Outside Vertical Bend: Part Number Cover	Inside Vertical Bend: Dimensions— H @ 3" A	Inside Vertical Bend: Dimensions— H @ 3" B	Inside Vertical Bend: Part Number Bend	Inside Vertical Bend: Part Number Cover
12 (305)	6	15 (381)	15 (381)	6 • 06050	67 • 06050	18 (457)	18 (457)	6 • 06070	67 • 06070
	9			6 • 09050	67 • 09050			6 • 09070	67 • 09070
	12			6 • 12050	67 • 12050			6 • 12070	67 • 12070
	18			6 • 18050	67 • 18050			6 • 18070	67 • 18070
	24			6 • 24050	67 • 24050			6 • 24070	67 • 24070
24 (610)	6	27 (686)	27 (686)	6 • 06052	67 • 06052	30 (762)	30 (762)	6 • 06072	67 • 06072
	9			6 • 09052	67 • 09052			6 • 09072	67 • 09072
	12			6 • 12052	67 • 12052			6 • 12072	67 • 12072
	18			6 • 18052	67 • 18052			6 • 18072	67 • 18072
	24			6 • 24052	67 • 24052			6 • 24072	67 • 24072

45° Outside

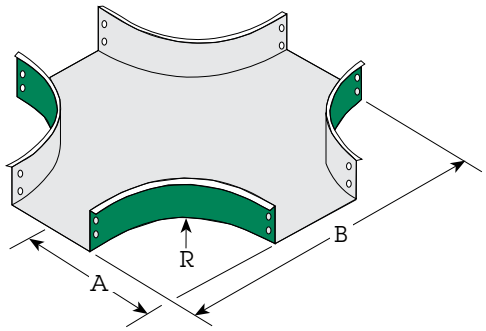


45° Inside

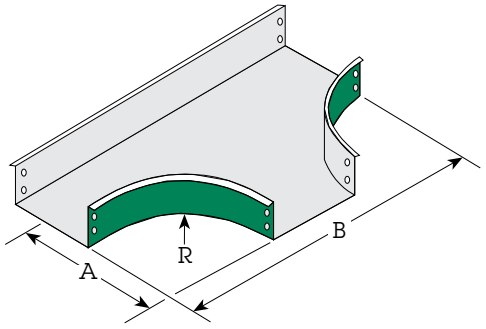


Radius R	Tray Width	Outside Vertical Bend Dimensions A	Outside Vertical Bend Dimensions B	Outside Vertical Bend Part Number Bend	Outside Vertical Bend Part Number Cover	Inside Vertical Bend Dimensions— H @ 3" A	Inside Vertical Bend Dimensions— H @ 3" B	Inside Vertical Bend Part Number Bend	Inside Vertical Bend Part Number
Cover									
12	6			6 • 06040	67 • 06040			6 • 06060	67 • 06060
(305)	9			6 • 09040	67 • 09040			6 • 09060	67 • 09060
	12	5.63 (143)	13.61 (356)	6 • 12040	67 • 12040	6.51 (165)	15.73 (400)	6 • 12060	67 • 12060
	18			6 • 18040	67 • 18040			6 • 18060	67 • 18060
	24			6 • 24040	67 • 24040			6 • 24060	67 • 24060
24	6			6 • 06042	67 • 06042			6 • 06062	67 • 06062
(610)	9			6 • 09042	67 • 09042			6 • 09062	67 • 09062
	12	9.15 (232)	22.09 (561)	6 • 12042	67 • 12042	10.03 (255)	24.21 (619)	6 • 12062	67 • 12062
	18			6 • 18042	67 • 18042			6 • 18062	67 • 18062
	24			6 • 24042	67 • 24042			6 • 24062	67 • 24062

Cross



Tee



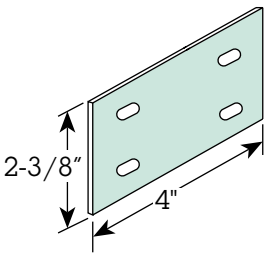
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number	Cover Number
12	6	18 (457)	36 (914)	6 • 06080	67 • 06080
(305)	9	19.5 (495)	39 (919)	6 • 09080	67 • 09080
	12	21 (533)	42 (1067)	6 • 12080	67 • 12080
	18	24 (610)	48 (1372)	6 • 18080	67 • 18080
	24	27 (686)	54 (1549)	6 • 24080	67 • 24080
24	6	30 (762)	60 (1524)	6 • 06082	67 • 06082
(610)	9	31.5 (800)	63 (1600)	6 • 09082	67 • 09082
	12	33 (838)	66 (1676)	6 • 12082	67 • 12082
	18	36 (914)	72 (1829)	6 • 18082	67 • 18082
	24	39 (991)	78 (1981)	6 • 24082	67 • 24082

Radius R	Tray Width	Dimensions A	Dimensions B	Part Number	Cover Number
12	6	18 (457)	36 (914)	6 • 06085	67 • 06085
(305)	9	19.5 (495)	39 (991)	6 • 09085	67 • 09085
	12	21 (533)	42 (1067)	6 • 12085	67 • 12085
	18	24 (610)	48 (1372)	6 • 18085	67 • 18085
	24	27 (686)	54 (1549)	6 • 24085	67 • 24085
24	6	30 (762)	60 (1524)	6 • 06087	67 • 06087
(610)	9	31.5 (800)	63 (1600)	6 • 09087	67 • 09087
	12	33 (838)	66 (1676)	6 • 12087	67 • 12087
	18	36 (914)	72 (1829)	6 • 18087	67 • 18087
	24	39 (991)	78 (1981)	6 • 24087	67 • 24087

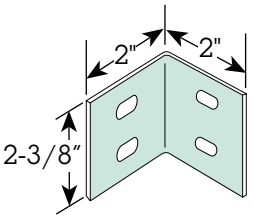
Splice Plates, Support Equipment and Accessories

Note: All splice plates, reducers, cover bars, blind ends, etc. are shipped with necessary hardware.

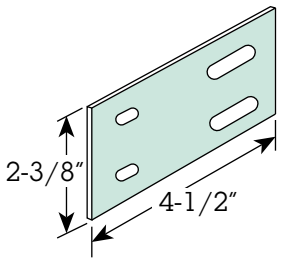
Standard Splice Plate—
Splice plates (one pair with hardware) are shipped with each straight section. Fittings are provided with the appropriate number of splice plates required. Only 4 bolts per plate and slotted hole design, make installation easy.
6 * SP200



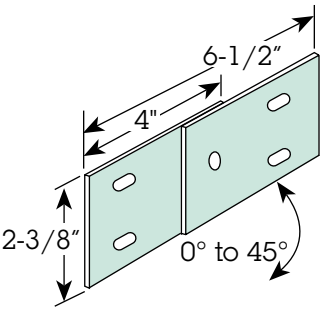
Tray to Box Splice Plate—
A good solution for attaching tray to distribution boxes, control centers or making a non--radius 90° bend or tee.
6 * SP213



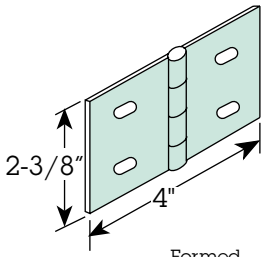
Expansion Splice Plate—
Needed for outdoor long runs only. Call factory or your representative if in doubt or you need advice on location, etc.
6 * SP201



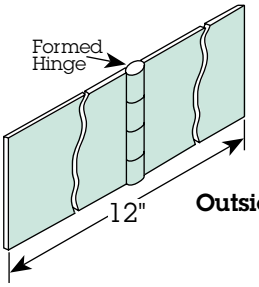
Vertical Adjustable Splice Plates—
For field installing vertical transitions. Install on each end after rise angle is set. Then drill through center pivot hole into back plate then bolt in place. Efficient for angles to 45 degrees.
6 * SP212



Horizontal Adjustable Splice Plates—
An inexpensive method to field install bends up to 45 degrees. Install hinged side, set desired angle then field drill holes in long hinge plate.
6 * SP210

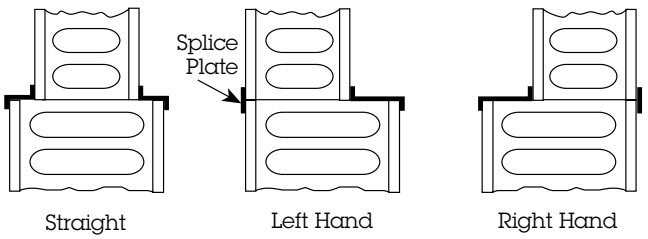


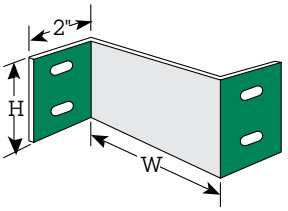
Inside Radius



Outside Radius

Reducers





H = 6 * = 3" LD
64 * = 4" LD
66 * = 6" LD

Note: Complete set of hardware furnished with each reducer.

Reducers are installed on outside of tray. For right or left hand reducers, the splice plate element installs on the outside. This is a very inexpensive method of joining various widths.

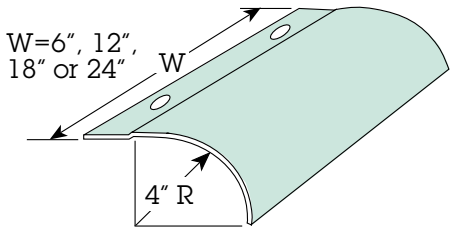
Reduction "W"	Concentric (Straight)	Right or Left Hand
3	6 * 03237	6 * 03236
6	6 * 06237	6 * 06236
9	6 * 09237	6 * 09236
12	6 * 12237	6 * 12236
18	6 * 18237	6 * 18236

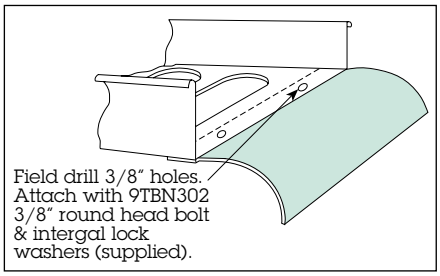
**Indicates type of material–See Order Code on Page 2-6.*

End of Run Drop Out

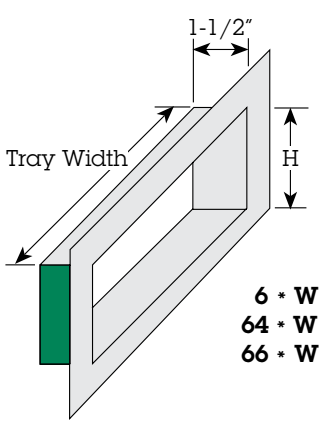
6 * W198

Used at end of runs when cable is dropping to a lower tray run...to prevent mechanical wear or damage to cables because of the tray edge. Use a bonding jumper to attach to vertically off-set trays to maintain grounding integrity.





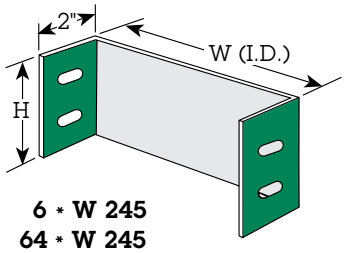
Wall Frame



6 * W 495
64 * W 495
66 * W 495

Designed to install in a wall cut-out for a finished look.
Note: Mounting hardware not included.

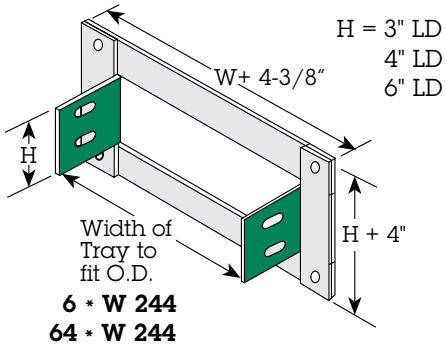
Blind Ends



6 * W 245
64 * W 245
66 * W 245

These are used as an end cap or cover at the end of a run. If a more finished look is desired, install with round head bolt to outside. Note: Splice plates can also be installed on the inside of tray for a cleaner look.

Tray to Panel Frame

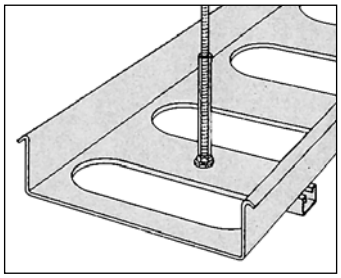


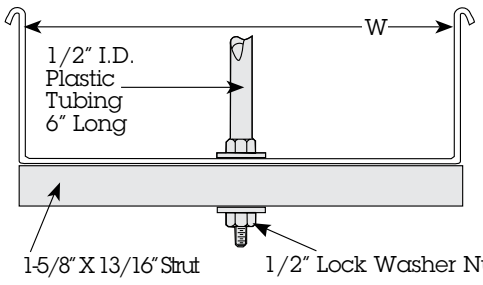
6 * W 244
64 * W 244
66 * W 244

Designed to terminate tray at a control panel to reinforce the box or panel and cover the cut made in the panel.
Note: Mounting hardware not included.

