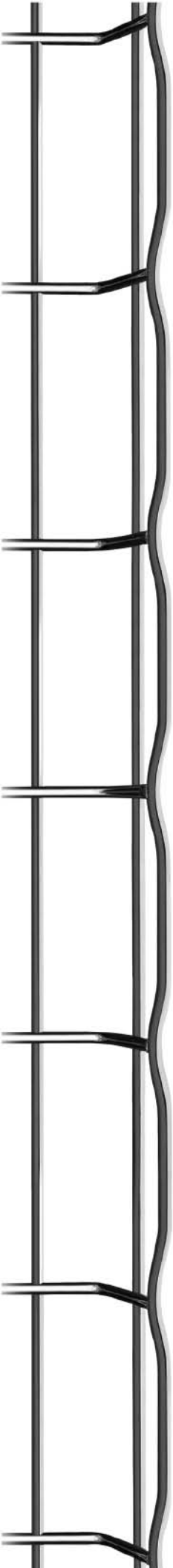
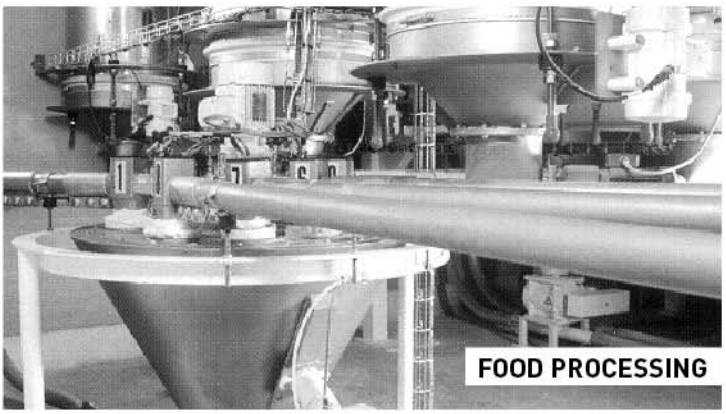


INSTALLATION GUIDE

CABLOFIL®

legrand®

EXTERIOR INSTALLATION



FOOD PROCESSING

UNDERFLOOR INSTALLATION

INTERIOR INSTALLATION

INDUSTRIAL PLANT

CABLOFIL WIRE MESH TRAY

Cablofil, the inventor of wire mesh cable tray is a revolutionary cable management system that provides exceptional strength combined with the flexibility to adapt easily to field requirements. Installation is easier since wire mesh requires fewer parts and the FAS system allows splice, bracket and accessory connections without hardware! Manufactured in the heartland of the US, Cablofil is dedicated to providing superior quality product, service and expertise.

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FINISHES

Cablofil wire cable tray and accessories are available in a variety of finishes to meet any industry need, from decorative to extreme environments. Use this chart to help you determine the best finish for your application and its availablilty.

Standard finish is EZ, electroplated zinc. (indoor applications) Stock finishes available include (EZ), electroplated zinc, (316L), 316 stainless steel, (GC), Hot dipped galvanized, (BL) Black powder coat paint

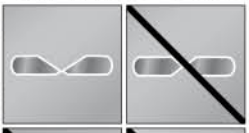
SYMBOL	MATERIAL	FINISH & STANDARD	Interior installations	Exterior installations	Petroleum Plants Chemical Plants	Marine/salt, Weak sulphurous environments	Acidic, alkaline environments	Food Production, Wash-down, Clean rooms	Halogen environments
PG	Carbon Steel ASTM A653	**Pre-Galvanized:** Continuous Galvanization Before Fabrication ASTM A 653	●						
EZ	Carbon Steel ASTM A510 Grade 1008	**Electrozinc:** Electrozinc plating ASTM B 633	●						
GC	Carbon Steel ASTM A510 Grade 1008	**Hot Dipped Galvanized:** After Fabrication ASTM A 123		●	●	●	●		
DC	Carbon Steel ASTM A510 Grade 1008	**Dacromet:** Zinc and Aluminum Protection Equivalent to Hot Dip Galvanization ASTM F 1136		●	●	●	●		
304L	Stainless Steel AISI Type 304L	**Stainless Steel 304L:** Cleaned and Passivated ASTM A 380		●	●	●	●	●	●
316L	Stainless Steel AISI Type 316L	**Stainless Steel 316L:** Cleaned and Passivated ASTM A 380		●	●	●	●	●	●
BL	Carbon Steel ASTM A510 Grade 1008	**Black Painted:** Black Powder Coated ASTM D 3451	●						
PE	Carbon Steel ASTM A510 Grade 1008	**Custom Painted:** Custom Color Powder Coated ASTM D 3451	●						

● recommended ● possible

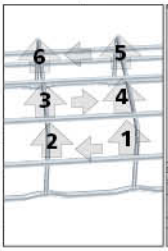
For a more detailed explanation of finish standards and compatibility, visit www.cablofil.com.

