

## ***Searching for Cooper B-Line Cable Tray Material?***

***Need a Cable Tray Materials Price Quote?***

**Get *Fastray* On-Line.**

<http://www.cooperblines.com/product/CableTray/SearchProducts>

- Search for Product Info!
- Create Submittal Package! (see page 6)
- View Bill of Materials!
- Even Receive a Quote Request!

***All This ON-LINE***

## ***Cooper B-Line Gives Just the Facts on: Construction Specifications***

***All specs are arranged as to their recommended CSI MasterFormat™ Divisions.***

***All Construction Specification Documents***

***On-Line or Downloaded***

***in Microsoft Word format***

<http://www.cooperblines.com/engineer/specs.asp>

**If you need more information  
about this or any other great  
Cooper B-Line product just...**





***By Just One Click of the Mouse Button add Cooper B-Line Cable Tray to your next set of Plans***

***To Download a Free copy of TrayCAD  
Go to: [www.cooperblines.com](http://www.cooperblines.com)  
and click on Software & Specifications***

***Directly: <http://www.cooperblines.com/engineer/Software.asp#TrayCAD>***

***Call: (800) 851-7415***



TrayCAD is a cable tray layout design program that works with AutoCAD®. TrayCAD is a Windows® based program and installs as an add-on to your AutoCAD® system. Use the TrayCAD toolbar to add cable tray to your plans by drawing a single line as the center line of the tray run, then, with the click of a button, the program will build a 3-D wire-frame model of the cable tray and all of the appropriate fittings. The program will also create a Bill of Material and contains a library of details.



***By Just One Click of the Mouse Button add Cooper B-Line Cable Runway, Cent-R-Rail™ and Relay Racks to your next set of Plans***

***To Download a Free copy of Runway Router™  
Go to: [www.cooperblines.com](http://www.cooperblines.com)  
and click on Software & Specifications***

***Directly: <http://www.cooperblines.com/engineer/Software.asp#Runway>***

***Call: (800) 851-7415***



Runway Router™ is a cable runway (ladder rack) layout design program that works with AutoCAD®. Runway Router is a Windows® based program that installs as an add-on to your AutoCAD® system. Use the commands from the Runway Router toolbar to layout cable runway, Cent-R-Rail, relay racks and electronic cabinets. Add cable runway or Cent-R-Rail to your existing plans by drawing a single line as the centerline path of the run. Then, with the click of a button, the program will build a 3-D wire-frame model of the cable runway and all of the appropriate connectors and fittings. The program will also create a Bill Of Materials, and contains a library of details.



# Cooper B-Line Cable Tray Systems

Cable tray is a mechanical support system that can support cables and raceways. Cable tray is not a raceway. Cable tray systems are required to be electrically continuous but not mechanically continuous.

## Advantages of Cooper B-Line Cable Tray Systems

- Safety
- Dependability
- Space Savings
- Cost Savings
- Design Cost Savings
- Material Savings
- Installation Cost & Time Savings
- Maintenance Savings

For more information refer to Cooper B-Line's Cable Tray Manual (Pages 381 thru 431) or call Cooper B-Line engineering at 1-800-851-7415 extension 366

## **Quick List Selection Process**

*See pages 36 & 37 for expanded selection process.*

### **1. Support Span Issues are: Strength and Length**

- Very important to first consider the support span as it affects the strength of the system and the length of the straight sections required.
- Short Span, 6 to 8 foot support spacing - use 12 foot sections.
- Intermediate Span, 8 to 12 foot support spacing - use 12 foot sections.
- Long Span, 16 to 20 foot support spacing - use 20 foot sections.
- Extra Long Span, over 20 foot to 30 foot support spacing - use 24 or 30 foot sections.