Single Center Support

6SW263





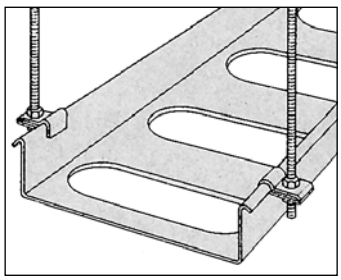
Includes strut, Nuts & Bolts and Plastic Rod Sleeve

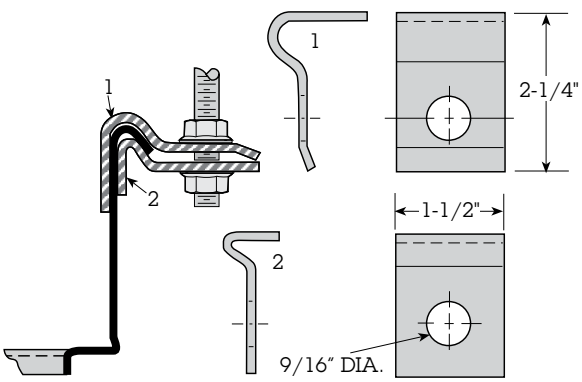
Rod ordered separately.
See page 3-12.

1/2"-13 Rod
(1130 lbs. allowable load)
Up to 10' span recommended

Hanger Rod Clamps

6SOB249

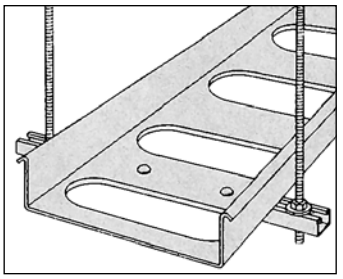


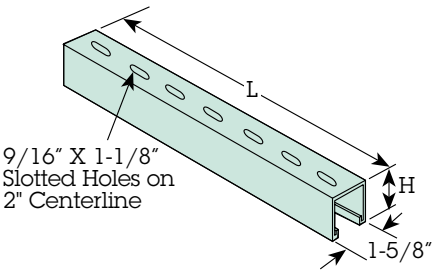


Rod ordered separately.
See page 3-12.

3/8"-16 Rod
(610 lbs. allowable load)
Up to 12' span recommended

Trapeze with Strut

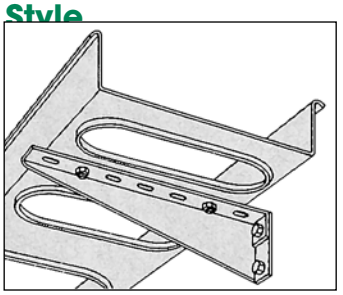


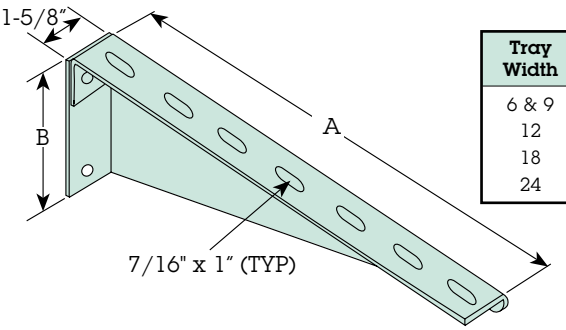


Tray Width	L	H	Usable Load (lbs.)	Ga	Part Number
6	12.00	0.8125	985	14	9S12323
9	15.00	0.8125	830	14	9S15323
12	18.00	0.8125	680	14	9S18323
18	24.00	0.8125	495	14	9S24323
24	30.00	1.625	1050	14	9S30323
30	36.00	1.625	880	14	9S36323

Note: Order required hanger rods and hardware separately.

Wall Bracket Shelf Style

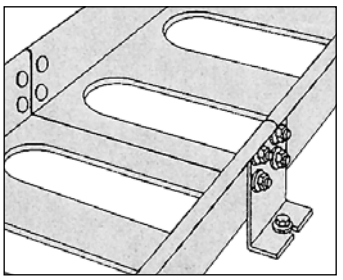


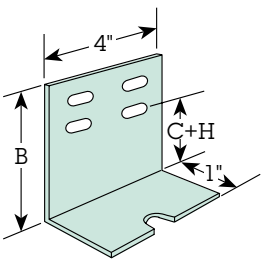


Tray Width	A	B	Uniform Load (lbs.)	Part Number
6 & 9	10.00	3.00	300	9S10322
12	16.00	4.50	300	9S16322
18	22.00	6.00	300	9S22322
24	28.00	7.50	300	9S28322

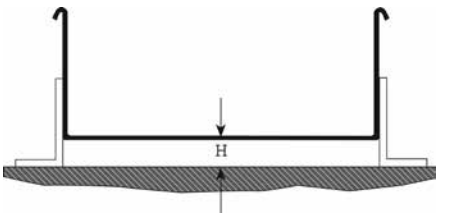
Important:
Allowance must be made for expansion if temperature extremes exist.

Pedestal Splice Plate





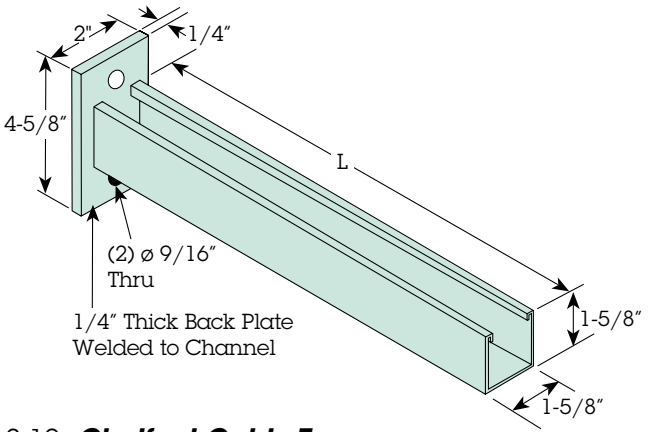
Patented



H = 0" thru 10 "
Specify Height
of Tray above Floor.

Load Depth	B	C	Part Number
3	2.6875	0.875	6 • SP200-H
4	3.1875	1.375	64 • SP200-H
6	4.1875	2.375	66 • SP200-H

Medium Duty Strut Channel Bracket



Tray Width	L	Uniform Load (lbs.)	Ga	Part* Number
6 & 9	12"	1500	12	9S12580
12	18"	750	12	9S18580
18	24"	500	12	9S24580
24	30"	250	12	9S30580

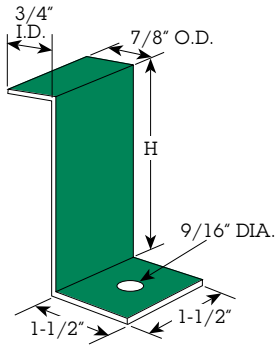
F.O.S. = 2.5
Securely mounted to wall with proper hardware.

** For hot dipped ASTM 123 galvanized steel after fabrication: specify "G" for material designation.*

Wall Bracket Clamp

Used for holding tray to strut or wall brackets. Can be used in pairs (both sides of tray) or on one side alternating sides from support to support. Use with Hex bolt to twist nut in strut, or with bolt to nut with wall brackets.

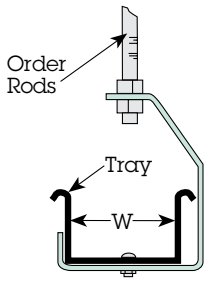
6 SOB 248 = 3" Load Depth
64SOB 248 = 4" Load Depth
66SOB 248 = 6" Load Depth



Single Support Bracket

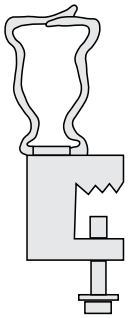
This Z bracket gives a very good single support to 6, 9 and 12" width tray (most economical for 6" width). Use with 1/2" rod with supports on 6' centers. Tray bolts directly to bracket. (Field drill 3/8" hole in tray.)

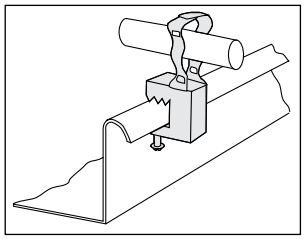
6SW272



Conduit Clamp Bracket

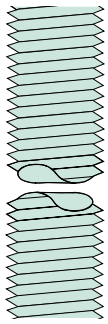
9SCB424*





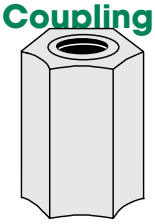
1/2" to 3/4" Conduit and Beam Clamp (Caddy Design)

Hanger Rods



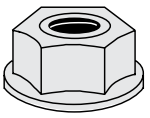
L	Part Number 3/8"-16	1/2"-13
12"	9S12310	9S12312
24"	9S24310	9S24312
36"	9S36310	9S36312
48"	9S48310	9S48312
72"	9S72310	9S72312
120"	9S120310	9S120312

Hanger Rod Coupling



9S38318 3/8" - 16
9S12318 1/2" - 13

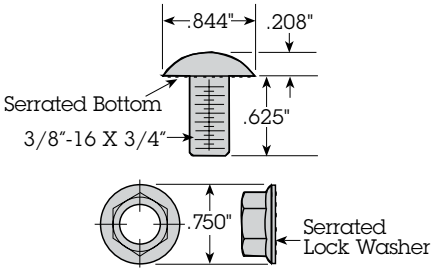
Flanged Washer/ Hex Nut



9S38309 3/8" - 16
9S12309 1/2" - 13

Splice Plate Nut & Bolt Assembly

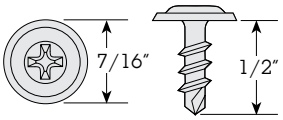
9TBN302



This is Chalfant's new exclusive standard splice plate nut and bolt assembly. Made from 304SS, it has a round truss head, serrated shoulder neck and integral flanged serrated lock washer hex nut.

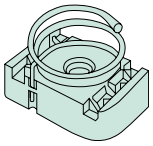
Self-Tapping Screw

9STK774



Used to attach barriers and covers. Made from steel with special Dorri Tech™ coating. This TEK screw can be easily attached with a magnetic phillips head holder. Screws can be backed out but not reused if covers are removed.

Twist Nut



9S38575 - 3/8" - 16
9S12575 - 1/2" - 13

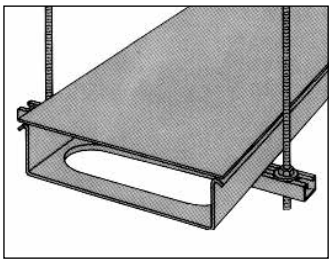
Misc. Accessories

9S38574 3/8" - 16 X 1" Hex Head Machine Bolt
9S12574 1/2" - 13 X 1" Hex Head Machine Bolt
9S12578 1 5/8" Square Washer for Strut
9S38307 3/8" washer
9S12307 1/2" washer
9S38318 3/8" - 16 Beam Clamp - Malleable Iron Plated
9S12318 1/2" - 13 Beam Clamp - Malleable Iron Plated
9SCB422* Optional Conduit Clamp Bracket

** 9SCB424 is the recommended option for 9SCB422.*

Covers, Barriers and Accessories

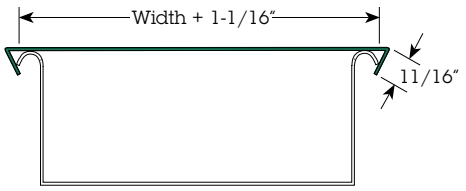
Covers



Standard covers for Series 6 tray are flat (no flanges). If you want ventilated covers, add the suffix -V for louvered ventilation. Covers follow the number system shown on page 1-20 with a 67S/A prefix. Covers can be held to tray with Caddy Beam Clamp 9SCB424BC or with 9STK774 self-drilling/tapping screws. Cover hold downs must be ordered separately. Covers to 24" widths are made from 20-gauge G-90 coated galvanized steel or 0.040" thick 5052H32 aluminum sheet.

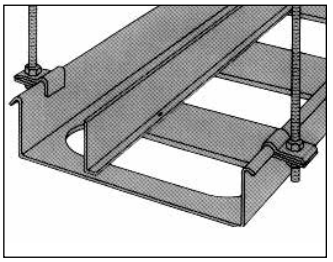
Snap-On Covers

7 * W010-S0



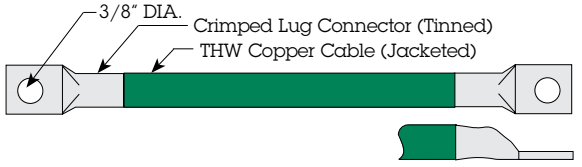
A new design Snap-On Cover is available in aluminum or steel that is tight fit to 12". Loose cover fit for 18" and 24" trays. No hardware required.

Barriers



Barriers are popular for isolating or separating various cables. For example, telephone from computer cables or fire alarm cables from intercom cabling. Straight barriers are furnished in 12' lengths (8*BS010-H) made of 20-gauge steel with top edge folded back or extruded aluminum with radiused edges. Barrier height equals load depth. 9STK774 steel self drilling tapping screws are included to fasten barrier to tray bottom. For horizontal bends and tees, an adjustable barrier in 4' lengths (8*BS340-H) is furnished. Vertical fitting barriers are formed to match fittings and ordered with same fitting part code. Barriers can be installed at the factory at nominal cost to save field installation time and labor.

