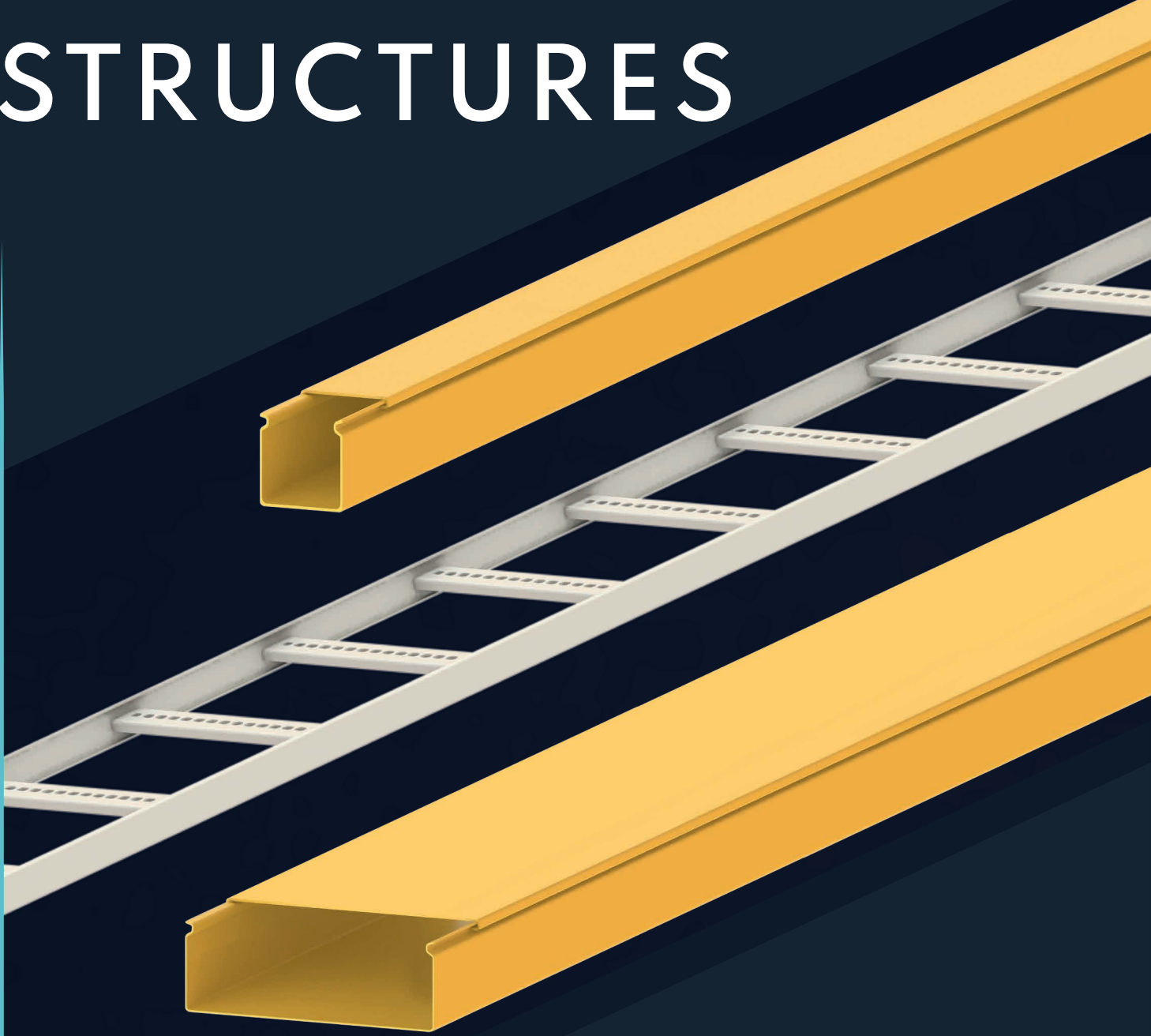


DATA CENTER CABLING STRUCTURES



Call Center | +90 444 1 726

TELECOM.samm.com

Fiber Raceway Systems

Samm fiber optic raceway system is a fully enclosed ducting system that segregates, routes, and protects fiber optic cables and jumpers from building entry point to fiber termination and distribution equipment. With the raceway system, fiber is easily traced and accessed through its convenient fully wrap-around, lay-in design.

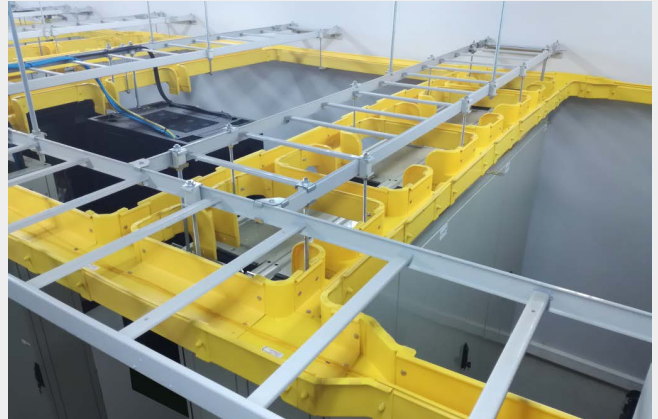
Straight channels and curved fittings are specifically designed to prevent fibers from violating a 50mm minimum bend Radius requirement and they protect fibers from snagging, crimping, and stress.

The system's modular design and extensive mounting kit selection enable the Project engineer to meet cable capacity requirements and future expansion needs using existing superstructure, cable racking and/or equipment racking.

The flexibility and simplicity of the Samm raceway system ensures cost-effective installations for new or existing cable routes in Central Offices, CEVs, Head-ends, Remote Offices, Data Centers, and Wiring Closets.

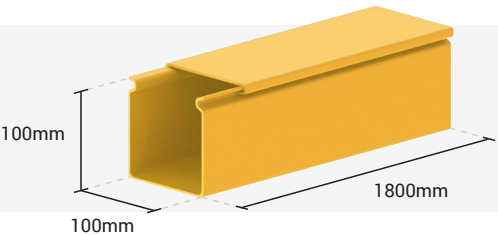
Technical Features

- All exposed surfaces are textured
- High impact thermoplastic robust design,PC/ABS blend
- Flammability rating of V-0 according to UL 94
- Hardware-free covers on all components
- Halogen-free (RoHS compliant)
- Robust and strong product design
- Versatile mounting kits
- Internal cable retainers

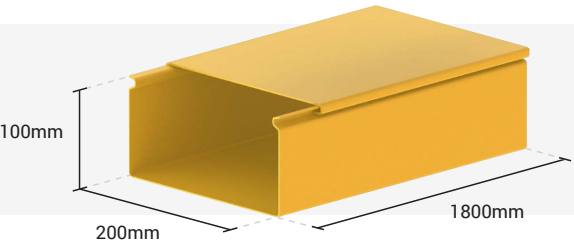


Solid Channels

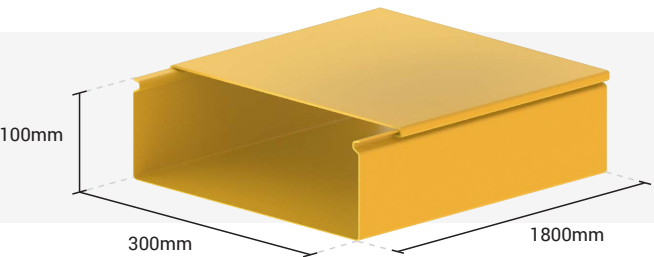
Description	Order Code
100mm_Solid Channel, W/O Cover	HT00348
100mm_Solid Channel Cover	HT00349
100mm_Solid Channel, W/ Cover	YT00252



200mm_Solid Channel, W/O Cover	HT00437
200mm_Solid Channel Cover	HT00438
200mm_Solid Channel, W/ Cover	YT00302



300mm_Solid Channel, W/O Cover	HT00435
300mm_Solid Channel Cover	HT00436
300mm_Solid Channel, W/ Cover	YT00070