### **2. Working Load Issues are: Size (Width, Loading Depth, and Strength)**

#### **Cable Load**

- Types and numbers of cables to support - Total cable load in lbs. per linear foot (lbs/ft)
- Power - is single layer - issue width (refer to local electrical code)
- Low Voltage - is stacked - issue loading depth and width (refer to affecting code)
- See chart of listed cable load guidelines (refer to page 40)

#### **Additional Loads**

200 lb. concentrated load - Industrial installations  
Ice, Wind, Snow loads - Outdoor installations

Select a Cable Tray system that meets the working load for the support span required and a straight section length that fits the installation. NEMA VE 2 - Straight sections equal to or larger than span.

[www.cabletrays.com/technical.htm](http://www.cabletrays.com/technical.htm)

### **3. Installation Environment Issues are: Material and Finish**

- Indoor Dry - Institutional, Office, Commercial, Light Industrial  
Aluminum, Pre-Galvanized Steel
- Indoor Industrial - Automotive, Pulp and Paper, Power Plants  
Aluminum, Pre-Galvanized Steel, Possibly Hot-Dipped Galvanized After Fabrication (HDGAF)
- Outdoor Industrial - Petrochemical, Automotive, Power Plants  
Aluminum, Hot-Dipped Galvanized After Fabrication (HDGAF)
- Outdoor Marine - Off Shore Platforms  
Aluminum, Stainless Steel, Fiberglass
- Special - Petrochemical, Pulp and Paper, Environmental Air  
Contact Cooper B-Line Engineering (1-800-851-7415 ext, 366)

# Cooper B-Line Cable Tray Systems

## Cooper B-Line Cable Tray Product Offering

- **Two Side Rail Systems**  
Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized After Fabrication Steel, 304 and 316L Stainless Steel, Fiberglass in Polyester Resin, Vinyl Ester, Zero Halogen, and Dis-Stat Redi-Rail Systems loaded with special installation and cable friendly features.  
Systems tested to 173 lbs/ft on a 30 foot span  
Special bottom options and splices  
Highest quality fittings  
Unmatched accessories supplied with attachment hardware
- **Cable Channel (See Cable Channel Section - pages 98-113)**  
3, 4, and 6 inch widths in Aluminum, Pre-Galvanized Steel, Hot Dip Galvanized after Fabrication Steel and 304 or 316L Stainless Steel  
3, 4, 6, and 8 inch widths in Fiberglass in Polyester Resin, Vinyl Ester, Zero Halogen, and Dis-Stat  
Unmatched fitting and accessory offering  
Special bottom options and splices  
Highest quality fittings  
Unmatched accessories supplied with attachment hardware
- **Cent-R-Rail™ Systems (See Cent-R-Rail Section - pages 114- 175)**  
Data Track™, Verti-Rack™, Half-Rack™, and Multi-Tier Half-Rack™  
Each system targeted to installation needs  
Each system is the fastest in the industry to install  
Pre-assembled, boxed connectors, splices  
Crated straight section shipments
- **Wire Flextray Tray (See Flextray Section - pages 42-97)**  
Best finish in the industry, ASTM B633, SC2 (ZN)  
Strong straight top wire design maximizes strength and minimizes weight  
Unmatched accessory package

## Advantage of Using Cooper B-Line Cable Tray? Selection!

**What kind of Cooper B-Line Cable Tray will work for your project?**  
*First, answer three questions.*

1. **Location:** Where will the project be located?
  - A. Is the installation inside or outside?  
(decision dealing with thermal and weather conditions)
  - B. Any contact of corrosive materials?  
(decision on cable tray material or finish)
  - C. Is the location for the cable tray confined or open?  
(decision on the size and type of cable tray)
2. **Span:** What would be the longest and shortest spans between supporting locations for the installation of cables? (decision on type or combination of types of cable tray design needed to be the most efficient and economical)
3. **Cables:** How many and what type of cables are involved in the support installation?  
(decision on the strength of the cable tray)

**All these variables are important to the cost savings and safety  
of your Cooper B-Line Cable Tray installation project.**

***It is your money, your decision.***

Important notice: The information herein has been carefully checked for accuracy and is believed to be correct and current. No warranty, either expressed or implied, is made as to either its applicability to or its compatibility with specific requirements of this information, nor for damages consequential to its use. All design characteristics, specifications, tolerances and similar information are subject to change without notice.