Bonding Jumper



Cable Size	Rated AMPS	Part Number
#6	200	9CBJ200
#1	600	9CBJ600

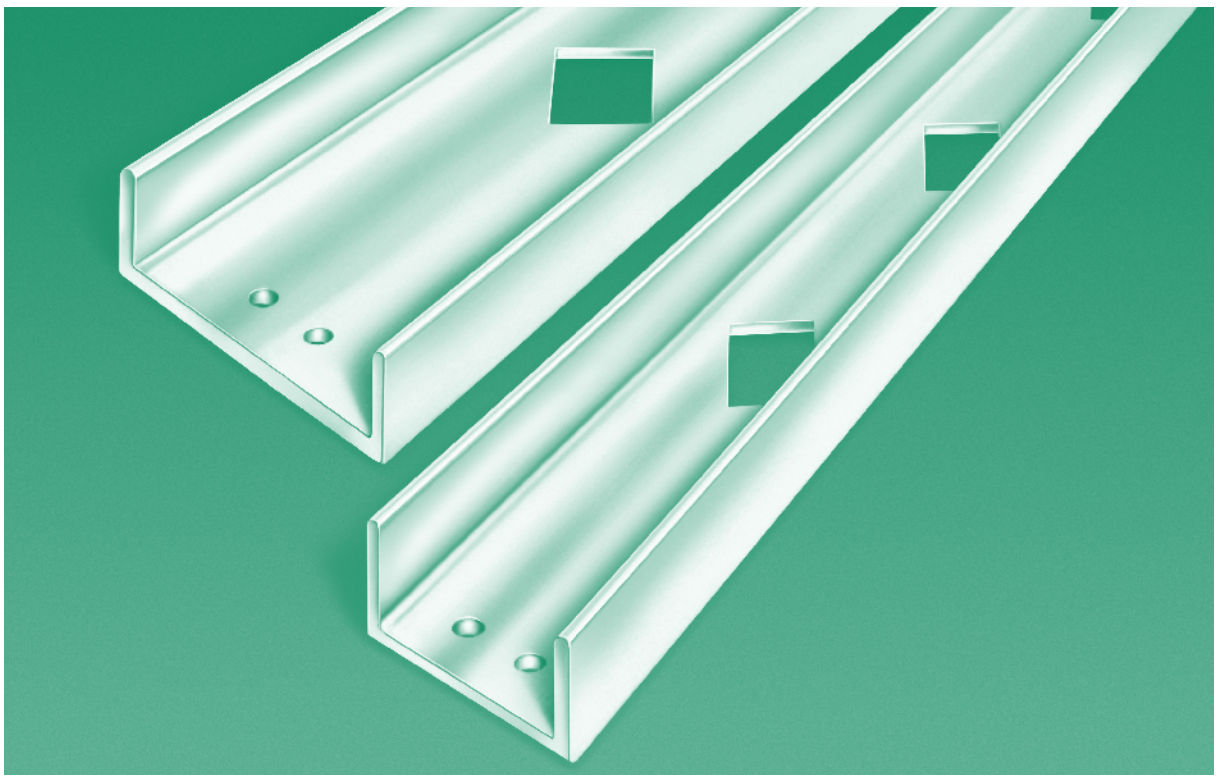
If you are using the tray as an equipment ground as classified by UL, you have to use a bonding jumper (one only with Series 6-single piece construction) for bridging adjustable splice plates and runs that aren't connected or across expansion joints.

- For **steel trays** use a 200 Amp jumper. This provides a 100 Amp equipment ground thru 18" width tray and a 200 Amp ground on 24" wide tray.
- For **aluminum trays** use a 600 Amp jumper to18" widths and two 600 Amp jumpers to provide 1000 Amp ground for 24" wide tray. For 64A24010 and 66A24010 tray you get 1200 Amp ground.

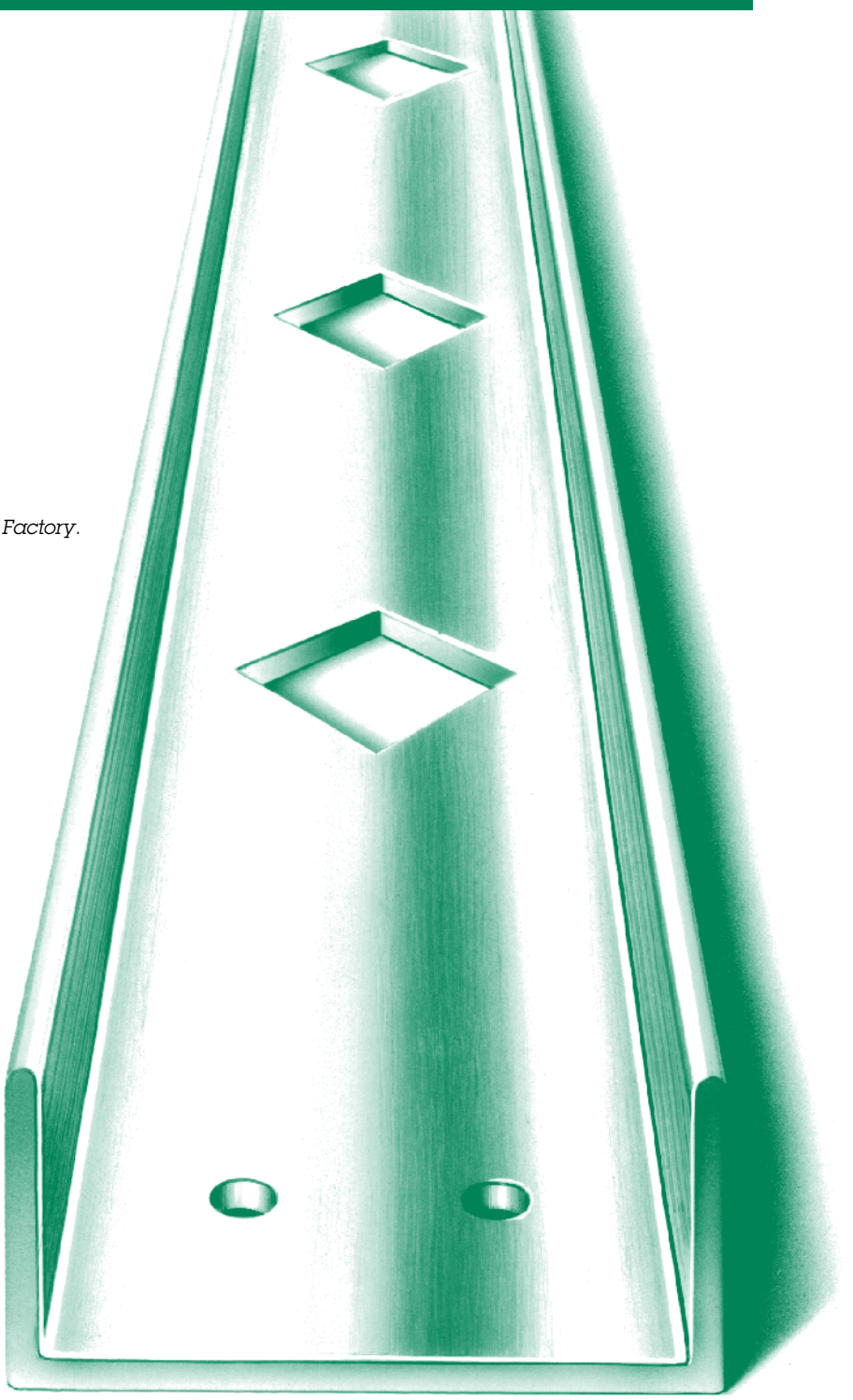
Series 5 Channel Cable Tray

Chalfant Series 5 Channel Cable Tray system offers a simple, inexpensive method of routing and supporting all types of light to heavy weight cables. It can also be used to support pneumatic or hydraulic hose or tubing. Series 5 channel cable tray has over 40 year proven track record with successful installations in all types of commercial, industrial and government applications.

- Installation cost is 40% to 60% less than pulling wire through conduit.
- Excellent ventilation permits full use of cable rating.
- Simple design saves layout and field modification time.
- Cables can be easily added or modified without redesigning the tray system.
- Choose from extruded aluminum, stainless steel or galvanized steel.
- Complete line of fittings and accessories provides the flexibility to meet any installation requirements.
- Built to NEMA 2015 standards. Meets NEC Article 392-5 and Made in the USA.



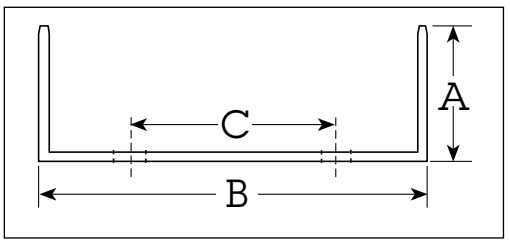
Straight Sections



Specifications/Dimensions

- Tray Widths: **4"** (102) ***(standard)*** and **6"** (152).
- Standard Lengths: **12'** (3658) and **24'** (7315).
- Loading Depths: **1.75"** (44) for both 4" and 6" width tray.
- Material: 6063-T6 extruded aluminum, 0,125" thick or 14-gage pre-galvanized or HDGAF steel. Also available in 304/316 stainless steel– Consult Factory.
- Drop-Outs: 1-5⁄8" square holes on 5-1⁄2" centers.
- Options: Tray is available with solid bottoms or can be provided with covers— Consult factory for details.

**** 4" wide aluminum is stocked for fast delivery.***
3" width is available for high volume orders— Consult Factory.



Tray Width	A	B	C
4"*	1.75 (44)	4.00 (102)	1.250 (25,6)
6"	1.75 (44)	6.00 (152)	1.250 (25,6)

Cable Tray Selection

Load Chart for 4" and 6" Width Tray

	Span	6'		8'		10'		12'	
	Part Number	Load lbs./ft.(Kg/m)	Defl. in.(mm)	Load lbs./ft.(Kg/m)	Defl. in.(mm)	Load lbs./ft.(Kg/m)	Defl. in.(mm)	Load lbs./ft.(Kg/m)	Defl. in.(mm)
4" Tray Width (Standard)	5A04010 (Aluminum)	48 (71,5)	0.60 (15)	27 (40)	1.07 (27)	17 (25)	1.64 (42)	12 (18)	2.40 (61)
	5S04010 (Steel)	40 (60)	0.43 (4)	22 (33)	0.74 (19)	14 (21)	1.15 (29)	10 (15)	1.71 (43)
6" Tray Width	5A06010 (Aluminum)	72 (107)	0.64 (16)	41 (61)	1.16 (29)	26 (39)	1.79 (45)	18 (27)	2.57 (65)
	5S06010 (Steel)	56 (83)	.033 (8)	32 (48)	0.60 (15)	20 (30)	0.92 (23)	14 (21)	1.33 (34)

Note: Simple Beam Data @ Factor of Safety = 1.5. Solid bottom models will handle a 15% greater load.

How to Order:

Each tray section, fitting or accessory is identified with a Chalfant Part Number.
To order, provide the appropriate part number and quality.

Example: 6 sections of 4" wide aluminum channel tray, 12' long,

Specify: (6) - 5 A 04010

Material Code

A = Aluminum ***(Standard)*** 6063T6
S = Mil Gal to ASTM 653A, G-90 Coating
G = Hot Dipped Galvanized Steel after Fabrication, ASTM 123-B2
T = 304 Stainless Steel
Z = 316 Stainless Steel

Note: For solid bottom tray add a suffix " –S" to the end of the part number.

Series 5 Tray--Part Numbers

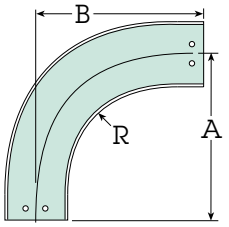
Tray Width	Load Depth	Aluminum Part Number		Galvanized Steel Part Number	
		12'	24'	12'	24'
4"	1.75	*5A04010	5A04010-L	5S04010	5S04010-L
6"	1.75	5A06010	5A06010-L	5S06010	N/A

* *Standard— Normally in stock.*

90° & 60° Fittings

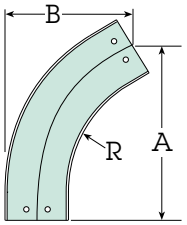
All Series 5 Fittings are solid bottom with a 3" tangent for easy fit-up during installation.