Usable Filling Capacities

	Cable Diameter mm	Duct 100 x 100	Duct 100 x 200	Duct 100 x 300	Tube 50 D.	Tube 100 D.
Recommended	1.7	960	1920	2880	250	500
	2	721	1443	2164	208	415
	2.4	500	1000	1500	144	288
	3	320	640	960	100	200
Maximum	1.7	1728	3456	5184		
	2	1298	2597	3895		
	2.4	905	1810	2715		
	3	580	1160	1740		

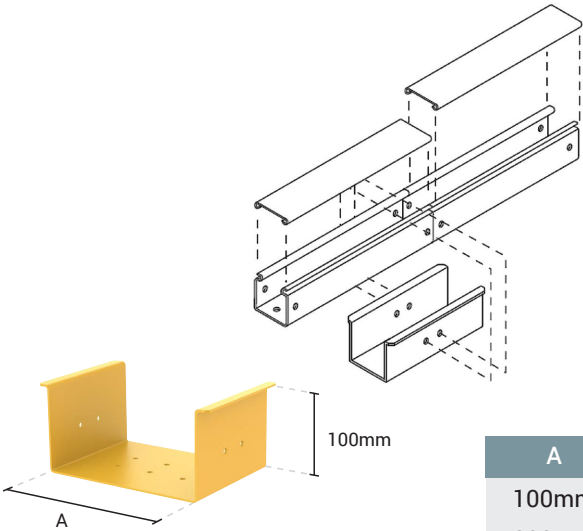
Recommended numbers are according to Telcordia 449 (maximum 50 mm pile height)

Assemblies

Channel to Channel Assembly

To create straight sections of channel beyond 1.8 meter in length, individual straight sections are joined using a channel splice position the end of one channel half way into the channel splice. Fasten the two components using M6 mushroom head bolts and nuts butt the second channel to the first within the channel splice, assemble and fasten in a similar manner.

Description	Order Code
100mm_Solid Channel Fitting	YT00249
200mm_Solid Channel Fitting	YT00299
300mm_Solid Channel Fitting	YT00251

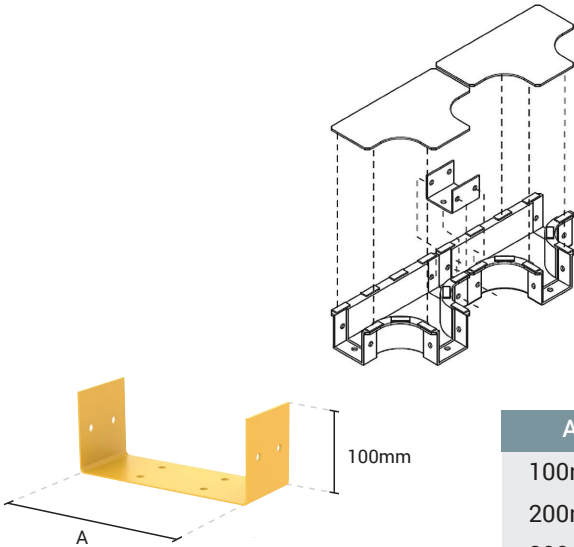


A
100mm
200mm
300mm

Fitting to Fitting Assembly

To assemble two fittings together use a fitting splice fitting splices are designed to fit within the female receptacle on each fitting. Position the fitting splice within the receptacle of the fitting itself. Fasten the two components using M6 mushroom head bolts and nuts place the second fitting over the fitting splice and fasten in a similar manner.

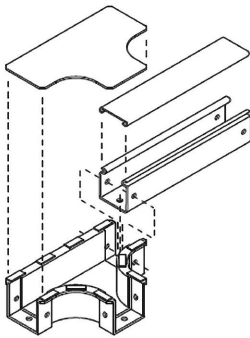
Description	Order Code
100mm_Accessory Fitting	YT00127
200mm_Accessory Fitting	YT00075
300mm_Accessory Fitting	YT00254



A
100mm
200mm
300mm

Fitting to Fitting Assembly

All fittings are designed with female receptacles at their outlets. These receptacles are dimensionally designed to accept straight channels without the use of additional parts or junction kits. This helps to reduce the total number of parts required for typical installations. Fewer parts to install translates into reduced material costs and assembly time. To install a fitting to the end of a channel section, simply slip the channel into the receptacle of the fitting. Fasten the two components using M6 mushroom head bolts and nuts. When complete the channel cover fits under the fitting cover, eliminating any gaps.

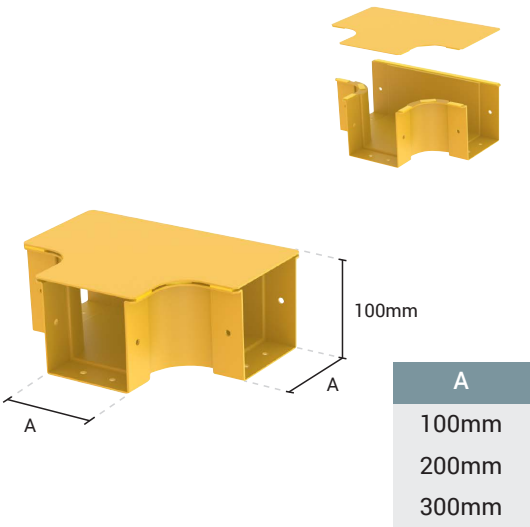


No Accessory Fitting Required!

Fittings

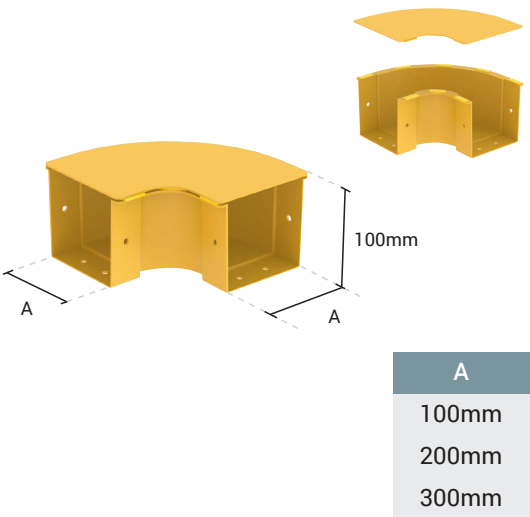
Horizontal "T" Connections

Description	Order Code
100mm_Horizontal "T" Connection, W/O Cover	HT00334
100mm_Horizontal "T" Connection Cover	HT00335
100mm_Horizontal "T" Connection, W/ Cover	YT00241
200mm_Horizontal "T" Connection, W/O Cover	HT00622
200mm_Horizontal "T" Connection Cover	HT00623
200mm_Horizontal "T" Connection, W/ Cover	YT00304
300mm_Horizontal "T" Connection, W/O Cover	HT00371
300mm_Horizontal "T" Connection Cover	HT00372
300mm_Horizontal "T" Connection, W/ Cover	YT00086



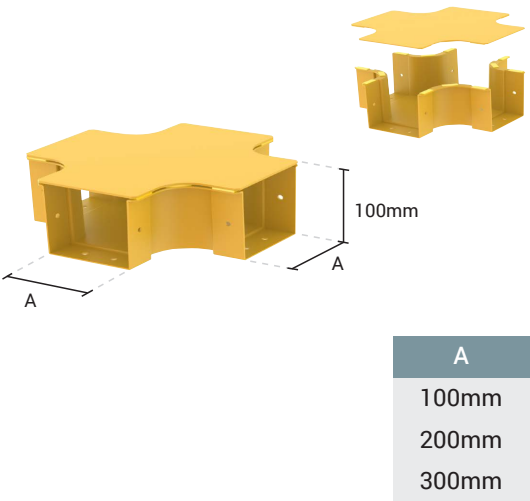
90° Horizontal Elbows

Description	Order Code
100mm_Horizontal Elbow, W/O Cover	HT00337
100mm_Horizontal Elbow Cover	HT00336
100mm_Horizontal Elbow, W/ Cover	YT00242
200mm_Horizontal Elbow, W/O Cover	HT00624
200mm_Horizontal Elbow Cover	HT00625
200mm_Horizontal Elbow, W/ Cover	YT00303
300mm_Horizontal Elbow, W/O Cover	HT00362
300mm_Horizontal Elbow Cover	HT00361
300mm_Horizontal Elbow, W/ Cover	YT00256