HOW TO CUT CABLOFIL CABLE TRAY

	LENGTH		WEIGHT		
	INCHES	MM	LBS	KG/1	
COUPFIL	24.8"	630	6	2.7	559 507



- Always use side action bolt cutters.
- Angle all cuts away from the new end.
- Cut each wire with one clean cut – eliminating any grinding or touch-up.



- Cut the bottom wires first, in order as shown, from the underside of the tray.
- Rest the lower jaw of the cutters against the cradle wire and cut at an angle away from the new end.

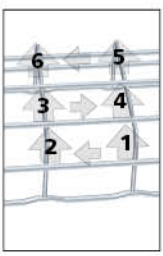
- Cut the side wires next, starting with the top wire.
- Make sure the finished cut is safe and ready for installation.

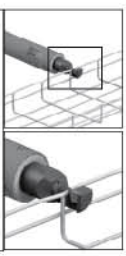
USING A POWER CUTTER TO CUT CABLOFIL CABLE TRAY

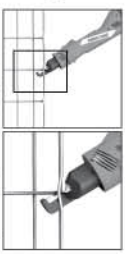
cutyfil™

	WEIGHT		
	LBS	KG/1	
CUTYFIL	9.5	4.3	559 557
REPLACEMENT BLADES	.4	.2	559 577
BATTERY	1	.5	559 567
CHARGER	2	.9	559 558

Cutyfil from Cablofil makes cutting wire cable tray easy. This lightweight power tool features a 330˚ swivel cutting head to make cuts from any angle. One button control engages and retracts blade for each cut. Cutyfil Kit comes in a padded carrying case with 2 batteries and a charger.





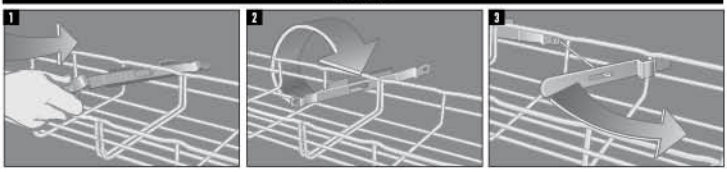


Use the same cutting procedures as outlined on the previous page when using Cutyfil. Remember to always wear safety goggles and follow safe procedures when using power equipment.

HOW TO SPLICE CABLOFIL CABLE TRAY – EDRN

SPLICING GUIDELINES			
CF30 – CF54 – CF105 – CF150	2" (50 mm)	12" (300 mm)	18" → 24" (450 → 600 mm)
EDRN splices needed on side wires	2x EDRN	2x EDRN	2x EDRN
EDRN splices needed on bottom of tray	–	–	1x OR 2x EDRN

INSTRUCTIONS



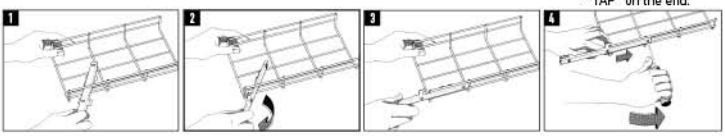
HOW TO SPLICE CABLOFIL CABLE TRAY – PRECLICK

SPLICING GUIDELINES			
CF54 – CF105 – CF150	2" → 8" (50 → 200 mm)	12" (300 mm)	18" → 24" (450 → 600 mm)
PRECLICK splices needed on side wires	2x PRECLICK	2x PRECLICK	2x PRECLICK
SWK splices needed on bottom of tray	–	1x SWK	2x SWK

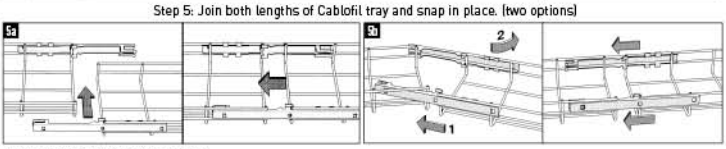
INSTRUCTIONS

Step 1-3: Snap a PRECLICK on each length of Cablofil tray to be joined.