90° Horizontal Bend



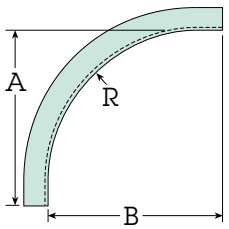
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	17 (432) 18.15 (461)	17 (432) 18.15 (461)	5 • 04030 5 • 06030
24 (610)	4 6	29 (737) 30 (762)	29 (737) 30 (762)	5 • 04032 5 • 06032
36 (914)	4 6	41 (1041) 42 (1067)	41 (1041) 42 (1067)	5 • 04033 5 • 06033
48 (1219)	4 6	54 (1346) 54 (1372)	53 (1346) 54 (1372)	5 • 04034 5 • 06034

60° Horizontal Bend



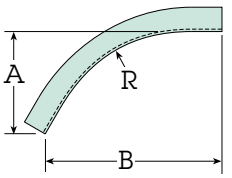
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	16.72 (425) 17.50 (445)	11.5 (292,1) 13.20 (335)	5 • 04025 5 • 06025
24 (610)	4 6	27.02 (686) 27.88 (708)	17.5 (445) 19.1 (485)	5 • 04027 5 • 06027
36 (914)	4 6	37.41 (950) 38.28 (972)	23.5 (599) 25.1 (638)	5 • 04028 5 • 06028
48 (1219)	4 6	47.80 (1214) 48.66 (1236)	29.6 (752) 31.1 (790)	5 • 04029 5 • 06029

90° Outside Bend



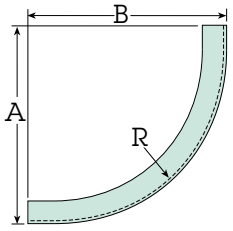
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	15 (381)	15 (381)	5 • 04050 5 • 06050
24 (610)	4 6	27 (686)	27 (686)	5 • 04052 5 • 06052
36 (914)	4 6	39 (991)	39 (991)	5 • 04053 5 • 06053
48 (1219)	4 6	51 (1295)	51 (1295)	5 • 04054 5 • 06054

60° Outside Bend



Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	8.6 (218)	14.89 (378)	5 • 04045 5 • 06045
24 (610)	4 6	14.60 (371)	25.28 (642)	5 • 04047 5 • 06047
36 (914)	4 6	20.60 (523)	35.68 (907)	5 • 04048 5 • 06048
48 (1219)	4 6	26.60 (676)	46.07 (1170)	5 • 04049 5 • 06049

90° Inside Bend

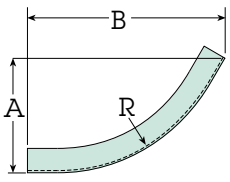


Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	15 (381)	15 (381)	5 • 04070 5 • 06070
24 (610)	4 6	27 (686)	27 (686)	5 • 04072 5 • 06072
36 (914)	4 6	39 (991)	39 (991)	5 • 04073 5 • 06073
48 (1219)	4 6	51 (1295)	51 (1295)	5 • 04074 5 • 06074

Note: Each straight section and fitting comes with a splice plate and four (4) 9TBN302 nut and bolt assemblies.

* Type of Material—See Page 5-3 for Selection.

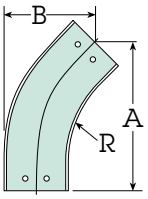
60° Inside Bend



Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12 (305)	4 6	8.6 (218)	14.89 (378)	5 • 04065 5 • 06065
24 (610)	4 6	14.60 (371)	25.28 (642)	5 • 04067 5 • 06067
36 (914)	4 6	20.60 (523)	35.68 (907)	5 • 04068 5 • 06068
48 (1219)	4 6	26.60 (676)	46.07 (1170)	5 • 04069 5 • 06069

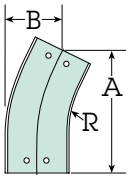
45° & 30°Fittings

45° Horizontal Bend



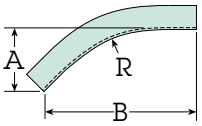
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	15.02 (382) 15.80 (401)	8.22 (209) 9.6 (244)	5 • 04020 5 • 06020
24	4 6	23.50 (597) 24.21 (615)	11.74 (298) 13.03 (331)	5 • 04022 5 • 06022
36	4 6	31.99 (813) 32.70 (831)	15.25 (387) 16.54 (420)	5 • 04023 5 • 06023
48	4 6	40.48 (1028) 41.18 (1046)	18.76 (427) 20.04 (509)	5 • 04024 5 • 06024

30° Horizontal Bend



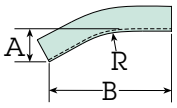
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	12.60 (320) 13.10 (332)	5.38 (137) 6.50 (165)	5 • 04015 5 • 06015
24	4 6	18.60 (472) 19.10 (485)	6.99 (178) 8.12 (206)	5 • 04017 5 • 06017
36	4 6	24.60 (625) 25.10 (638)	8.59 (219) 9.72 (247)	5 • 04018 5 • 06018
48	4 6	30.60 (777) 31.10 (790)	10.20 (259) 11.34 (288)	5 • 04019 5 • 06019

45° Outside Bend



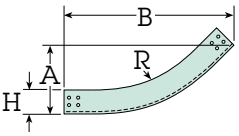
Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	5.63 (143)	13.61 (356)	5 • 04040 5 • 06040
24	4 6	9.15 (232)	22.09 (561)	5 • 04042 5 • 06042
36	4 6	12.66 (322)	30.58 (777)	5 • 04043 5 • 06043
48	4 6	16.18 (411)	39.06 (992)	5 • 04044 5 • 06044

30° Outside Bend



Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	3.11 (79)	11.60 (295)	5 • 04035 5 • 06035
24	4 6	4.72 (120)	17.60 (447)	5 • 04037 5 • 06037
36	4 6	6.32 (161)	23.60 (599)	5 • 04038 5 • 06038
48	4 6	7.93 (201)	29.60 (752)	5 • 04039 5 • 06039

45° Inside Bend

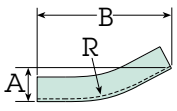


Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	5.63 (143)	13.61 (356)	5 • 04050 5 • 06050
24	4 6	9.15 (232)	22.09 (561)	5 • 04052 5 • 06052
36	4 6	12.66 (322)	30.58 (777)	5 • 04053 5 • 06053
48	4 6	16.18 (411)	39.06 (992)	5 • 04054 5 • 06054

Note: Each straight section and fitting comes with a splice plate and four (4) 9TBN302 nut and bolt assemblies.

* Type of Material—See Page 5-3 for Selection.

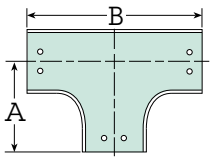
30° Inside Bend



Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4 6	3.11 (79)	11.60 (295)	5 • 04055 5 • 06055
24	4 6	4.72 (120)	17.60 (447)	5 • 04057 5 • 06057
36	4 6	6.32 (161)	23.60 (599)	5 • 04058 5 • 06058
48	4 6	7.93 (201)	29.60 (752)	5 • 04059 5 • 06059

Fittings

Tee



Radius R	Tray Width	Dimensions A	Dimensions B	Part Number
12	4	17 (432)	34 (864)	5 * 04085
	6	18 (457)	36 (914)	5 * 06085
24	4	29 (737)	58 (1473)	5 * 04087
	6	30 (762)	60 (1524)	5 * 06087
36	4	41 (1041)	82 (2083)	5 * 04088
	6	42 (1067)	84 (2134)	5 * 06088
48	4	54 (1346)	106 (2692)	5 * 04089
	6	54 (1372)	108 (2743)	5 * 06089

Note: Each straight section and fitting comes with a splice plate and four (4) 9TBN302 nut and bolt assemblies.

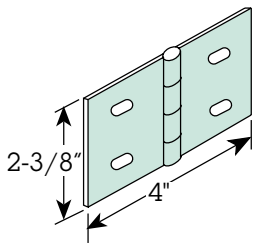
* Type of Material—
See Page 5-3 for Selection.

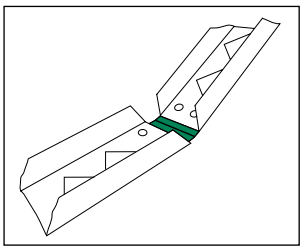
Splice Plates, Support Equipment and Accessories

Note: All splice plates, blind ends, etc. are shipped with necessary hardware.

Vertical Adjustable Splice Plate

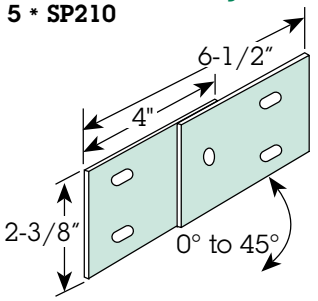
5 * SP212

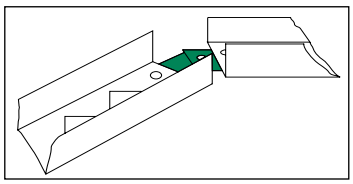




Horizontal Adjustable Splice Plate

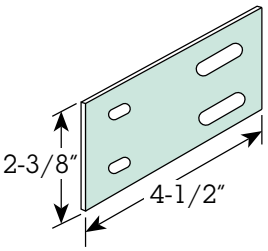
5 * SP210

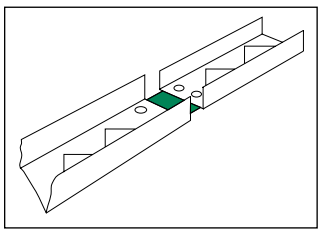




Expansion Splice Plate

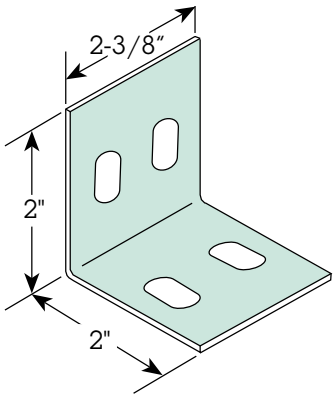
5 * SP201

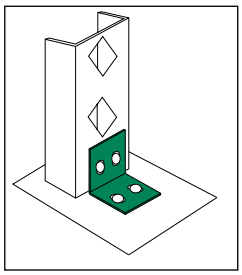




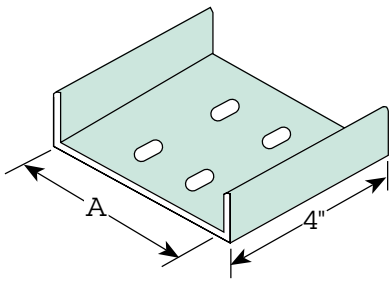
90° Tray to Box Splice Plate

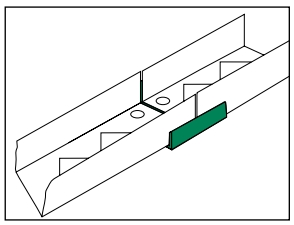
5 * SP213





Channel Splice Plate

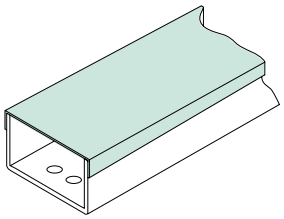




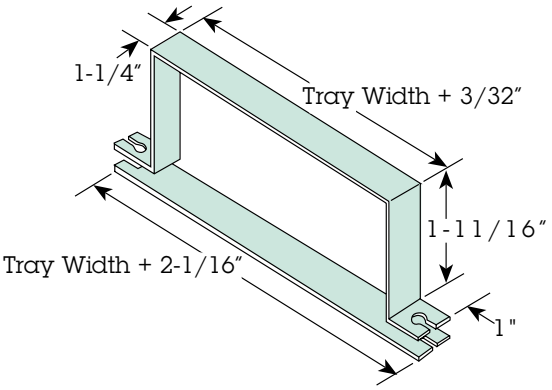
A	Part Number
4.015±.011	5 * 04200
6.390±.011	5 * 06200

Covers & Accessories

Covers and Cover Straps
7 * 04010
7 * 06010

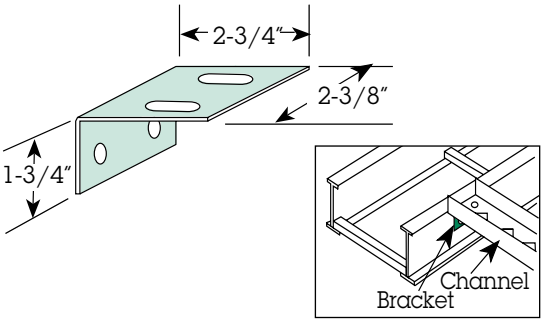


Covers and Cover Straps
7 * 04692
7 * 06692

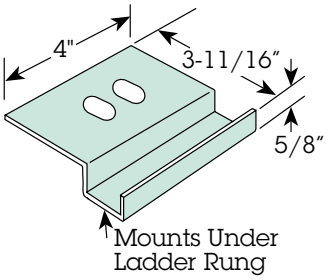


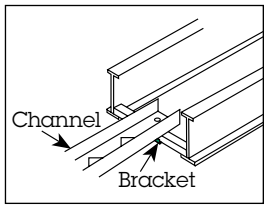
Supplied with (2) #1024 X 3/4 truss head screws and flange nuts.