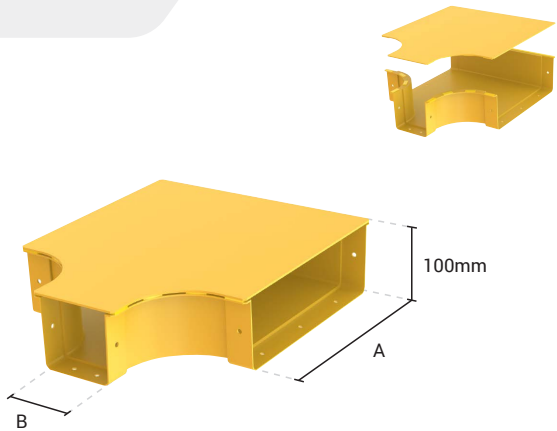
4-Way Cross Connections

Description	Order Code
100mm_4 Way Cross Connection, W/O Cover	HT00344
100mm_4 Way Cross Connection Cover	HT00345
100mm_4 Way Cross Connection, W/ Cover	YT00246
200mm_4 Way Cross Connection, W/O Cover	HT00656
200mm_4 Way Cross Connection Cover	HT00657
200mm_4 Way Cross Connection, W/ Cover	YT00309
300mm_4 Way Cross Connection, W/O Cover	HT00396
300mm_4 Way Cross Connection Cover	HT00397
300mm_4 Way Cross Connection, W/ Cover	YT00227



Horizontal "T" Reducers

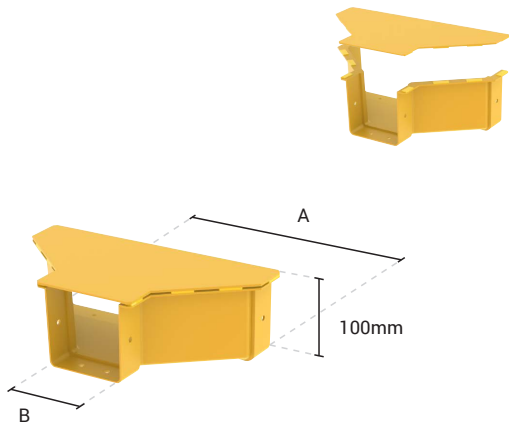
Description	Order Code
3010_Horizontal "T" Reducer, W/O Cover	HT00346
3010_Horizontal "T" Reducer Cover	HT00347
3010_Horizontal "T" Reducer, W/ Cover	YT00247
3020_Horizontal "T" Reducer, W/O Cover	HT00645
3020_Horizontal "T" Reducer Cover	HT00646
3020_Horizontal "T" Reducer, W/ Cover	YT00313
2010_Horizontal "T" Reducer, W/O Cover	HT00647
2010_Horizontal "T" Reducer Cover	HT00648
2010_Horizontal "T" Reducer, W/ Cover	YT00312



Size Coding	A	B
3010	300mm	100mm
3020	300mm	200mm
2010	200mm	100mm

Horizontal Line Reducers

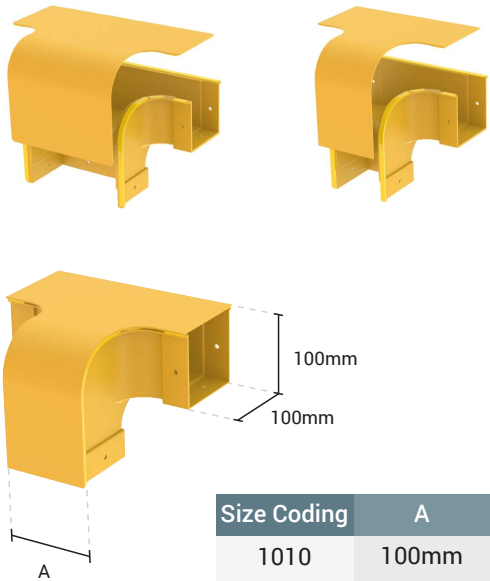
Description	Order Code
3010_Horizontal Reducer, W/O Cover	HT00366
3010_Horizontal Reducer Cover	HT00365
3010_Horizontal Reducer, W/ Cover	YT00257
3020_Horizontal Reducer, W/O Cover	HT00660
3020_Horizontal Reducer Cover	HT00661
3020_Horizontal Reducer, W/ Cover	YT00073
2010_Horizontal Reducer, W/O Cover	HT00662
2010_Horizontal Reducer Cover	HT00663
2010_Horizontal Reducer, W/ Cover	YT00314



Size Coding	A	B
3010	300mm	100mm
3020	300mm	200mm
2010	200mm	100mm

Vertical Offset Drops | 100mm

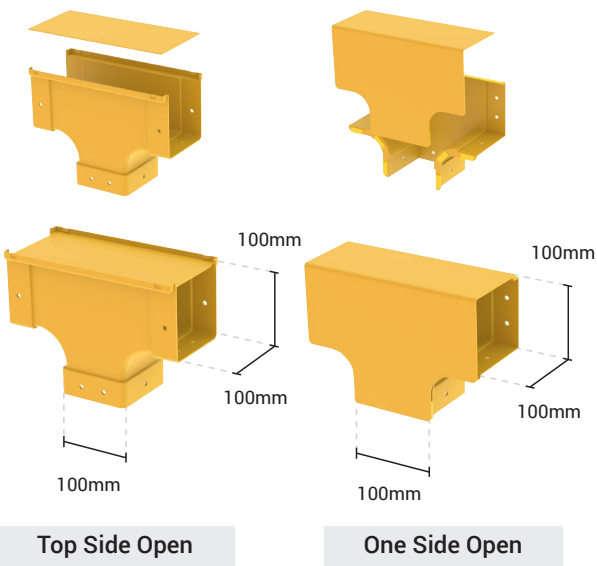
Description	Order Code
1010_Vertical Offset Drop, W/O Cover	HT00637
1010_Vertical Offset Drop Cover	HT00638
1010_Vertical Offset Drop, W/ Cover	YT00298
1020_Vertical Offset Drop, W/O Cover	HT00640
1020_Vertical Offset Drop Cover	HT00639
1020_Vertical Offset Drop, W/ Cover	YT00563



Size Coding	A
1010	100mm
1020	200mm

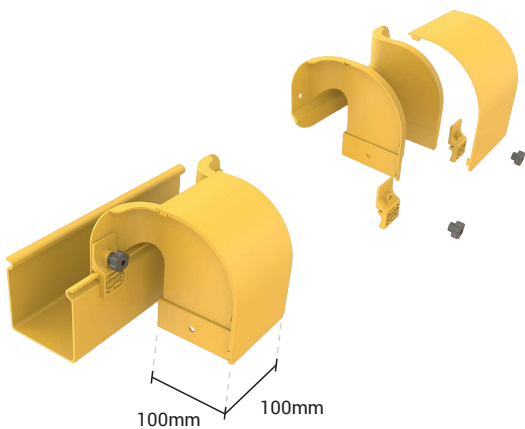
Vertical Line Drops | 100mm

Description	Order Code
100mm_Top Side Open Vertical Drop, W/O Cover	HT00753
100mm_Top Side Open Vertical Drop Cover	HT00754
100mm_Top Side Open Vertical Drop, W/ Cover	YT00734
100mm_One Side Open Vertical Drop, W/O Cover	HT00342
100mm_One Side Open Vertical Drop Cover	HT00343
100mm_One Side Open Vertical Drop, W/ Cover	YT00245



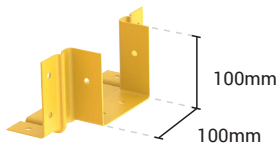
Quick Drop | 100mm

Description	Order Code
1010_Vertical Quick Drop W/O Cover	HT01317
1010_Vertical Quick Drop Cover	HT01318
1010_Vertical Quick Drop Fixture	HT01320
1010_Vertical Quick Drop W/ Cover	YT01173