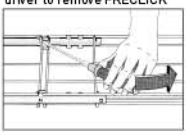
Step 4: Snap in place with a screw driver or a simple "TAP" on the end.



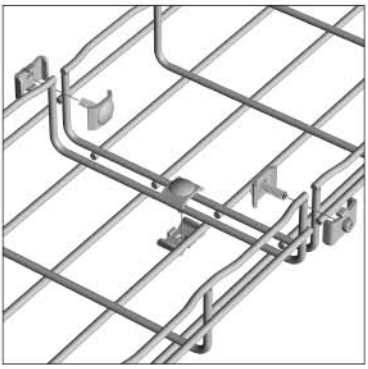
Step 5: Join both lengths of Cablofil tray and snap in place. (two options)



Removing PRECLICK: Use a screw driver to remove PRECLICK



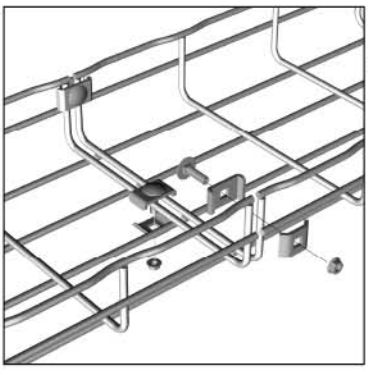
HOW TO SPLICE CABLOFIL CABLE TRAY - SWK



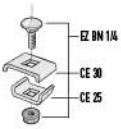
- Use SWK to splice any two sections of Cablofil tray.
- Swaged nut allows clamp to be stationary while nut is tightened.
- Consult chart below for correct number of SWK sets needed for each width of tray.

CF30 – CF54 – CF105 – CF150	2" (50 mm)	4" → 8" (100 → 200 mm)	12" → 24" (300 → 600 mm)
SWK attachment sets needed for side wires	2x SWK	2x SWK	2x SWK
SWK attachment sets needed for bottom wires	–	1x SWK	2x SWK

HOW TO SPLICE CABLOFIL CABLE TRAY - CE 25, CE 30



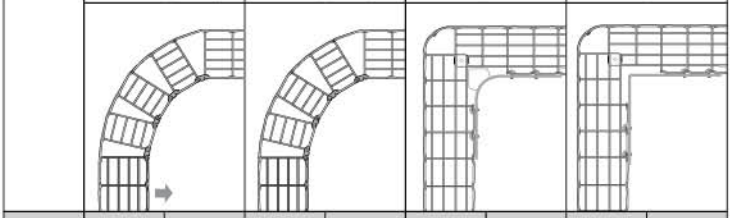
- Use CE 25 and CE 30 with EZ BN 1/4 to splice any two sections of Cablofil tray.
- Consult chart below for correct number of Nut/ Bolt/Clamp sets needed for each width of tray.



CF30 – CF54 – CF105 – CF150	2" (50 ⏮)	4" → 8" (100 → 200 ⏮)	12" → 24" (300 → 600 ⏮)
CE 25-CE30 attachment sets needed for side wires	2x CE 25, CE 30, EZ BN 1/4	2x CE 25, CE 30, EZ BN 1/4	2x CE 25, CE 30, EZ BN 1/4
CE 25-CE30 attachment sets needed for bottom wires	–	1x CE 25, CE 30, EZ BN 1/4	2x CE 25, CE 30, EZ BN 1/4