Channel to Ladder Tray Bracket
5 * CB422

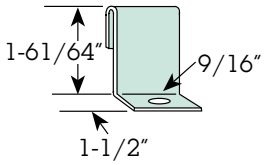


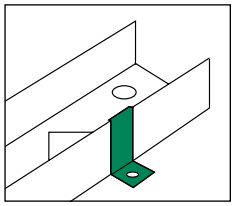
Channel to Ladder Tray Adapter
5 * 04499



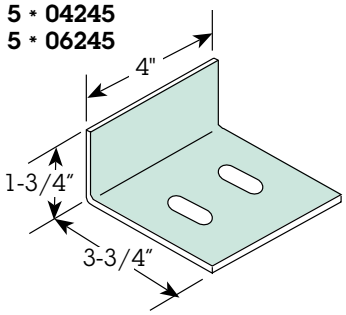


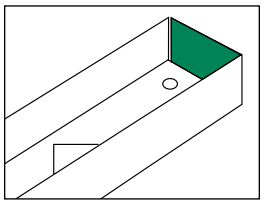
Channel Hold-Down Clamp
5 * OB248



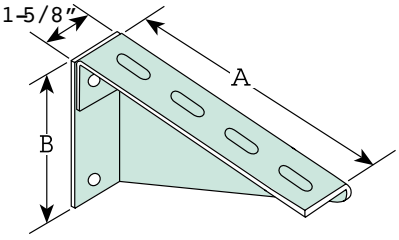


Blind End
5 * 04245
5 * 06245



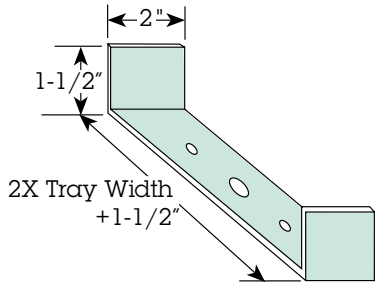


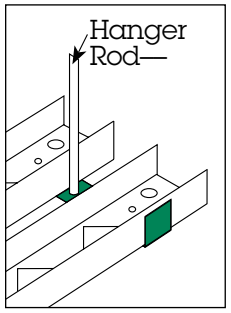
Shelf Style Wall Bracket



Tray Width	A	B	Part Number
4"	6.00	3.00	9S06322
6"	10.00	3.00	9S10322

Double Channel Bracket
5 * 04273
5 * 06273





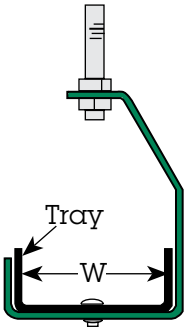
To order Hanger Rod, see page 3-8.

Accessories

Single Support Bracket

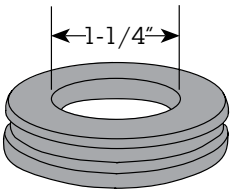
5S W 272

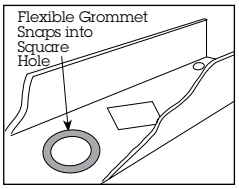
This Z bracket gives a very good single support to 4" and 6" width tray. Use with 1/2" rod with supports on 6' centers. Tray bolts directly to bracket. (Field drill 3/8" hole in tray.)



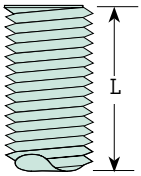
Drop Out Grommet

5RG198





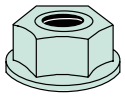
Hanger Rods



L	Part Number	
	3/8"-16	1/2"-13
12"	9S12310	9S12312
24"	9S24310	9S24312
36"	9S36310	9S36312
48"	9S48310	9S48312
72"	9S72310	9S72312
120"	9S120310	9S120312

Flanged Washer/Hex Nut

9S38309 3/8" - 16
9S12309



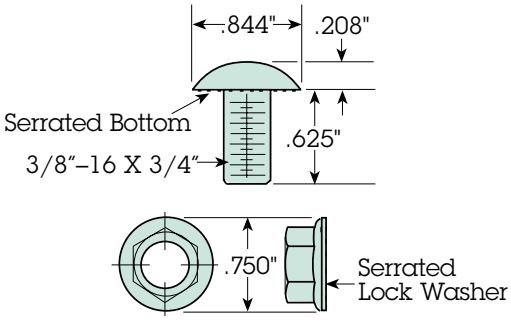
Misc. Accessories

9S38574 3/8" - 16 X 1" Hex Head Machine Bolt
9S38307 3/8" - Washer
9S38318 3/8" - 16 Beam Clamp - Malleable Iron Plated

Splice Plate Nut & Bolt Assembly

9TBN302

This is Chalfant's exclusive standard splice plate nut and bolt assembly. Made from 302SS, it has a round truss head-serrated and integral flanged serrated lock washer hex nut. Bolt is torqued properly at 20 ft. lbs.

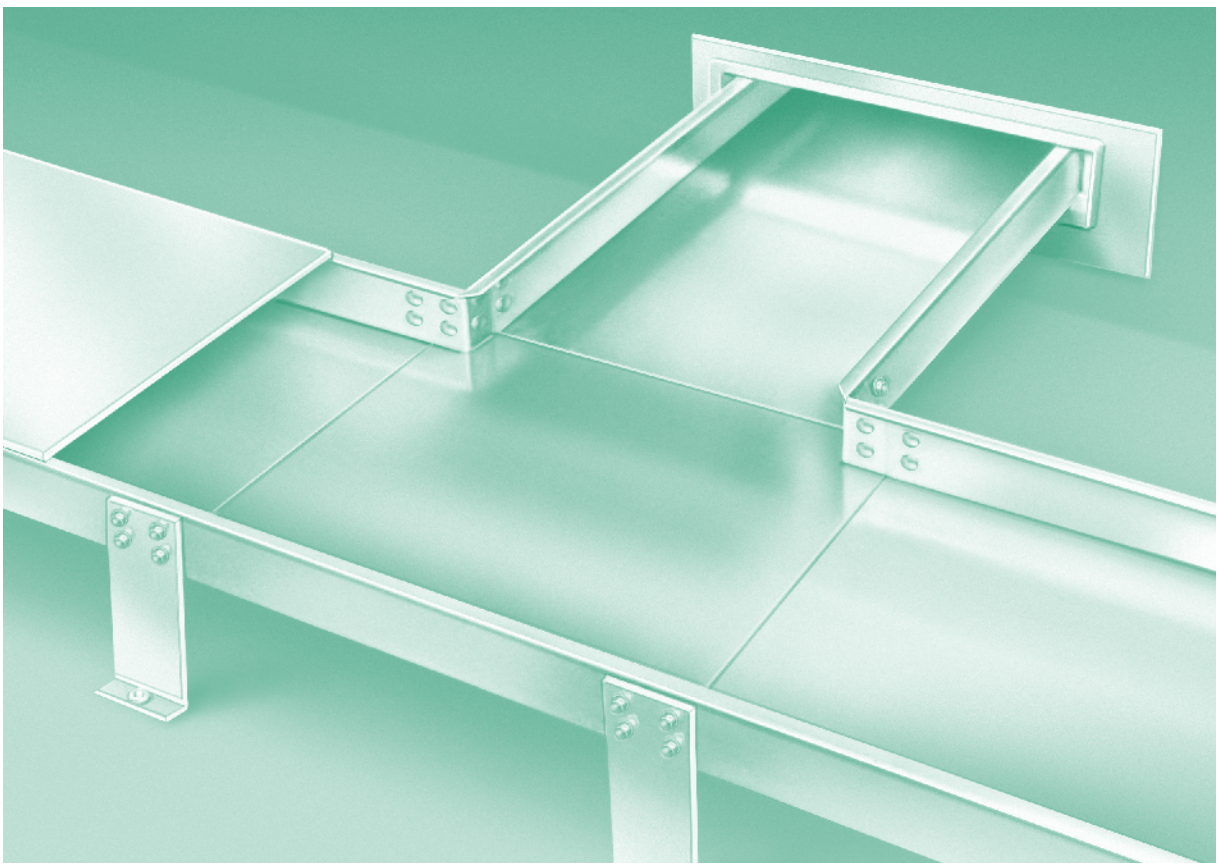


Com-Tray™

Chalfant, a leading supplier of cable trays and systems for utilities, industrial plants, and commercial service, offers ***Com-Tray***, a unique modular, cost-saving system for routing and protecting cables under raised floors in computer and communications installations. Totally compatible with the 2' by 2' grid post system of raised floors.

Standard, off-the-shelf ***Com-Tray*** modules are designed to meet any underfloor cable routing system. Simply select the modules you need for your system configuration and you'll have economical, easily installed, permanent solution to your underfloor cable routing and protection requirements.

- Labor-saving assembly
- Field proven and tested
- Superior construction
- Shipped ready to assemble



Routing and Protecting Cable

Com-Tray Offers the Ultimate solution for Routing Cable and Protecting Communications Cable Under Raised Floors

Chalfant's ***Com-Tray*** system provides a simple cost-saving investment and solution for routing and supporting many types of cables. Chalfant has a proven record of successful installations for many types of applications with these benefits:

Neater, Safer Installations

Com-Tray permits the orderly, efficient routing of data, control and power cables under raised floors—eliminates the hard-to-trace "spaghetti" effect of loose cables, and minimize both cable lengths and attendant circuit losses. Sturdy metal trays with optional covers completely enclose your cables and protect them against damage from falling objects or being stepped on. Tampering by unauthorized persons is also discouraged.

Versatile

The modular design of ***Com-Tray***, which includes straight sections, tees, crosses, elbows reducers and optional covers, lets you select components and design a "cableway" to accommodate any interconnection requirement. You can even install pull wires initially, along with cables, to meet future requirements. RF or other electromagnetic shielding can also be provided.

Fast Labor-Saving Assembly

Installation of ***Com-Tray*** is simple and fast. The modules can be quickly slid or lowered between grid posts and joined with splice plates and hardware supplied. Slotted holes in the splice plates make alignment easy and ample clearance is provided for inserting and tightening bolts.Covers are assembled with self-tapping screws supplied and are easily removed for inspection or maintenance. No field cutting, drilling, or extra labor is required, resulting in a clean, professional installation with minimum time and labor costs.

Field Proven

Chalfant has supplied cable Tray for use under computer floors for over 30 years. We have designed and supplied modular Cable Tray systems to meet the specific under floor requirements for many large computer communications centers. These systems were installed easily, quickly and inexpensively in a fraction of the time of conventional Cable Tray systems.

Contractors experienced no need for field modification, which resulted in systems that had instant customer acceptance and contractor acclaim. Using ***Com-Tray's*** concept, contractors have been successful in reducing labor costs resulting in substantial savings. Chalfant ***Com-Tray*** can provide users and contractors everywhere with the same benefits.

Superior Construction

All formed cable tray components are made from 18 gage mill galvanized steel per ASTM 653A for superior strength, durability and corrosion resistance. **Components can also be made from aluminum.**
Optional covers are 20 gage mill galvanized steel. Our patented raised "Big Foot" Splice Plates are made of heavy 12 gage mill galvanized steel to provide extra rigidity and strength. With "Big Foot" the ***Com-Tray*** system can be elevated form 2" to 12". With ***Com-Tray*** you'll never have to make expensive field modifications.

Shipped Ready to Assemble

When you order a ***Com-Tray*** system from Chalfant, it is supplied with all the splice plates and hardware you need for fast assembly in the exact configuration you have selected. No other system can compare with the design flexibility, speed and convenience of assembly and quality construction of ***Com-Tray*** under floor cable tray systems.

Prompt Delivery

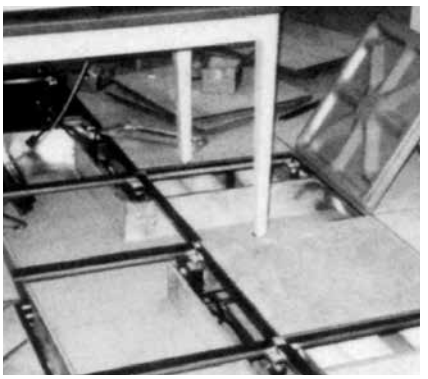
Com-Tray can be delivered to a job-site in weeks, since major sub-assemblies are available from stock or can be quickly fabricated to standard designs in our modern factory.

You'll be pleased with ***Com-Tray***. It's a logical timely solution to the underfloor cable routing problems that pays for itself in simplified design and labor during installation and provides permanent protection for your vital underfloor circuitry while maintaining complete accessibility.

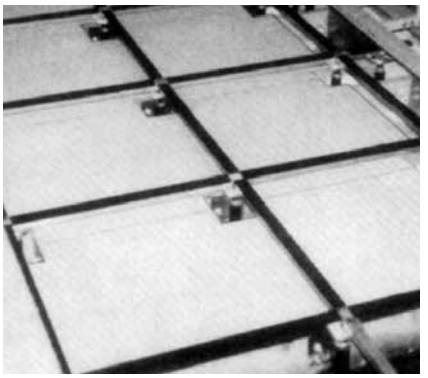
Specials

Com-Tray is also available in ventilated or ladder designs. Special fittings, such as, crossovers, risers, adjustable risers, floor flanges, multiple tap tees and crosses can be ordered. Contact the factory for additional information.

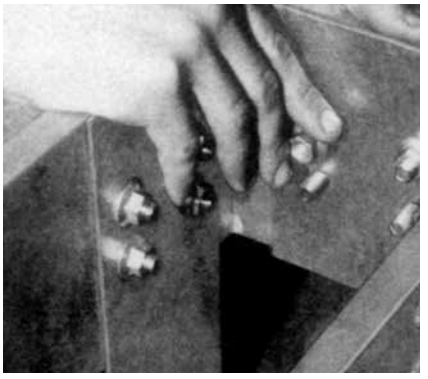
For specification details and current pricing, contact your local Chalfant representative.