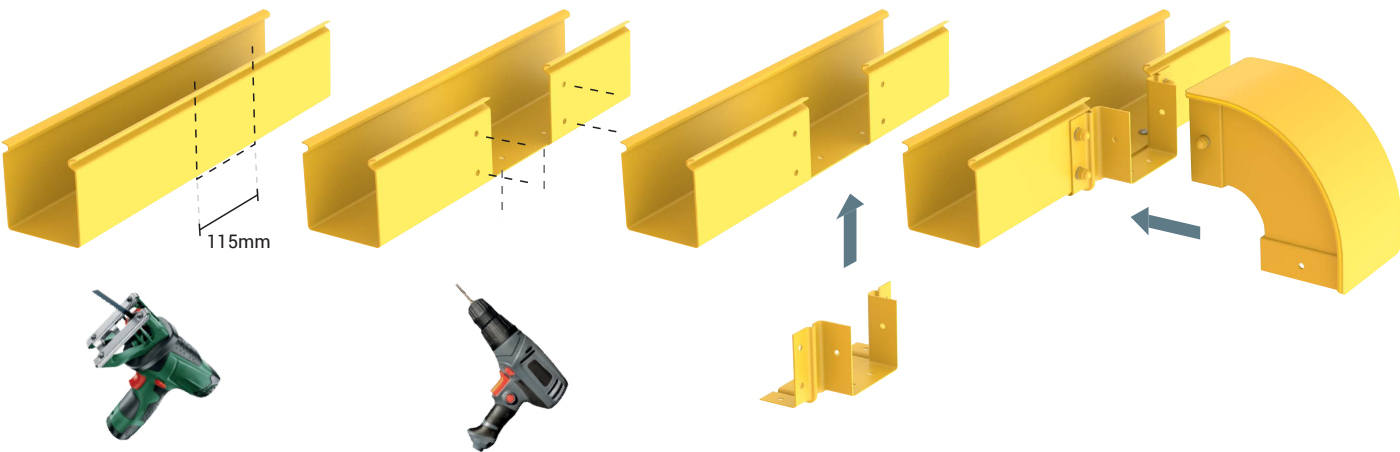


Cut-off Drop Connection

Description	Order Code
100mm_Cut-off Drop Connection	YT00286

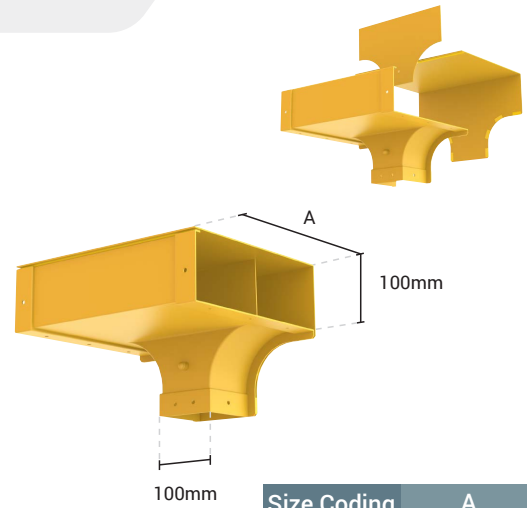


- 1 Cut open the channel as shown below.
- 2 Drill screw holes at the proper screw points.
- 3 Mount the Connection and screw it properly.
- 4 Install the compatible drop out-let.



Vertical Line Drops

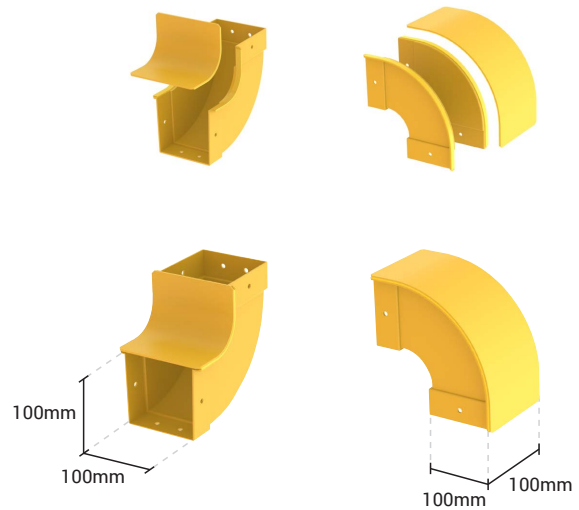
Description	Order Code
2010_Vertical Line Drop, W/O Cover	HT00642
2010_Vertical Line Drop Cover	HT00641
2010_Vertical Line Drop, W/ Cover	YT00310
3010_Vertical Line Drop, W/O Cover	HT00359
3010_Vertical Line Drop Cover	HT00360
3010_Vertical Line Drop, W/ Cover	YT00255



Size Coding	A
2010	200mm
3010	300mm

90° Inside/Outside Open Vertical Elbows

Description	Order Code
100mm_Inside Open Vertical Elbow, W/O Cover	HT00338
100mm_Inside Open Vertical Elbow Cover	HT00339
100mm_Inside Open Vertical Elbow, W/ Cover	YT00243
100mm_Outside Open Vertical Elbow, W/O Cover	HT00341
100mm_Outside Open Vertical Elbow Cover	HT00340
100mm_Outside Open Vertical Elbow, W/ Cover	YT00244

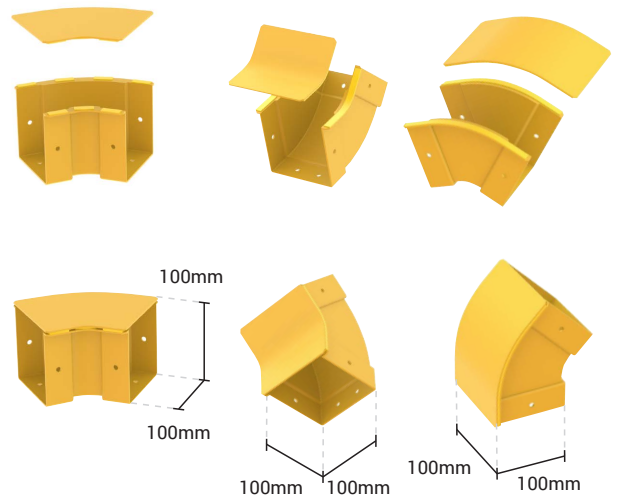


Inside Open

Outside Open

45° Horizontal/Vertical Elbows

Description	Order Code
100mm_Horizontal Elbow 45°, W/O Cover	HT00649
100mm_Horizontal Elbow 45° Cover	HT00650
100mm_Horizontal Elbow 45°, W/ Cover	YT00123
100mm_Outside Open Vertical Elbow 45°, W/O Cover	HT00651
100mm_Outside Open Vertical Elbow 45° Cover	HT00652
100mm_Outside Open Vertical Elbow 45°, W/ Cover	YT00565
100mm_Inside Open Vertical Elbow 45°, W/O Cover	HT00653
100mm_Inside Open Vertical Elbow 45° Cover	HT00654
100mm_Inside Open Vertical Elbow 45°, W/ Cover	YT00564



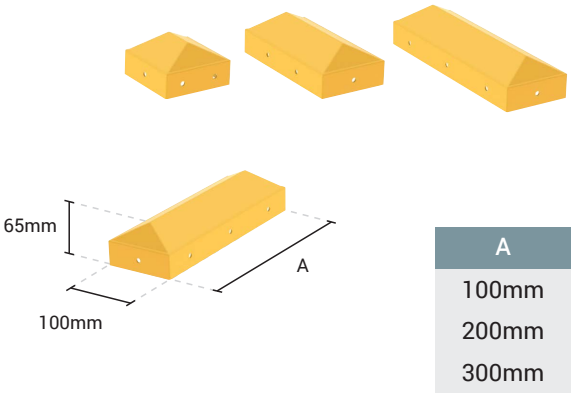
Horizontal

Inside Open

Outside Open

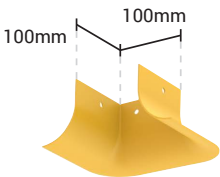
Channel End Caps

Description	Order Code
100mm_Channel End Cap	YT00248
200mm_Channel End Cap	YT00311
300mm_Channel End Cap	YT00091