# Cable Tray Selection Charts

## Short Span 6 - 8 Foot (distance between the supports)

## Recommended Short Span Cable Tray Selection Use 10 ft or 12 ft Sections

Cable Tray Information

	Catalog Number	Rail Height	Load Depth	Span Load lbs/ft		Available Widths	Material*	Straight Sections & Accessories Pages	Fittings Pages
				6'	8'				
Flextray	FT2X2X10	2.380"	2.000"	28	20	2"	S	46 & 49 - 97	--
	FT2X4X10	2.380"	2.000"	43	27	4"	S	46 & 49 - 97	--
	FT2X6X10	2.380"	2.000"	47	27	6"	S	46 & 49 - 97	--
	FT2X8X10	2.380"	2.000"	47	27	8"	S	46 & 49 - 97	--
	FT2X12X10	2.380"	2.000"	47	27	12"	S	46 & 49 - 97	--
	FT2X18X10	2.380"	2.000"	47	27	18"	S	46 & 49 - 97	--
	FT2X20X10	2.380"	2.000"	47	27	20"	S	46 & 49 - 97	--
	FT2X24X10	2.380"	2.000"	47	27	24"	S	46 & 49 - 97	--
	FT4X4X10	4.380"	4.000"	49	36	4"	S	47 & 49 - 97	--
	FT4X8X10	4.380"	4.000"	77	46	8"	S	47 & 49 - 97	--
	FT4X12X10	4.380"	4.000"	83	47	12"	S	47 & 49 - 97	--
	FT4X18X10	4.380"	4.000"	83	47	18"	S	47 & 49 - 97	--
	FT4X20X10	4.380"	4.000"	83	47	20"	S	47 & 49 - 97	--
	FT4X24X10	4.380"	4.000"	89	50	24"	S	47 & 49 - 97	--
	FT6X12X10	6.380"	6.000"	86	48	12"	S	47 & 49 - 97	--
	FT6X18X10	6.380"	6.000"	89	50	18"	S	47 & 49 - 97	--
FT6X20X10	6.380"	6.000"	98	55	20"	S	47 & 49 - 97	--	
FT6X24X10	6.380"	6.000"	107	60	24"	S	47 & 49 - 97	--	
Cable Channel	ACC-03	1.250"	1.250"	15	10	3"	A	100 & 101 - 104	105 - 112
	ACC-04	1.750"	1.750"	33	20.5	4"	A	100 & 101 - 104	105 - 112
	ACC-06	1.750"	1.750"	36	22.5	6"	A	100 & 101 - 104	105 - 112
	†CC-03	1.250"	1.250"	17	11.5	3"	S, SS	100 & 101 - 104	105 - 112
	†CC-04	1.750"	1.750"	36	24.5	4"	S, SS	100 & 101 - 104	105 - 112
	†CC-06	1.750"	1.750"	41	28	6"	S, SS	100 & 101 - 104	105 - 112
	FCC-03	1.000"	1.000"	8	--	3"	F	352 & 353	353 & 354
	FCC-04	1.125"	1.125"	12	--	4"	F	352 & 353	353 & 354
FCC-06	1.625"	1.625"	58	--	6"	F	352 & 353	353 & 354	
FCC-08	2.188"	2.188"	87	--	8"	F	352 & 353	353 & 354	
Cent-R-Rail	C3ADB	3.700"	3.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C4ADB	4.700"	4.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C6ADB	6.700"	6.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C3A1H	3.700"	3.000"	50	50	3" - 12"	A	128 & 132 - 156	--
	C4A1H	4.700"	4.000"	50	50	3" - 12"	A	128 & 132 - 156	--
	C6A1H	6.700"	6.000"	50	50	3" - 12"	A	128 & 132 - 156	--
	C2AⓐV	All	2.000"	--	225	3" - 12"	A	126 & 132 - 156	--
	C3AⓐM	All	3.000"	50	50	3" - 12"	A	130 & 132 - 156	--
	C4AⓐM	All	4.000"	50	50	3" - 12"	A	130 & 132 - 156	--
Redi-Rail	H14AR	3.840"	3.000"	224	194	6" - 36"	A	178 & 180 - 187	191 - 201
	H15AR	4.840"	4.000"	224	224	6" - 36"	A	178 & 180 - 187	191 - 201
	H16AR	5.840"	5.000"	224	224	6" - 36"	A	179 & 180 - 187	191 - 201
	H17AR	6.840"	6.000"	224	224	6" - 36"	A	179 & 180 - 187	191 - 201
Cable Tray Steel	148	3.625"	3.077"	204	115	6" - 36"	S	204 & 208 - 214	216 - 224
	156	4.188"	3.628"	304	171	6" - 36"	S	205 & 208 - 214	216 - 224
	166	5.188"	4.628"	308	173	6" - 36"	S	206 & 208 - 214	216 - 224
	176	6.188"	5.628"	-	194	6" - 36"	S	207 & 208 - 214	216 - 224
	Fiber 13F	3.000"	2.000"	257	145	6" - 24"	F	324 & 348 - 351	330 - 347