Com-Tray is ready for cable installation



Covers are in place. System is secure.



Splice plates install quickly even on 18" widths

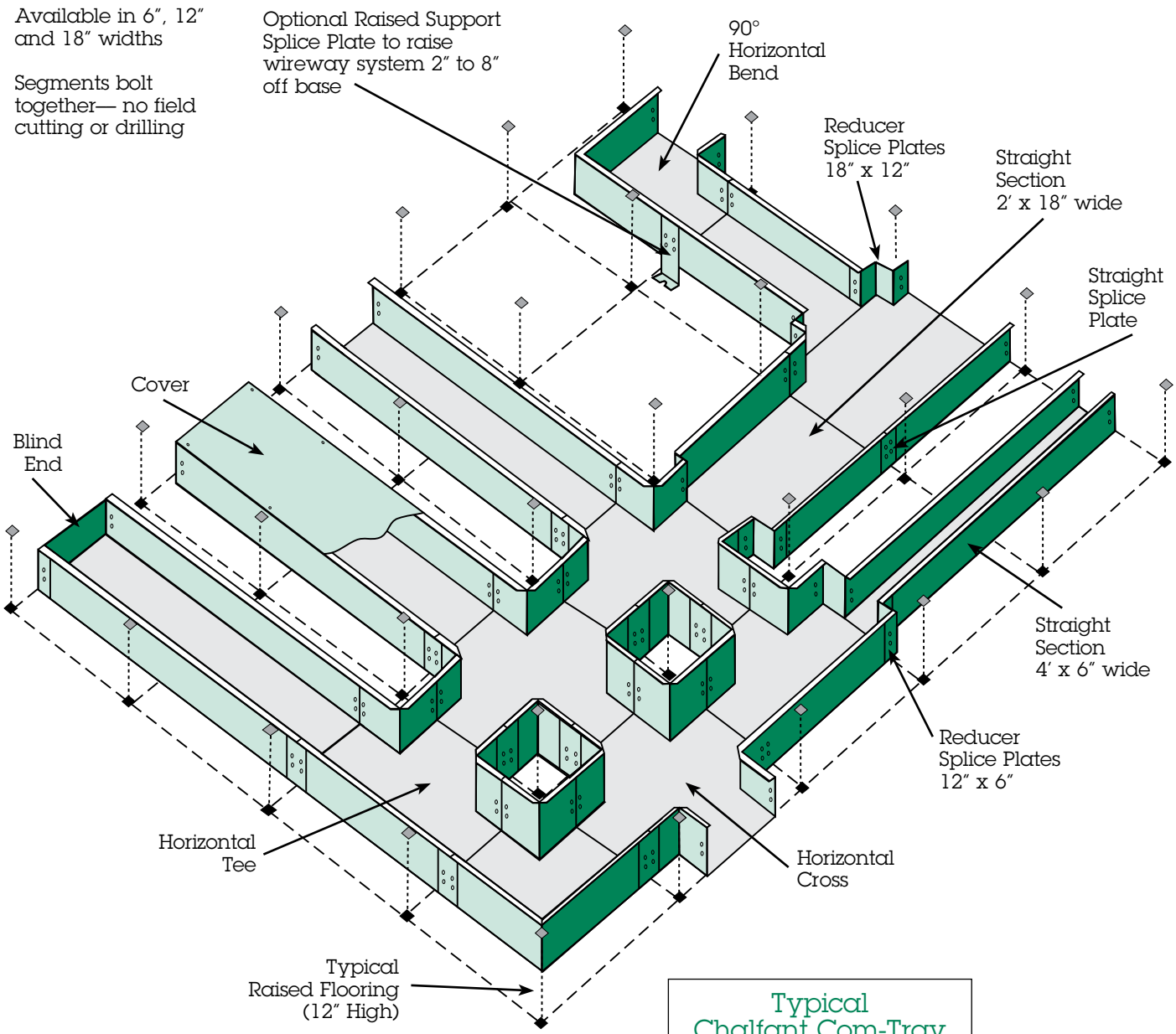
Combining Standard Modules

The drawing illustrates how standard ***Com-Tray*** components can be combined and arranged in virtually any cable routing pattern under raised flooring.

A 12" wide system with 6" load depth is shown. Components in 6" and 18" widths (with 6" load depths) are also available.

Straight sections and covers for all sizes come in 1', 2', 4' 8' and 12' lengths for added flexibility. Splice plates and blind ends have slotted holes for easy alignment with other components and are fastened with Chalfant's exclusive standard splice plate nut and bolt assembly— a fastener with a round serrated truss head combined with a integral flanged serrated lock washer hex nut.

The flexibility of the layout, ease of assembly and structural integrity of underfloor cable tray systems built with ***Com-Tray*** components are unmatched in the industry.



Typical Chalfant Com-Tray Installation
(6" Load Depth)

U. S. Patent 4,596, 095 June 24, 1985

Straight Sections, Covers and Fittings

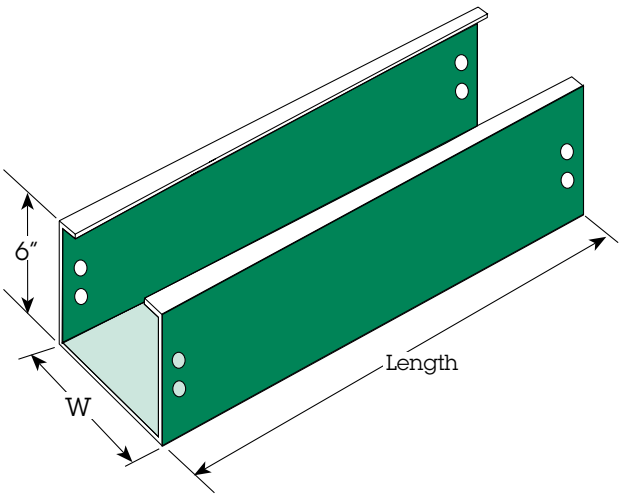
Loading Depth
Chalfant's Standard Com-Tray Design is a 6" (152) load depth and is shown in the part Numbers. Other Loading Depths from 2" to 8" are available. To change the depth, replace first 6 in the Part Number to the desired depth.

ie: C306-12 C3= 3" depth

Materials
All straight sections and fittings are manufactured from 18 gage mill galvanized steel per ASTM 653A.

Straight Sections

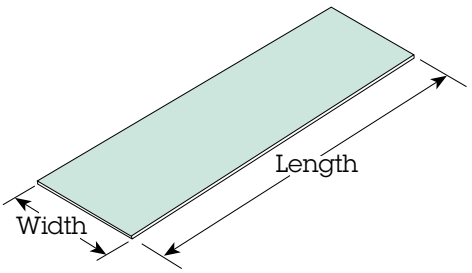
When using the part number listed for Straight Sections and Fittings, you will receive: straight section or fitting, splice plate, nuts and bolts (9TBN302).



Tray Width	Tray Length	Weight (lbs.)	Part Number
6" (152)	1'	4.9	C606-01
	2'	8.4	C606-02
	4'	15.4	C606-04
	8'	29.5	C606-08
	12'	43.5	C606-12
12" (152)	1'	6.4	C612-01
	2'	11.0	C612-02
	4'	20.2	C612-04
	8'	38.5	C612-08
	12'	56.9	C612-12
18"	1'	7.9	C618-01
	2'	13.6	C618-02
	4'	24.9	C618-04
	8'	47.6	C618-08
	12'	70.3	C618-12

Covers

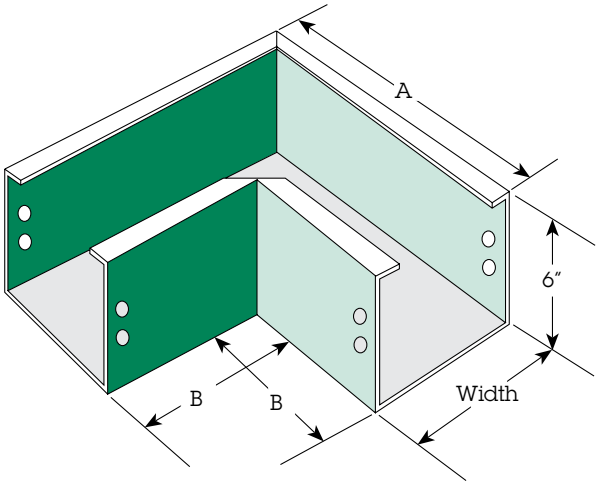
Covers, when ordered, will include (9STK774) self-tapping cover screws.
Flange covers are also available from the factory. To specify flange covers, replace C7 with 7S in the part number.



Tray Width	Tray Length	Weight (lbs.)	Part Number
6"	1'	.8	C706-01
	2'	1.7	C706-02
	4'	3.3	C706-04
	8'	6.6	C706-08
	12'	9.9	C706-12
12"	1'	1.7	C712-01
	2'	3.3	C712-02
	4'	6.6	C712-04
	8'	13.3	C712-08
	12'	19.9	C712-12
18"	1'	2.5	C718-01
	2'	5.0	C718-02
	4'	9.9	C718-04
	8'	19.9	C718-08
	12'	29.8	C718-12

Material: 20 gage Mill Galvanized Steel, ASTM A924

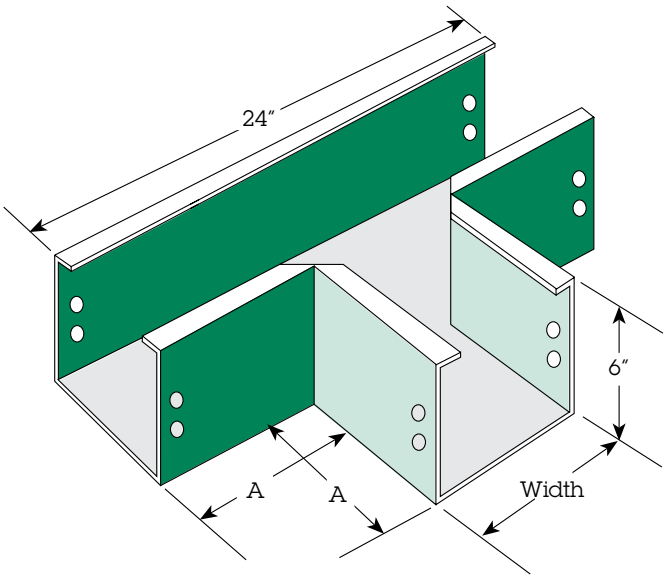
90° Horizontal Bend



Tray Width	Dimensions A	B	Weight (lbs.)	Part Number
6″	15″	9″	9.0	C606030
12″	18″	6″	11.5	C612030
18″	21″	3″	14.1	C618030

13/32″ holes (typ. 8)

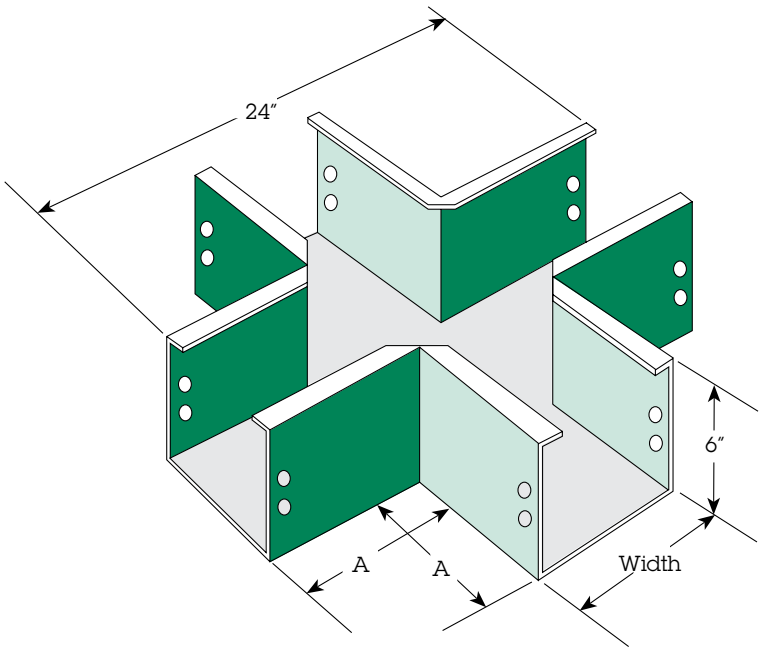
Horizontal Tee



Tray Width	Dimension A	Weight (lbs.)	Part Number
6″	9″	12.5	C606085
12″	6″	14.4	C612085
18″	3″	15.9	C618085

13/32″ holes (typ. 8)

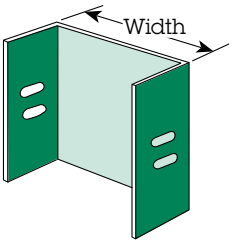
Cross



Tray Width	Dimension A	Weight (lbs.)	Part Number
6″	9″	16.1	C606080
12″	6″	17.3	C612080
18″	3″	17.6	C618080

13/32″ holes (typ. 16)