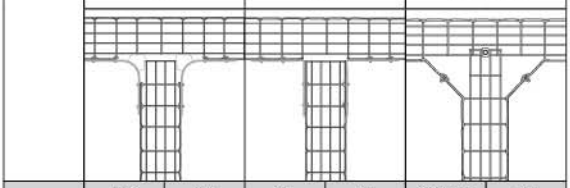
DIRECTIONAL CHANGE HARDWARE

90 DEGREE BENDS



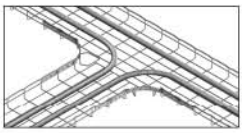
TRAY WIDTH	FASLOCK (SWEEP) QTY. REQUIRED	FASLOCK (SWEEP) CUT INSTRUT.	SWK (SWEEP) QTY. REQUIRED	SWK (SWEEP) CUT INSTRUT.	RADT90 QTY. REQUIRED	RADT90 CUT INSTRUT.	EZT90 QTY. REQUIRED	EZT90 CUT INSTRUT.
2"	–	–	2	p. 15	–	–	1 kit	p. 11
4"	2	p. 14	2	p. 15	1 kit	p. 10	1 kit	p. 11
6"	3	p. 14	4	p. 15	1 kit	p. 10	1 kit	p. 11
8"	4	p. 14	4	p. 15	1 kit	p. 10	1 kit	p. 11
12"	6	p. 14	6	p. 15	1 kit	p. 10	1 kit	p. 11
18"	9	p. 14	8	p. 15	1 kit	p. 10	1 kit	p. 11
20"	10	p. 14	9	p. 15	1 kit	p. 10	1 kit	p. 11
24"	12	p. 14	11	p. 15	1 kit	p. 10	1 kit	p. 11

HORIZONTAL TEE



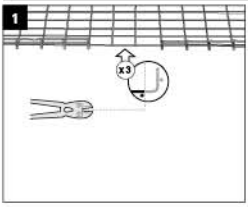
TRAY WIDTH	RADT90 QTY. REQUIRED	RADT90 CUT INSTRUT.	EZT90 QTY. REQUIRED	EZT90 CUT INSTRUT.	Y JUNCTION HARDWARE REQUIRED	Y JUNCTION CUT INSTRUT.
2"	–	–	1 kit	p. 9	–	–
4"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
6"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
8"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
12"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
18"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
20"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12
24"	1 kit	p. 8	1 kit	p. 9	p. 12	p. 12

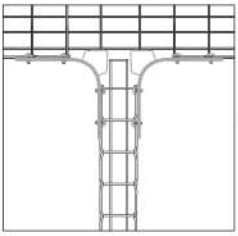
T JUNCTIONS: RAD T 90 KIT



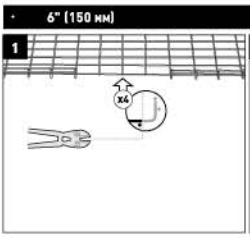
One RAD T 90 KIT will make one T Junction.

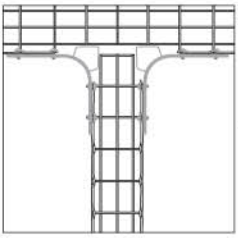
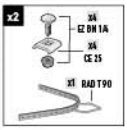
- 4" (100 мм)



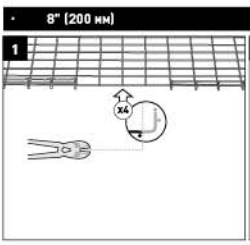


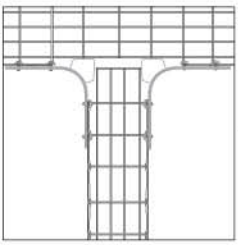
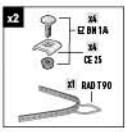
- 6" (150 мм)



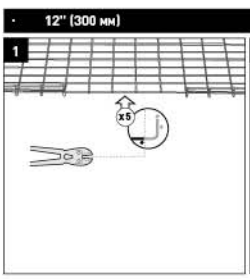



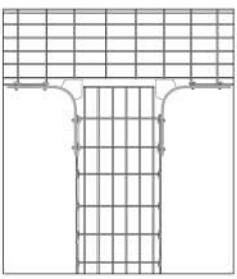
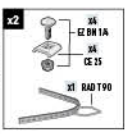
- 8" (200 мм)



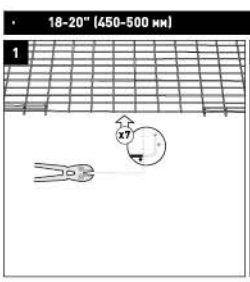



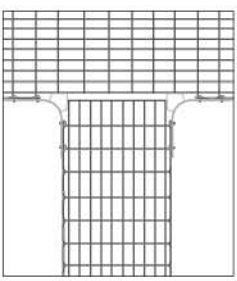
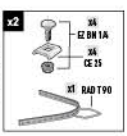
- 12" (300 мм)