\*Material: A = Aluminum • S = Steel • SS = Stainless Steel Type 304 or 316 • F = Fiberglass  
 † = G for HDGAF • P for Pre-Galvanized • SS4 for 304 or SS6 for 316 Stainless Steel  
 ① Insert 2, 3, 4, 5 or 6 for number of tiers • ② Insert 2, 3 or 4 for number of tiers



Cooper B-Line cable trays conform to the requirements of IEC Standard 61537, 2001 Ed.

# Cable Tray Selection Charts

## Intermediate Span 10 - 12 Foot (distance between the supports)

### Recommended Intermediate Span Cable Tray Selection Use 12 ft Sections

	Catalog Number	Rail Height	Load Depth	Span Load lbs/ft		Available Widths	Material*	Straight Sections & Accessories Pages	Fittings Pages
				10'	12'				
<b>Cent-R-Rail</b>	C3ADB	3.700"	3.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C4ADB	4.700"	4.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C6ADB	6.700"	6.000"	100	100	6" - 24"	A	124 & 132 - 156	--
	C3A1H	3.700"	3.000"	100	100	3" - 12"	A	128 & 132 - 156	--
	C4A1H	4.700"	4.000"	100	100	3" - 12"	A	128 & 132 - 156	--
	C6A1H	6.700"	6.000"	100	100	3" - 12"	A	128 & 132 - 156	--
<b>Redi-Rail</b>	H14AR	3.840"	3.000"	124	86	6" - 36"	A	178 & 180 - 187	191 - 201
	H15AR	4.840"	4.000"	147	102	6" - 36"	A	178 & 180 - 187	191 - 201
	H16AR	5.840"	5.000"	164	114	6" - 36"	A	179 & 180 - 187	191 - 201
	H17AR	6.840"	6.000"	144	100	6" - 36"	A	179 & 180 - 187	191 - 201
<b>Aluminum</b>	24A	4.120"	3.050"	181	126	6" - 36"	A	228 & 238 - 248	288 - 302
	25A	5.000"	3.930"	200	139	6" - 36"	A	230 & 238 - 248	288 - 302
	26A	6.120"	5.040"	204	142	6" - 36"	A	232 & 238 - 248	288 - 302
	37A	7.140"	6.050"	--	222	6" - 36"	A	234 & 238 - 248	288 - 302
<b>Steel</b>	148	3.625"	3.077"	73	51	6" - 36"	S	204 & 208 - 214	216 - 224
	156	4.188"	3.628"	109	76	6" - 36"	S	205 & 208 - 214	216 - 224
	166	5.188"	4.628"	111	77	6" - 36"	S	206 & 208 - 214	216 - 224
	176	6.188"	5.628"	124	86	6" - 36"	S	207 & 208 - 214	216 - 224
	248	4.188"	3.140"	148	103	6" - 36"	S	252 & 260 - 270	288 - 302
	258	5.188"	4.140"	157	109	6" - 36"	S	254 & 260 - 270	288 - 302
	268	6.188"	5.140"	158	110	6" - 36"	S	256 & 260 - 270	288 - 302
	378	7.188"	6.140"	204	142	6" - 36"	S	258 & 260 - 270	288 - 302
<b>Stainless Steel</b>	348	4.188"	3.130"	180	125	6" - 36"	SS_	274 & 277 - 284	288 - 302
	358	5.188"	4.130"	248	172	6" - 36"	SS_	275 & 277 - 284	288 - 302
	368	6.188"	5.130"	236	164	6" - 36"	SS_	276 & 277 - 284	288 - 302
<b>Fiberglass</b>	13F	3.000"	2.000"	93	64	6" - 24"	F	324 & 348 - 351	330 - 347
	24F	4.000"	3.000"	226	157	6" - 36"	F	325 & 348 - 351	330 - 347