Blind End



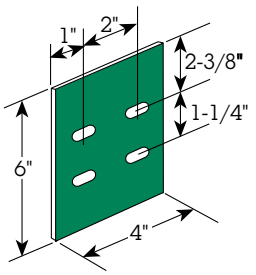
Tray Width	Weight (lbs.)	Part Number
6″	.9	C606245
12″	1.5	C612245
18″	2.0	C618245

5/8″ x 7/16″ slotted holes (typ. 4)
Furnished with (8) 3/8″ nuts and bolts

Splice Plates

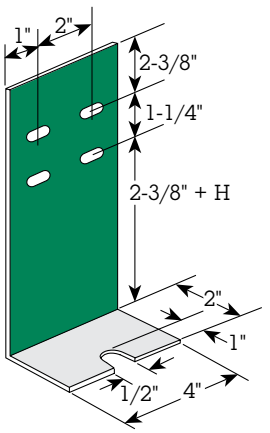
4 Bolt Splice Plate

C6SSP200

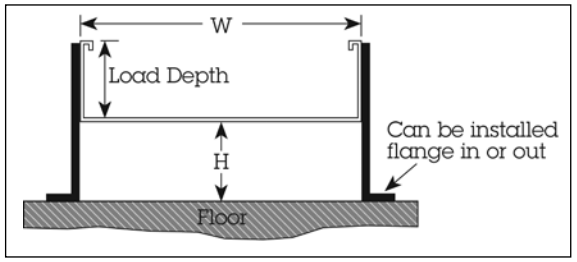


Raised Support Splice Plate

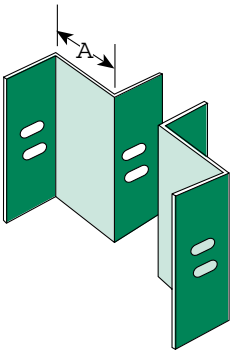
C6SSP200-H



Patented "Big Foot" Design.
H= Specify Height 2" to 12"



Reducer Splice Plates



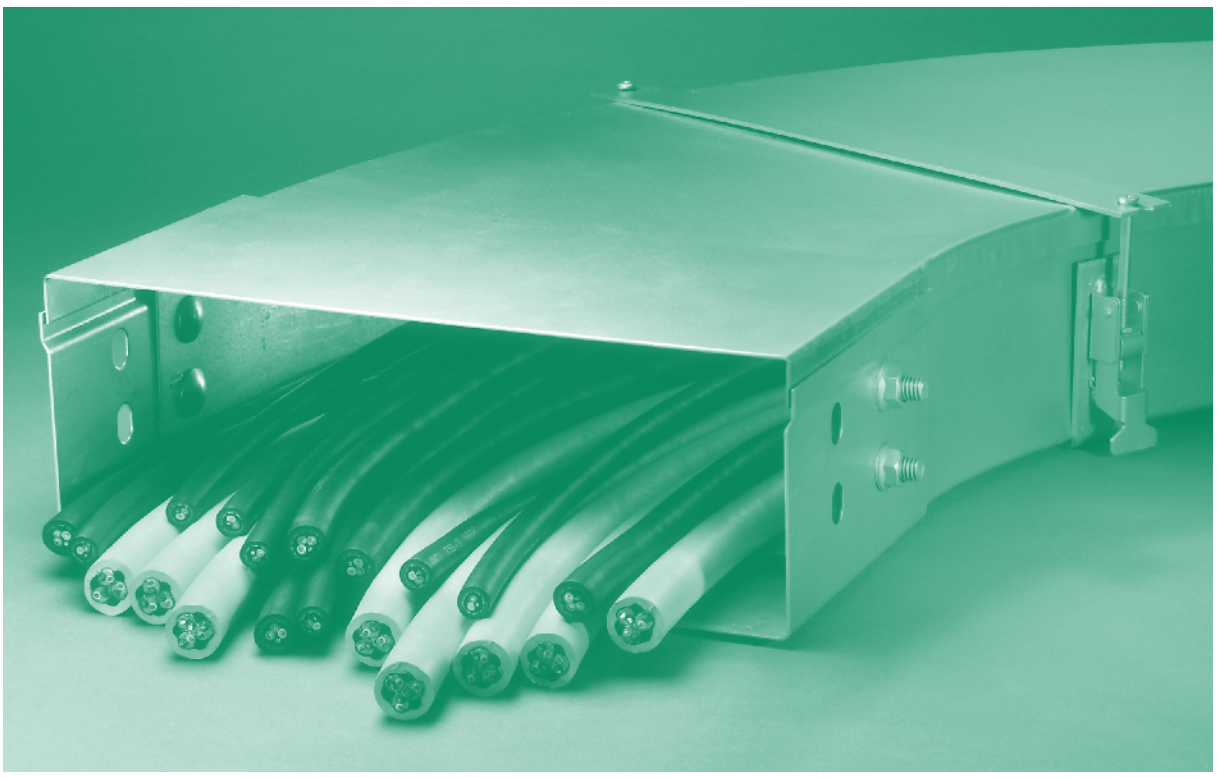
Basic Width	Reduces To	Dimension A	Weight (lbs.)	Part Number
18"	12" 6"	3" 6"	1.6 2.2	C6RS1812 C6RS1806
12"	6"	3"	1.6	C6RS1206

EMI/RFI Shielded Cable Tray

Chalfant began supplying industry cable tray in 1948 and designed and developed the first RF Tray for NASA in 1960 when it became imperative to protect instrument and control cabling from EMI fields during missile launching. Over the past 50 years, Chalfant has developed both a ***Premium*** and an ***Ultra*** class RF Tray.

The gasketed ***Ultra*** RF Tray has been successfully used at Sandia Labs, Los Alamos, as well as, military and other sensitive government facilities. Industrial and utility companies have found Chalfant's ***Premium*** RF Tray to be suitable because of the lower (long wave) EMI frequencies present in most of these applications.

- Field proven and tested
- Premium and Ultra class
- Designs to 78 dB attenuation @1,000 MHz



Maximum EMI/RFI Protection

RF Tray and Electromagnetic Compatibility

EMC is the technology of minimizing the electromagnetic interference caused by electromagnetic fields that are radiated or propagated along a conducting medium and reducing the susceptibility of these fields on electrical or electronic devices or systems. EMC is a coordinated systems design approach costing of:

1. Reducing interference at the source.

2. Isolating the offending circuits by filtering, grounding or shielding cable in RF cable tray.

3. Increasing the immunity of susceptible circuits by distance or rerouting away from radiation sources such as power equipment or high voltage sources.

RF Tray Often the Answer

EMC cable tray has become the solution when source radiation or rerouting of cables is difficult or impossible. They have saved industrial plants many man-hours of tracking and correcting offending circuits during plant or process start-up and shakedown.

In addition, properly grounded and shielded RF tray not only reduces the radiated EMI fields a sensitive circuit sees but also provides an isolated ground reference which effectively reduces internal and circuit part coupling and overall mode coupling.

Chalfant's Answer to Glitches and Bad Effects of EMI/RMI

The consequences of inadequate shielding of critical cable runs can include:

1. Computer "glitches" (introduction and transmission of erroneous data).

2. Radio and television interference.

3. System malfunctions due to voltage variations. The longer the control cable run the more susceptible it is to EMI. Also, the lower the control voltage, the higher the impedance and its susceptibility to induced interference. Typical operating voltages and current for process elements range between 100mV to 5V and 1mA to 50 mA,

4. Stolen information through "listening in" on unprotected, unsecured data lines.

Chalfant's tested RF tray design plus Chalfant's proven field experience can minimize or reduce the "bad" effects of EMI/RMI.

RF Cable Tray Design Considerations

RF Trays are designed to either contain or exclude EMI/RFI. A perfect design would be a one-piece tray and seam welded covers. However, this design is impractical as easy access to cables is necessary. Straight sections, covers and fittings must also be designed for easy installation in the field.

Premium RF Tray

Low frequency magnetic fields are best attenuated by mass of material. Chalfant's ***Premium*** RF Tray has the capability to efficiently attenuate H fields in the 150 KHz-10 MHz range form 70 to 83 dB.

E fields are effectively attenuated >114 to 90dB and 1 MHz to 30 MHz. **E fields below 1 MHz are attenuated over 100dB.** (see performance graphs.)

Ultra RF Tray

Chalfant's unique ***Ultra*** RF Tray has been designed with special cover clamps, splice plates, gaskets and foil. These features are essential for sealing and attenuating the plane wave frequencies 100 MHz through 1GHz.

Special adjustable tension cover straps compress the cover seam gaskets for optimum shielding efficiency.

Chalfant RF Cable Tray-- Easy to Install

Pre-galvanized steel (ASTM A653, G90 Coating) has proven to be the most cost effective tray material. It's flat, smooth surface is formable, weldable and conductive. It has excellent corrosion resistance. Coating or painted surfaces are not conductive and work against shielding effectiveness.

Surprisingly the overall shielding effectiveness of RF Tray is determined more from the elimination of seams or gaps that from the mass or thickness of the material used.

Chalfant builds its RF Tray to close tolerances so surfaces are flat and mate tightly.

- *Tray* is one-piece construction without seams (18 gauge to 18" widths, 16 gauge @24" width).

- *Covers* are designed to overlap at 90 degree angles (18 gauge to 18" widths, 16 gauge @24" width).

- *Fittings* have long 3" tangents for tight fit with overlapped splice plates when joined with straight sections.

- *Splice plates* are wraparound with joint cover plates and special offset along with pressure bolted construction and 3" overlap over all seams.

- *Gaskets and Foil* are made of exclusive conductive coated metal materials with pressure sensitive adhesive backing for easy field installation.

- *Cover latches* are wraparound, snap-latch type with adjustable tension to 200 lbs. to assure positive pressure to compress cover gaskets.

Flatness, overlapping surfaces, tight tolerance and gasketing are the keys to Chalfant's proven RF Tray design.

Laboratory Tested to MIL STD 285

Chalfant retained the services of a major Radiation Testing Lab (widely recognized for Tempest Certification) to certify the performance and shielding effectiveness of Chalfant's *Premium* and *Ultra* RF Cable Tray.

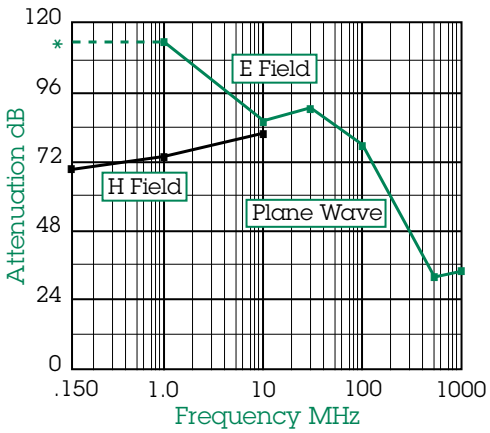
A complete series of tests were conducted to MIL STD 285 using a production run RF Tray with the following components: two 12" wide straight sections, one 12" radius horizontal fitting with gasketted bottom, one blind end, two wraparound splice plates, one panel adapter, covers, cover gaskets, foil tape and adjustable cover straps. The results of these tests are shown below.

Chalfant also tested a large Navy project to 60 dB at 1,000 MHz. Over six test set-ups were required. This on-site testing was done to MIL STD 285 by another highly respected testing company. Slight modifications were made to Chalfant's original design to eliminate variables of controlled laboratory conditions and small sample size to the actual conditions encountered on the job-site. The new improvements were incorporated and retested at 400 and 1,000 MHz.

Chalfant encourages comparison and believes we are the only tray company that offers a proven, tested system with attenuation levels far above any competitor.

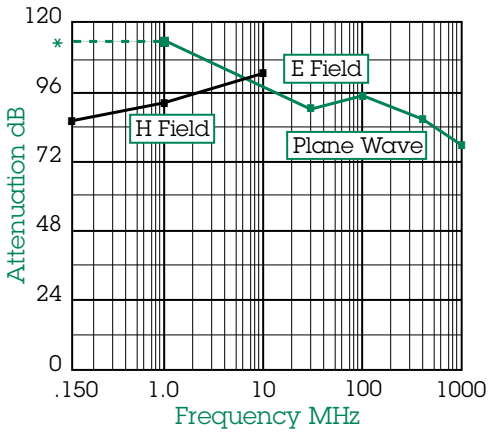
Unmatched Shielding Effectiveness

Premium RF Tray (No cover Gaskets)



*EMI Attenuation from 0-150 KHz exceeds 100 dB

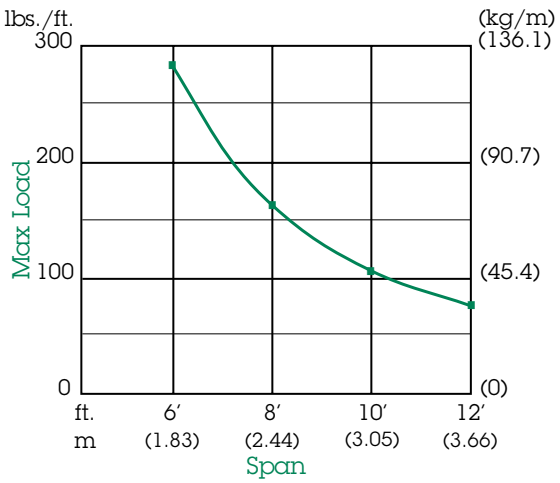
Ultra RF Tray (Fully Gasketed)



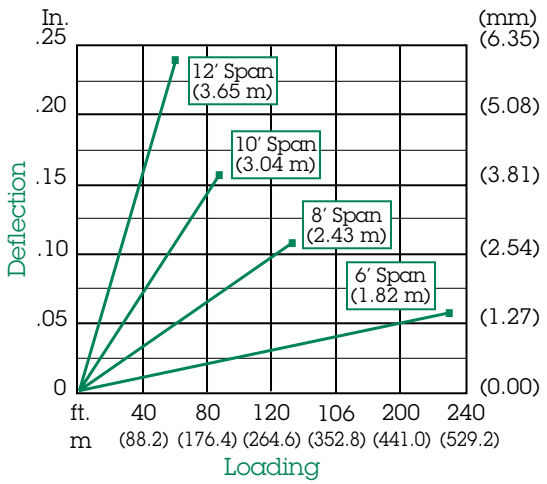
Caution: The foregoing test results can only be assured if the product is properly installed. Proper installation includes: providing a level of supports, tightly butted joints, proper cleaning of contact surfaces, proper taping and/or installation of gaskets and proper adjustment of cover straps, all of which are the sole responsibility of others. If properly installed, the product will test as shown.