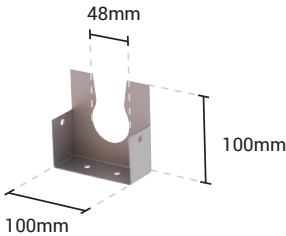
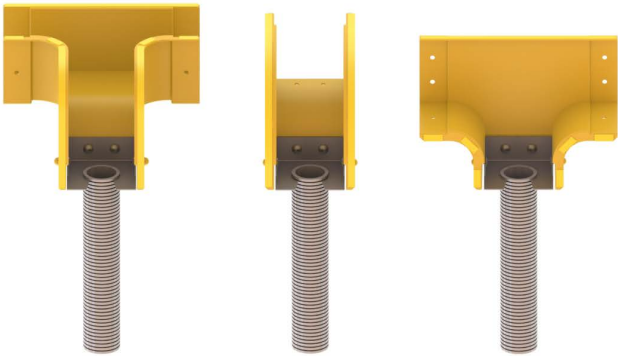
Accessory Outlets

Description	Order Code
100mm_Bend Radius Outlet Trumpet	YT00250



Compatible with all 100mm drop outlets

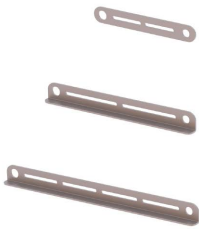
Description	Order Code
Flex Tube Adapter-48-1	YT00320



Compatible with all 100mm drop outlets

Surface Hanging Supports - I Profiles

Description	Order Code
100mm_I11 Threaded Rod Hanging Support	YT00061
200mm_I12 Threaded Rod Hanging Support	YT00315
300mm_I13 Threaded Rod Hanging Support	YT00316



For one side hanging M14 or M16 rod sizes are recommended
For two sides hanging M12 or M14 rod sizes are recommended

Installation Types

Underfloor Hanging



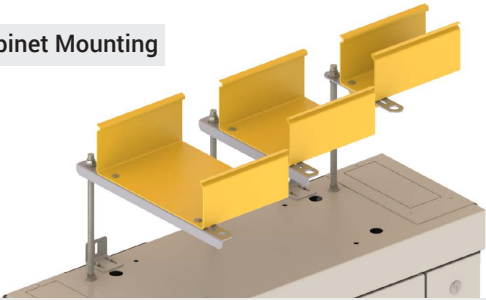
Ceiling Hanging



Ladder Mounting

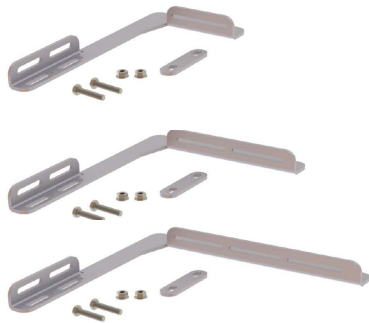


Over Cabinet Mounting



Ladder Hanging Supports - L Profiles

Description	Order Code
100mm_L11 Cable Ladder Connection Set	YT00645
200mm_L12 Cable Ladder Connection Set	YT00646
300mm_L13 Cable Ladder Connection Set	YT00647



Installation Types

Supplied with M8 bolt and nut set



Surface Hanging Supports - U Profiles

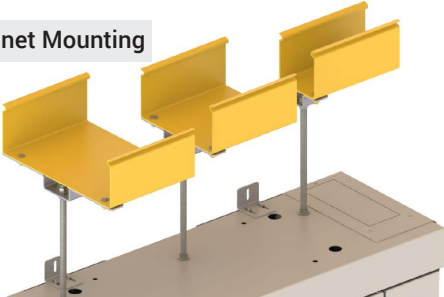
Description	Order Code
100mm_U11 Threaded Rod Hanging Support	HT00096
200mm_U12 Threaded Rod Hanging Support	HT00514
300mm_U13 Threaded Rod Hanging Support	HT00515

Installation Types

Underfloor Hanging



Over Cabinet Mounting

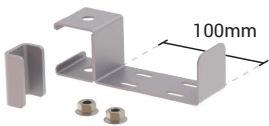


M14 or M16 rod sizes are recommended

Hanging Supports - C Profiles

Description	Order Code
100mm_C11 Threaded Rod Hanging Support	YT01011

Installation Types

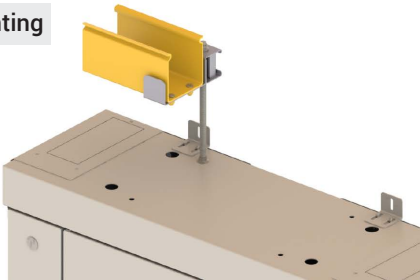


M10 or M12 rod sizes are recommended

Ladder Mounting



Over Cabinet Mounting



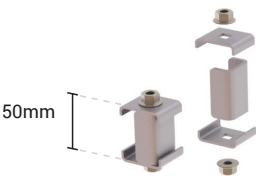
Underfloor Hanging



Ladder Mounting Clamp

Description	Order Code
50mm_LC1 Ladder Clamp Set	YT01012

Installation Types

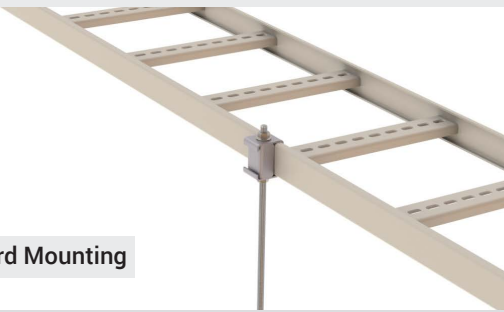


M10 or M12 rod sizes are recommended

Upward Mounting



Downward Mounting



Raceway Fastening Components

Description	Order Code
Bolt+Nut+Cap Set	YT00259



Flex Tubes

Description	Order Code
Single Wall Slitted Flex Tube-48	YT00644



Galvanized Steel Rods and Nuts

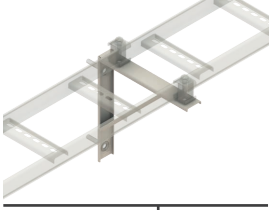
Description	Order Code
M10 Threaded Rod,Galvanized-1M	HT00350
M12 Threaded Rod,Galvanized-1M	HT01215
M14 Threaded Rod,Galvanized-1M	HT01216
M16 Threaded Rod,Galvanized-1M	HT01217

Description	Order Code
DIN 6923 M10 Flanged Nut,Galvanized	HT00890
DIN 6923 M12 Flanged Nut,Galvanized	HT01218
DIN 6923 M14 Flanged Nut,Galvanized	HT01219
DIN 6923 M16 Flanged Nut,Galvanized	HT01220