\*Material  
 A = Aluminum  
 S = Steel  
 SS\_ = Stainless Steel Type 304 or 316  
 F = Fiberglass



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# Cable Tray Selection Charts

## Long 16 - 20 Foot (distance between the supports)

### Recommended Intermediate Span Cable Tray Selection Use 20 ft Sections

	Catalog Number	Rail Height	Load Depth	Span Load lbs/ft			Available Widths	Material*	Straight Sections & Accessories Pages	Fittings Pages
				16'	18'	20'				
Aluminum	25A	5.000"	3.930"	78	62	50	6" - 36"	A	230 & 238 - 248	288 - 302
	34A	4.200"	3.080"	125	99	80	6" - 36"	A	228 & 238 - 248	288 - 302
	35A	5.060"	3.960"	121	96	77	6" - 36"	A	230 & 238 - 248	288 - 302
	26A	6.120"	5.040"	80	63	51	6" - 36"	A	232 & 238 - 248	288 - 302
	36A	6.170"	5.060"	131	104	84	6" - 36"	A	232 & 238 - 248	288 - 302
	37A	7.140"	6.050"	125	99	80	6" - 36"	A	234 & 238 - 248	288 - 302
	46A	6.190"	5.080"	161	127	103	6" - 36"	A	232 & 238 - 248	288 - 302
	47A	7.240"	6.130"	156	123	100	6" - 36"	A	234 & 238 - 248	288 - 302
	H46A	6.240"	5.090"	261	206	167	6" - 36"	A	232 & 238 - 248	288 - 302
	H47A	7.240"	6.090"	233	184	149	6" - 36"	A	234 & 238 - 248	288 - 302
Steel	346	4.188"	3.130"	98	78	63	6" - 36"	S	252 & 260 - 270	288 - 302
	356	5.188"	4.130"	108	85	69	6" - 36"	S	254 & 260 - 270	288 - 302
	366	6.188"	5.140"	117	93	75	6" - 36"	S	256 & 260 - 270	288 - 302
	378	7.188"	6.140"	80	63	51	6" - 36"	S	258 & 260 - 270	288 - 302
	444	4.188"	3.110"	142	112	91	6" - 36"	S	252 & 260 - 270	288 - 302
	454	5.188"	4.110"	166	131	106	6" - 36"	S	254 & 260 - 270	288 - 302
	464	6.188"	5.110"	192	152	51	6" - 36"	S	256 & 260 - 270	288 - 302
	476	7.188"	6.130"	120	95	77	6" - 36"	S	258 & 260 - 270	288 - 302
	574	7.188"	6.110"	203	160	130	6" - 36"	S	258 & 260 - 270	288 - 302
Stainless Steel	348	4.188"	3.130"	70	56	45	6" - 36"	SS_	274 & 277 - 284	288 - 302
	358	5.188"	4.130"	97	77	62	6" - 36"	SS_	275 & 277 - 284	288 - 302
	368	6.188"	5.140"	92	73	59	6" - 36"	SS_	276 & 277 - 284	288 - 302
	464	6.188"	5.110"	192	152	123	6" - 36"	SS_	277 & 277 - 284	288 - 302
Fiberglass	36F	6.000"	5.000"	139	109	89	6" - 36"	F	326 & 348 - 351	330 - 347
	46F	6.000"	5.000"	221	174	141	6" - 36"	F	327 & 348 - 351	330 - 347
	H46F	6.000"	5.000"	239	188	153	6" - 36"	F	328 & 348 - 351	330 - 347