RF Tray Can be Supported to 12-foot Spans

Maximum Cable Loading (At various spans)



Maximum Deflection (At various spans/loads)



Note: Loading and deflection data is based on NEMA VE-1 testing of 24" (610 mm) wide, 4" (102 mm) load depth RF Tray. Simple beam test Safety Factor= 1.3

Straight Sections and Fittings

How to Order

When using the part number listed, you will receive: *Premium* Tray section or fitting, cover, wraparound splice plate with joint cover strap, nuts and bolts and cover screws.

Ultra Tray section or fitting, cover, wraparound splice plate with joint cover strap, nuts and bolts, foil tape, gasket material and adjustable cover straps (5 per straight section, 1 per fitting).

Blind ends, panel adapters, Z-hold downs, special accessories and support material must be ordered separately for either type of tray.

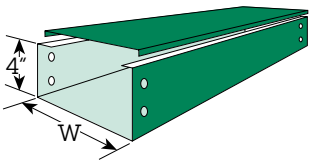
Tape and gasket material are furnished, taking into consideration some waste. Chalfant cannot be responsible for indiscriminate waste by installers.

Chalfant's Standard RF Design is 4" load depth, 12" radius fittings and supplied with covers.

Note:

- Add suffix -G to straight and fitting part numbers if Ultra RF Design is required; ie: RFS12-144-G or RFS12-90HB12-G. Three inch and 6' load depths and 24" radius are available as specials.
- 30° and 60° Horizontal and Vertical fittings are available—identical pricing to 45° and 90° respectively.
- See Chalfant's Ladder Style Cable Tray section (Section One) for metric conversions and dimensions on fittings and 24" radii not featured in this section.

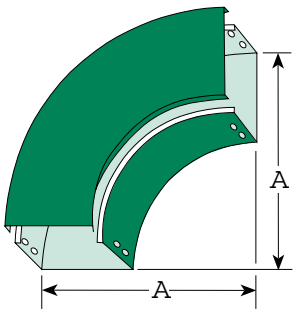
Straight Sections



Load Depth	Tray Width	NEC Equipment Ground Area In²	Amps	Part Number
4"	6 (152)	0.8	200	RFS06-144
	12 (305)	1.1	400	RFS12-144
	18 (457)	1.4	400	RFS18-144
	24 (610)	2.1	600	RFS24-144

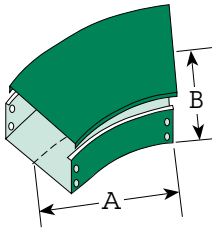
Fittings

90° Horizontal Bend



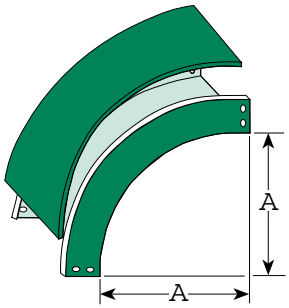
Radius	Tray Width	Dimension A	Part Number
12"	6 (152)	21 (533)	RFS06-90HB-12
	12 (305)	27 (685)	RFS12-90HB-12
	18 (457)	33 (838)	RFS18-90HB-12
	24 (610)	39 (990)	RFS24-90HB-12

45° Horizontal Bend



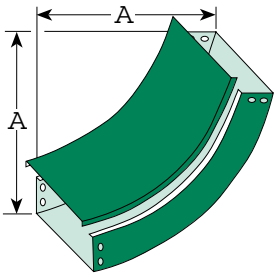
Radius	Tray Width	Dimensions A	Dimensions B	Part Number
12"	6 (152)	15.75 (400)	9.5 (241)	RFS06-45HB-12
	12 (305)	17.875 (454)	13.375 (340)	RFS12-45HB-12
	18 (457)	20 (508)	17.25 (438)	RFS18-45HB-12
	24 (610)	22.0625 (560)	21.125 (537)	RFS24-45HB-12

90° Outside Vertical Bend



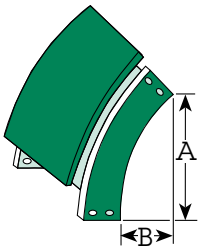
Radius	Tray Width	Dimension A	Part Number
12"	6 (152)	15 (381)	RFS06-90VOB-12
	12 (305)	15 (381)	RFS12-90VOB-12
	18 (457)	15 (381)	RFS18-90VOB-12
	24 (610)	15 (381)	RFS24-90VOB-12

90° Inside Vertical Bend



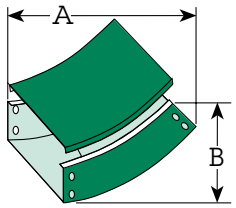
Radius	Tray Width	Dimension A	Part Number
12"	6 (152)	19 (381)	RFS06-90VIB-12
	12 (305)	19 (381)	RFS12-90VIB-12
	18 (457)	19 (381)	RFS18-90VIB-12
	24 (610)	19 (381)	RFS24-90VIB-12

45° Outside Vertical Bend



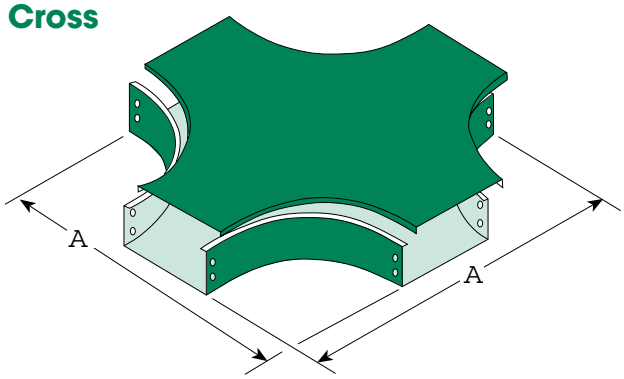
Radius	Tray Width	Dimensions A	Dimensions B	Part Number
12"	6 (152)	13.625 (346)	5.375 (137)	RFS06-45VOB-12
	12 (305)	13.625 (346)	5.375 (137)	RFS12-45VOB-12
	18 (457)	13.625 (346)	5.375 (137)	RFS18-45VOB-12
	24 (610)	13.625 (346)	5.375 (137)	RFS24-45VOB-12

45° Inside Vertical Bend



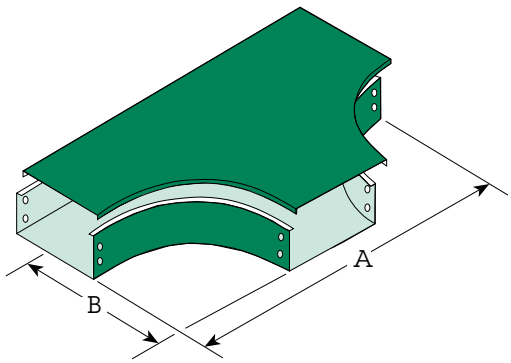
Radius	Tray Width	Dimensions A	Dimensions B	Part Number
12"	6 (152)	16.4375 (418)	6.8125 (173)	RFS06-45VIB-12
	12 (305)	16.4375 (418)	6.8125 (173)	RFS12-45VIB-12
	18 (457)	16.4375 (418)	6.8125 (173)	RFS18-45VIB-12

Cross



Radius	Tray Width	Dimension A	Part Number
12"	6 (152)	36 (914)	RFS06-X-12
	12 (305)	42 (1067)	RFS12-X-12
	18 (457)	48 (1219)	RFS18-X-12
	24 (610)	54 (1372)	RFS24-X-12

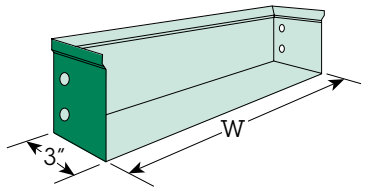
Tee



Radius	Tray Width	Dimensions A	Dimensions B	Part Number
12"	6 (152)	36 (914)	21 (522)	RFS06-T-12
	12 (305)	42 (1067)	27 (686)	RFS12-T-12
	18 (457)	48 (1219)	33 (838)	RFS18-T-12
	24 (610)	54 (1372)	39 (991)	RFS24-T-12

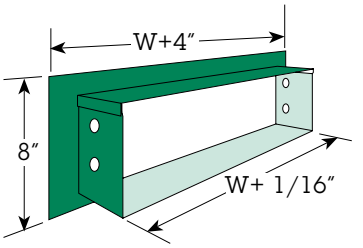
Accessories

Blind End



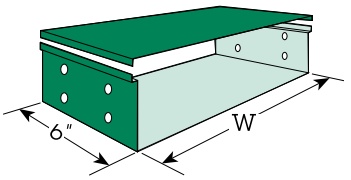
Tray Width	Part Number
6 (152)	RFS06-245
12 (305)	RFS12-245
18 (457)	RFS18-245
24 (610)	RFS24-245

Panel Adapter

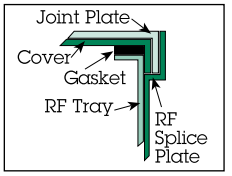


Tray Width	Part Number
6 (152)	RFS06-244
12 (305)	RFS12-244
18 (457)	RFS18-244
24 (610)	RFS24-244

Splice Plate

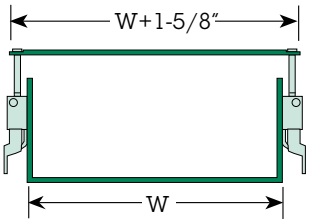


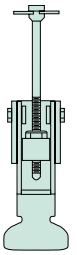
Tray Width	Part Number
6 (152)	RFS06-480
12 (305)	RFS12-480
18 (457)	RFS18-480
24 (610)	RFS24-480



Cover Strap

Adjustable Latch

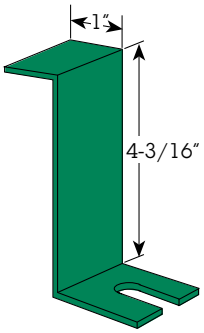




Tray Width	Part Number
6 (152)	R7S06-280
12 (305)	R7S12-280
18 (457)	R7S18-280
24 (610)	RFS24-280

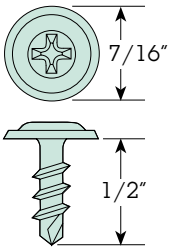
Hold Down Clasp

Part Number: RSZC-360



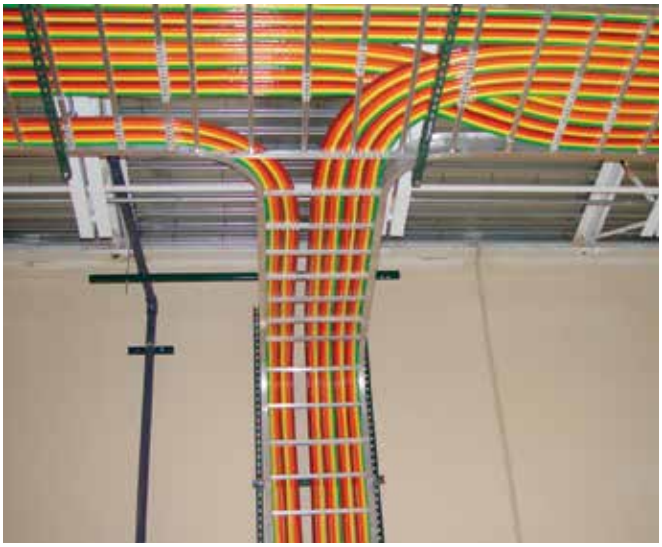
Cover Hold Down Screw

Part Number: 9STK774



Shielded


CHALFANT



CHALFANT
Manufacturing Company

50 Pearl Road, Suite 212 ▪ Brunswick, Ohio 44212
Phone: 330/273-3510 FAX: 330/273-8149
Facilities: Brunswick and Elyria, Ohio

www.chalfantcabletray.com
sales@chalfantcabletray.com

Bulletin No. CH-115C
Printed in U.S.A.