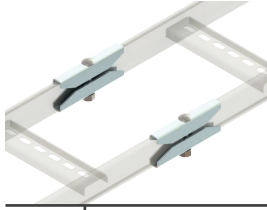


Cable Pathway and Management Systems

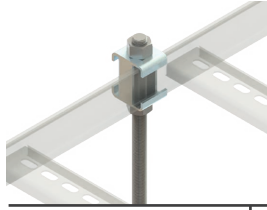
Wall Mounting Triangle Bracket



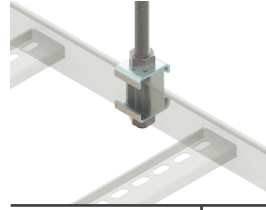
Straight Ladder Splicing Kit



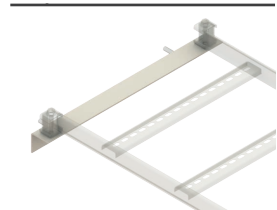
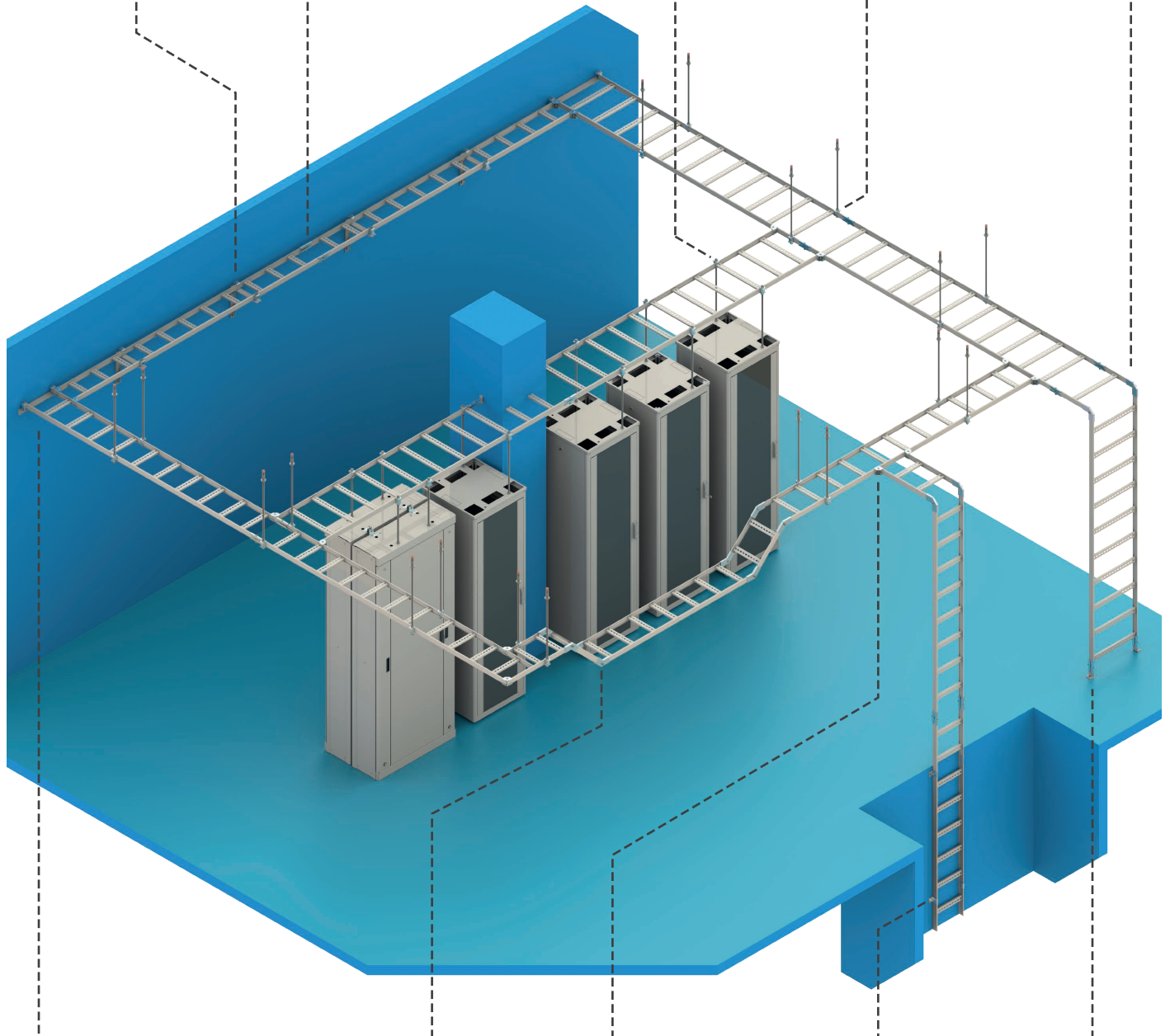
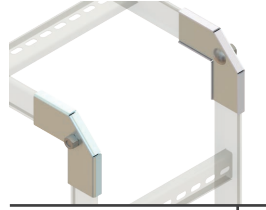
Over Cabinet Threaded Rod



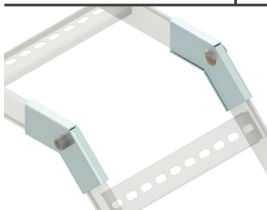
Ceiling Hanging Threaded Rod



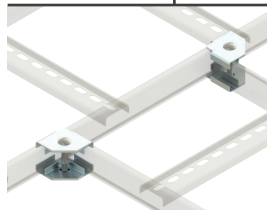
90° Vertical Drop Splicing Kit



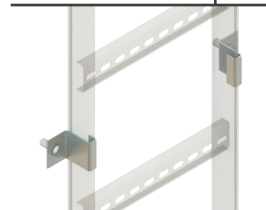
Wall Mounting "L" Bracket



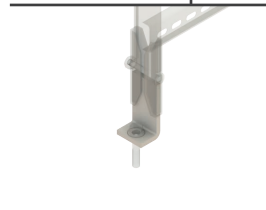
45° Vertical Drop Splicing Kit



Corner Splicing Kit



Wall Mounting "U" Clamp

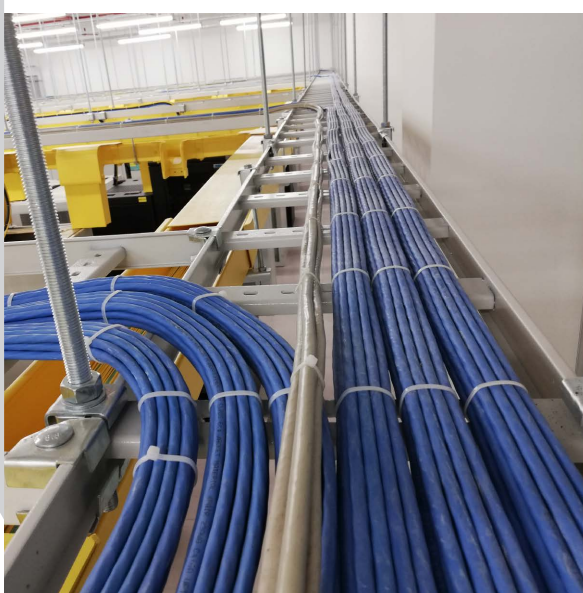
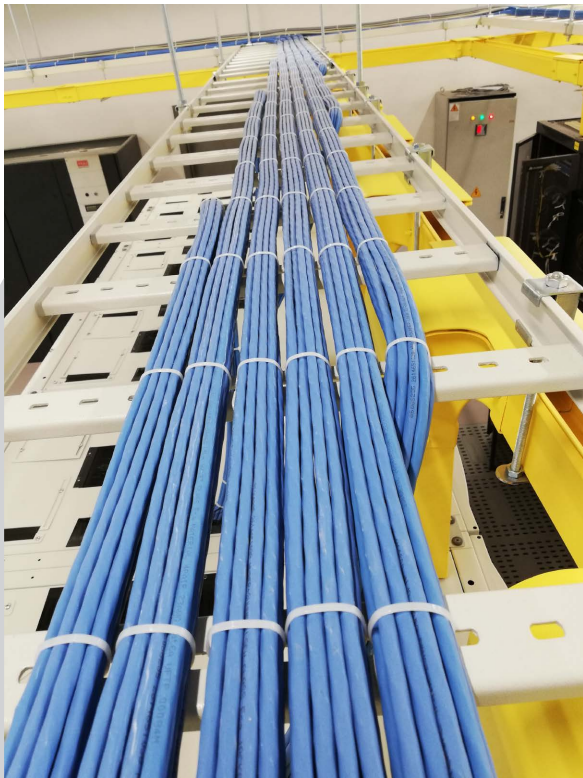


Ladder End Mounting Bracket

The SAMM modular cable ladder systems are designed to manage the structural cabling in the system halls in a horizontal or vertical cabling, in order to manage the cables along the ceiling, wall and floor.