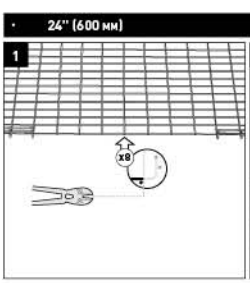



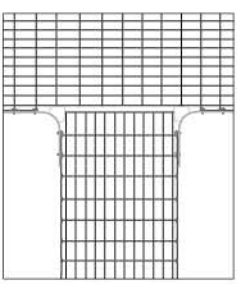
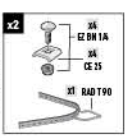
- 18-20" (450-500 мм)



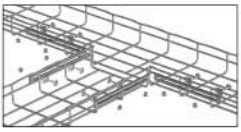



- 24" (600 мм)



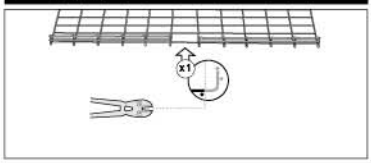



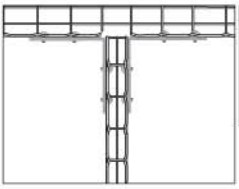
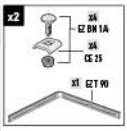
T JUNCTIONS: EZ T 90 KIT



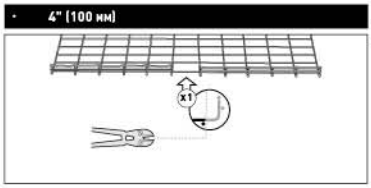
One EZ T 90 KIT will make one T Junction.

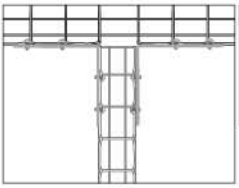
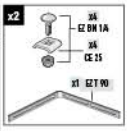
- 2" (50 мм)



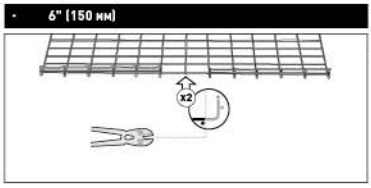



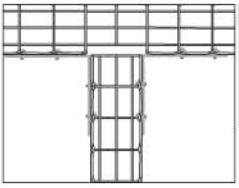
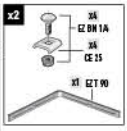
- 4" (100 мм)



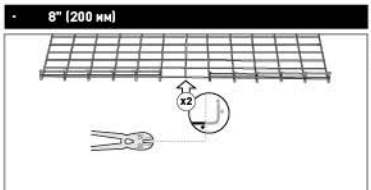



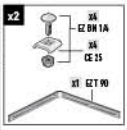
- 6" (150 мм)



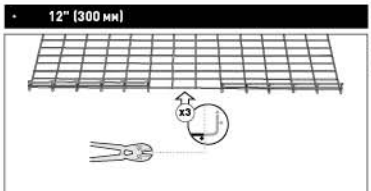



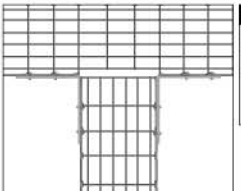
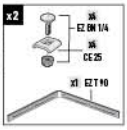
- 8" (200 мм)



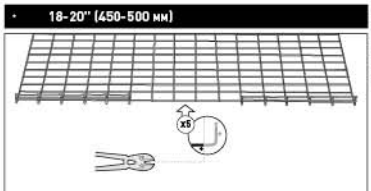


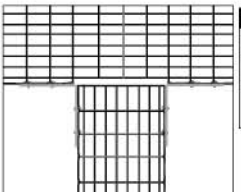
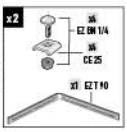
- 12" (300 мм)



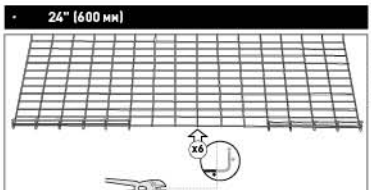



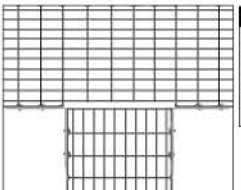
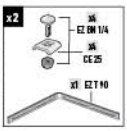
- 18-20" (450-500 мм)