\*Material  
 A = Aluminum  
 S = Steel  
 SS\_ = Stainless Steel Type 304 or 316  
 F = Fiberglass

 Cooper B-Line cable trays conform to the requirements of IEC Standard 61537, 2001 Ed.

# Cable Tray Selection Charts

## Extra Long Span 24 - 30 Foot (distance between the supports)

### Recommended Extra Long Span Cable Tray Selection Use 24 ft or 30 ft Sections

	Catalog Number	Rail Height	Load Depth	Span Load lbs/ft		Available Widths	Material*	Straight Sections & Accessories Pages	Fittings Pages
				24'	30'				
Aluminum	46A	6.190"	5.080"	72	-	6" - 36"	A	232 & 238 - 248	288 - 302
	47A	7.240"	6.130"	69	-	6" - 36"	A	234 & 238 - 248	288 - 302
	57A	7.400"	6.230"	161	75	12" - 36"	A	234 & 238 - 248	288 - 302
	H46A	6.240"	5.090"	116	-	6" - 36"	A	232 & 238 - 248	288 - 302
	H47A	7.240"	6.090"	103	-	6" - 36"	A	234 & 238 - 248	288 - 302
	S8A	8.000"	6.200"	252	161	12" - 36"	A	236 & 237	237
Steel	444	4.188"	2.110"	63	-	6" - 36"	S	252 & 260 - 270	288 - 302
	454	5.188"	4.110"	74	-	6" - 36"	S	254 & 260 - 270	288 - 302
	464	6.188"	5.110"	85	-	6" - 36"	S	256 & 260 - 270	288 - 302
	476	7.188"	6.130"	53	-	6" - 36"	S	258 & 260 - 270	288 - 302
	574	7.188"	6.110"	90	-	6" - 36"	S	258 & 260 - 270	288 - 302
SS	464	6.188"	5.110"	85	-	6" - 36"	SS_	276 & 277 - 284	288 - 302