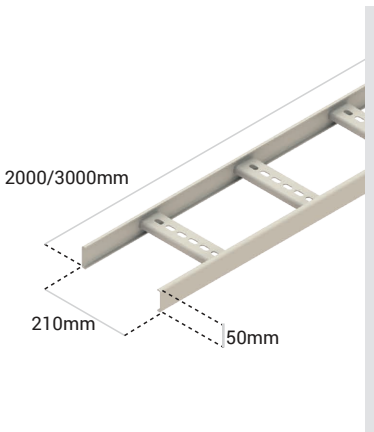
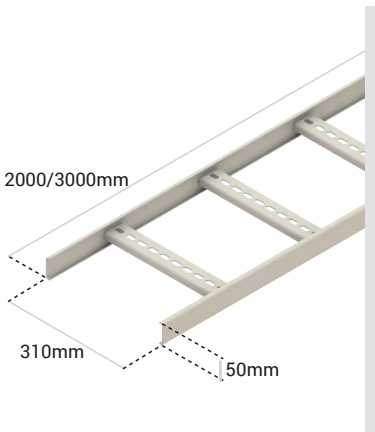
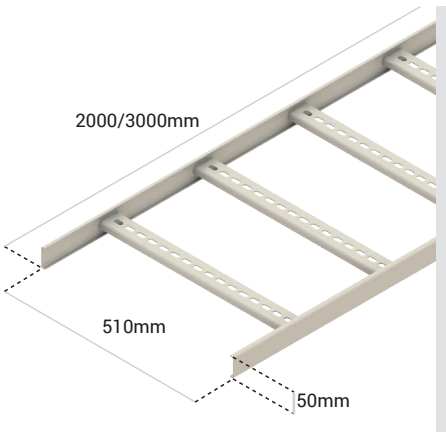
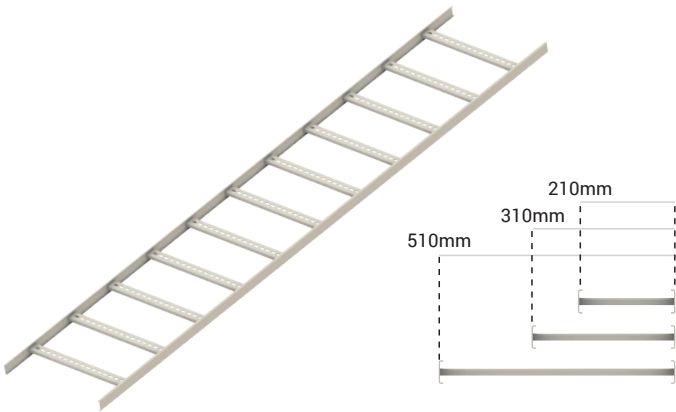
These structures protect cables from environmental conditions, making network connections reconfiguring or troubleshooting more efficient.

- ✓ Roll form construction
- ✓ Robust and strong design
- ✓ Wide range accessory variety
- ✓ Epoxy polyester powder coating



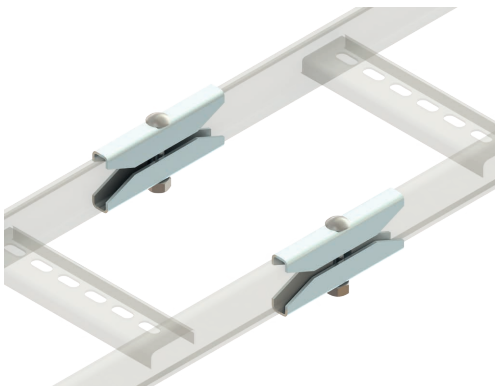
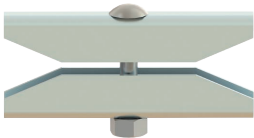
Cable Ladders

Description	Order Code
210mm Cable Ladder_2MT	210LDR_2M
310mm Cable Ladder_2MT	310LDR_2M
510mm Cable Ladder_2MT	510LDR_2M
210mm Cable Ladder_3MT	210LDR_3M
310mm Cable Ladder_3MT	310LDR_3M
510mm Cable Ladder_3MT	510LDR_3M



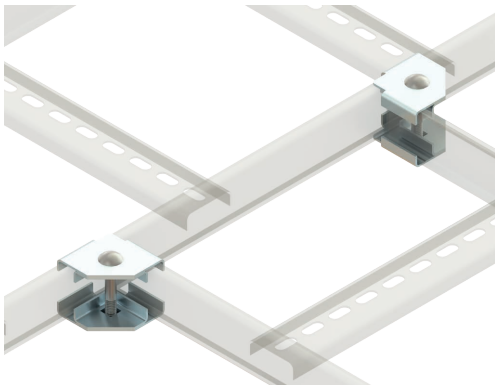
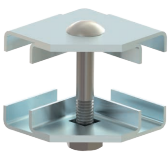
Straight Ladder Splicing Kit

Description	Order Code
Straight Ladder Splicing Kit	LD-SPLK-180



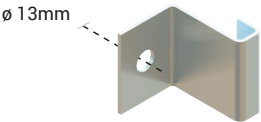
Corner Splicing Kit

Description	Order Code
Corner Splicing Kit	LD-CSPLK-90

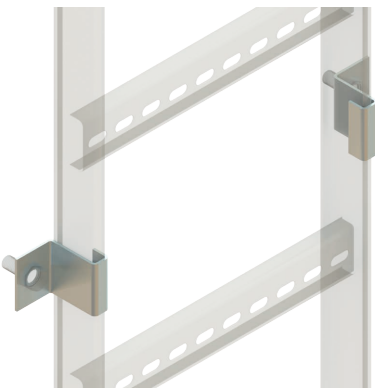


Wall Mounting "U" Clamp

Description	Order Code
Wall Mounting "U" Clamp	LD-WMUC

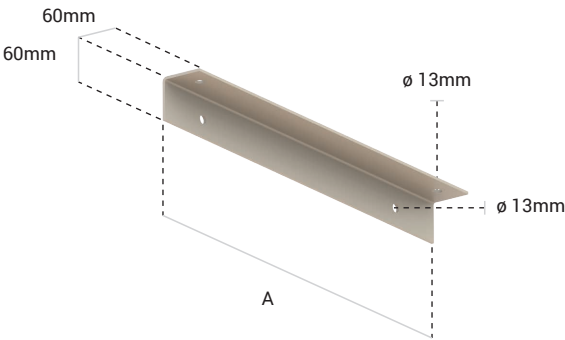


For Wall Mounting, Order 1 Set of **LD-MS-1** | Page 7

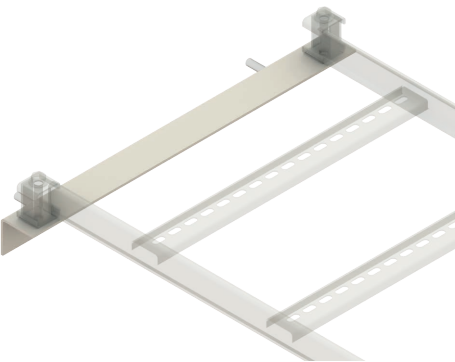


Wall Mounting "L" Bracket

Description	Order Code
Wall Mounting "L" Bracket - 210	LD-WMLB-210
Wall Mounting "L" Bracket - 310	LD-WMLB-310
Wall Mounting "L" Bracket - 510	LD-WMLB-510



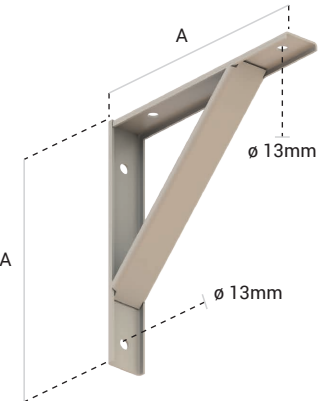
For Wall Mounting, Order 2 Sets of **LD-MS-1** | Page 7
For Ladder Mounting, Order 2 Sets of **LD-FCS-M12** | Page 6



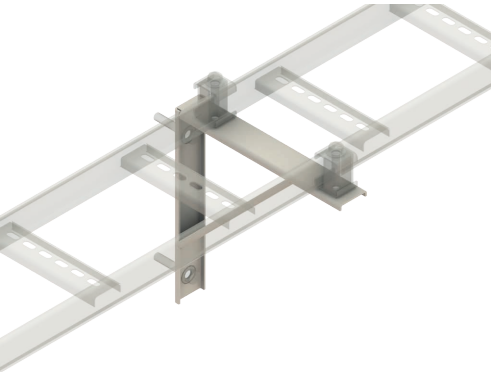
Ladder Size	A
510mm	600mm
310mm	400mm
210mm	300mm

Wall Mounting Triangle Bracket

Description	Order Code
Wall Mounting Triangle Bracket - 210	LD-WMTB-210
Wall Mounting Triangle Bracket - 310	LD-WMTB-310
Wall Mounting Triangle Bracket - 510	LD-WMTB-510



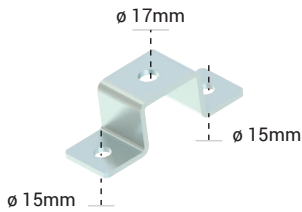
For Wall Mounting, Order 2 sets of **LD-MS-1** | Page 7
For Ladder Mounting, Order 2 Sets of **LD-FCS-M12** | Page 6



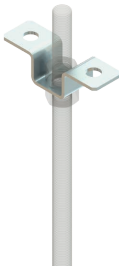
Ladder Size	A
510mm	600mm
310mm	400mm
210mm	300mm