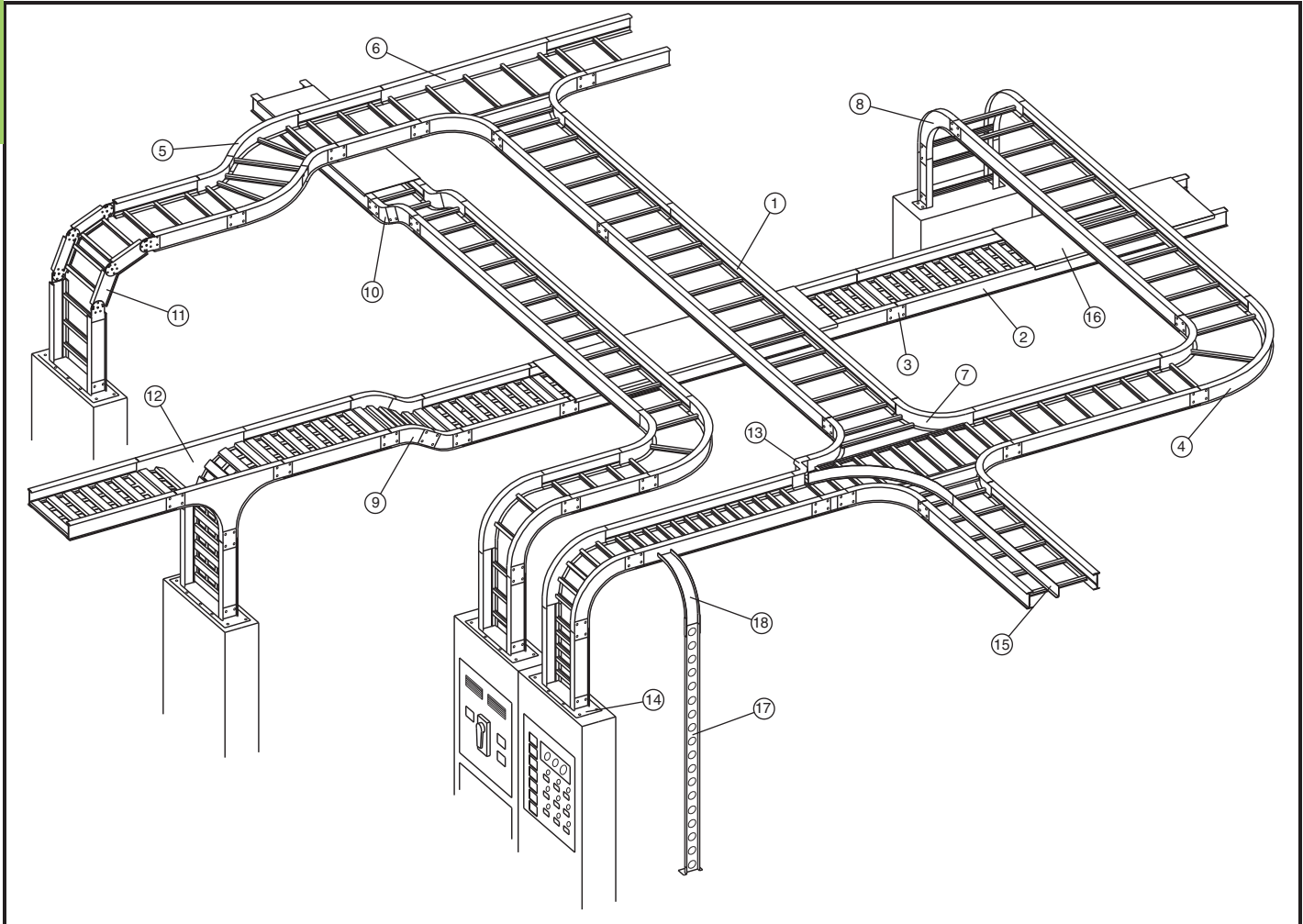
\*Material  
 A = Aluminum  
 S = Steel  
 SS\_ = Stainless Steel Type 304 or 316



Cooper B-Line cable trays conform to the requirements of IEC Standard 61537, 2001 Ed.

# Cable Tray Systems

## Cooper B-Line Cable Trays - Designed for Your Cable Support Requirements



### Nomenclature

1. Ladder Type Cable Tray
2. Ventilated Trough Type Cable Tray
3. Straight Splice Plate
4. 90° Horizontal Bend, Ladder Type Cable Tray
5. 45° Horizontal Bend, Ladder Type Cable Tray
6. Horizontal Tee, Ladder Type Cable Tray
7. Horizontal Cross, Ladder Type Cable Tray
8. 90° Vertical Outside Bend, Ladder Type Cable Tray
9. 45° Vertical Outside Bend, Ventilated Type Cable Tray
10. 30° Vertical Inside Bend, Ladder Type Cable Tray
11. Vertical Bend Segment (VBS)
12. Vertical Tee Down, Ventilated Trough Type Cable Tray
13. Left Hand Reducer, Ladder Type Cable Tray
14. Frame Type Box Connector
15. Barrier Strip Straight Section
16. Solid Flanged Tray Cover
17. Ventilated Channel Straight Section
18. Channel Cable Tray, 90° Vertical Outside Bend