Ceiling Hanging “U” Profile

Description	Order Code
Ceiling Hanging “U” Profile	LD-CHUP

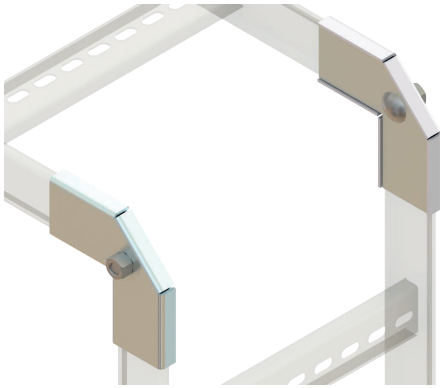


For Ceiling Mounting, Order 1 Set of **LD-MS-7** | Page 7



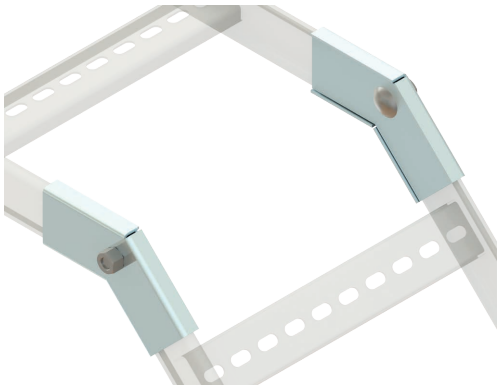
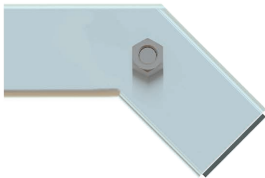
90° Vertical Drop Splicing Kit

Description	Order Code
90° Vertical Drop Splicing Kit	LD-SPLK-90



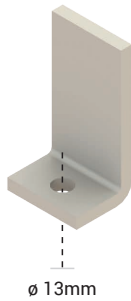
45° Vertical Drop Splicing Kit

Description	Order Code
45° Vertical Drop Splicing Kit	LD-SPLK-45

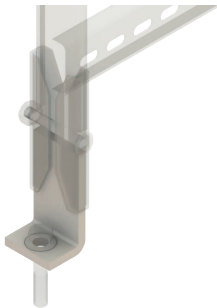


Ladder End Mounting Bracket

Description	Order Code
Ladder End Mounting Bracket	LD-EMB

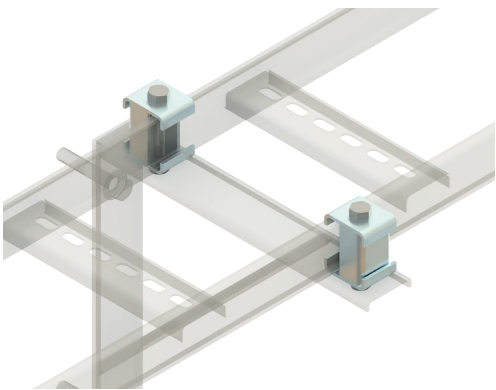
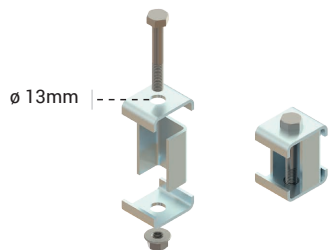


For Surface Mounting, Order 1 Set of **LD-MS-1** | Page 7



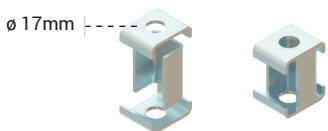
Ladder Fixation Clamp Set

Description	Order Code
Ladder Fixation Clamp Set - M12	LD-FCS-M12

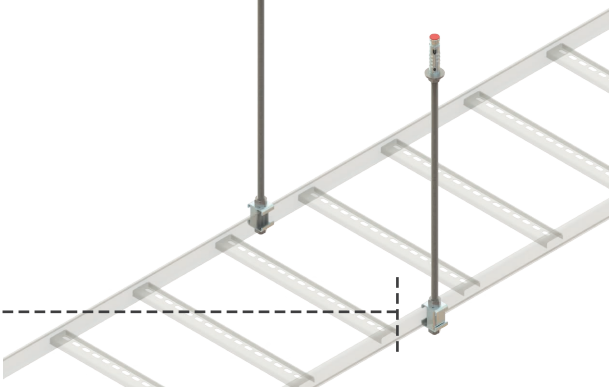
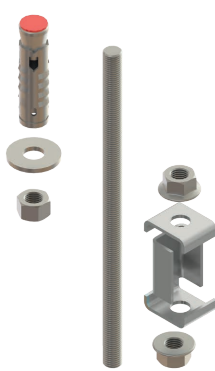


Ladder Hanging Clamp Sets

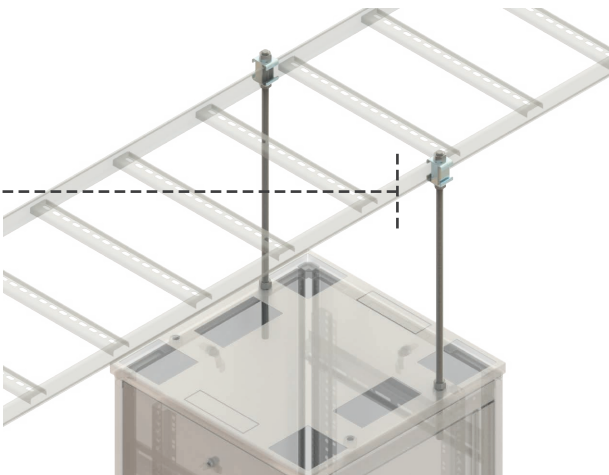
Description	Order Code
Ladder Hanging Clamp Bracket - M16	LD-HCB-M16



Ceiling Hanging Threaded Rod Sets	
Ceiling Hanging Threaded Rod Set - 200cm	LD-CH-TRS-200
Ceiling Hanging Threaded Rod Set - 100cm	LD-CH-TRS-100



Over Cabinet Threaded Rod Sets	
Over Cabinet Threaded Rod Set - 100cm	LD-OC-TRS-100
Over Cabinet Threaded Rod Set - 75cm	LD-OC-TRS-75
Over Cabinet Threaded Rod Set - 50cm	LD-OC-TRS-50



Mounting Sets

Description	Order Code
M12 Bolt + Sleeve Anchor + Washer	LD-MS-1
M16 Threaded Rod (200cm) + 3 Nuts + Sleeve Anchor + Flat Washer	LD-MS-2
M16 Threaded Rod (100cm) + 3 Nuts + Sleeve Anchor + Flat Washer	LD-MS-3
M16 Threaded Rod (100cm) + 4 Nuts	LD-MS-4
M16 Threaded Rod (75cm) + 4 Nuts	LD-MS-5
M16 Threaded Rod (50cm) + 4 Nuts	LD-MS-6
M12 2 Wedge Anchors + 2 Washers + 2 Nuts	LD-MS-7

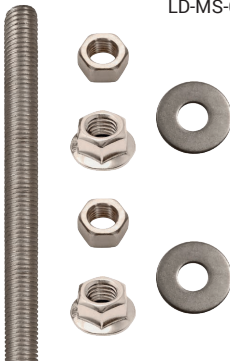
LD-MS-1



LD-MS-2
LD-MS-3













LD-MS-4
LD-MS-5
LD-MS-6



LD-MS-7



Mounting Parts

Description	Order Code	Illustration
M16 Threaded Rod 200 cm	LD-MA-1	
M16 Threaded Rod 100 cm	LD-MA-2	
M16 Threaded Rod 75 cm	LD-MA-3	
M16 Threaded Rod 50 cm	LD-MA-4	
M16 Sleeve Anchor	LD-MA-5	
M16 Nut	LD-MA-6	
M16 Flange Nut	LD-MA-7	
M16 Flat Washer	LD-MA-8	
M16 Connector	LD-MA-9	
M12 Nut	LD-MA-10	
M12 Sleeve Anchor	LD-MA-11	
M12 Bolt	LD-MA-12	
M12 Flat Washer	LD-MA-13	
M12 Wedge Anchor	LD-MA-14	