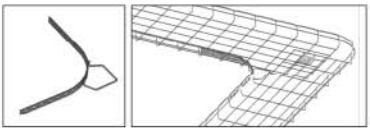



- 24" (600 мм)



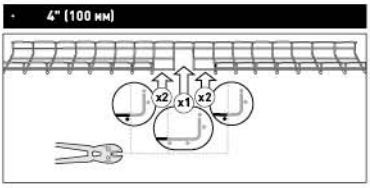



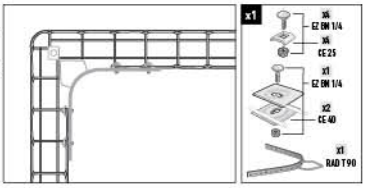
90° BENDS: RAD T 90 KIT



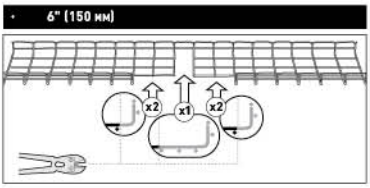
One RAD T 90 KIT will make two 90° Bends.

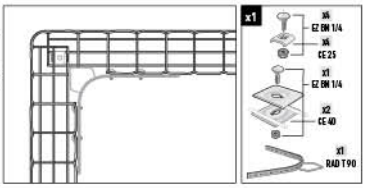
- 4" (100 мм)



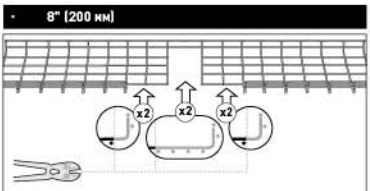


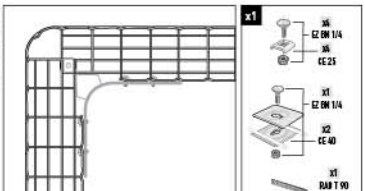
- 6" (150 мм)



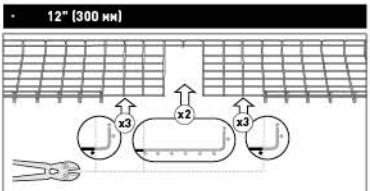


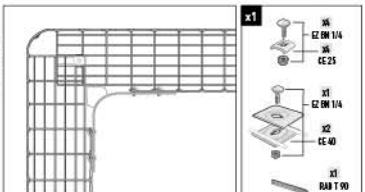
- 8" (200 мм)



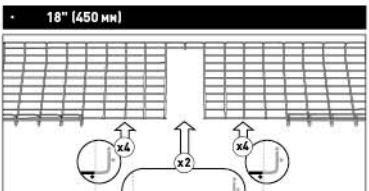


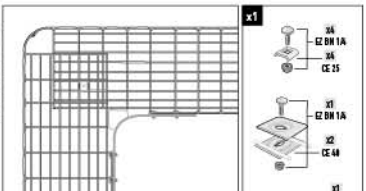
- 12" (300 мм)



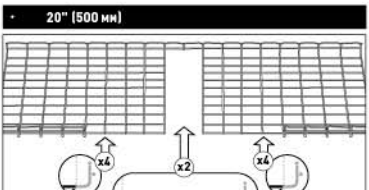


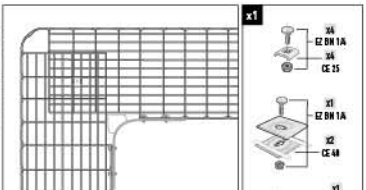
- 18" (450 мм)



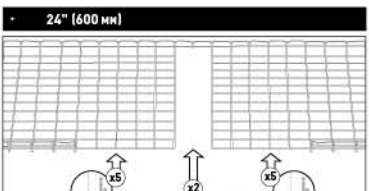


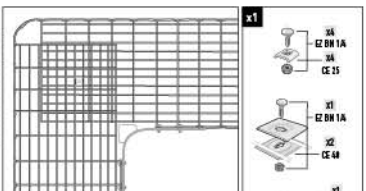
- 20" (500 мм)



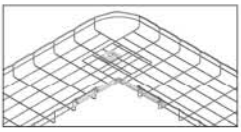


- 24" (600 мм)



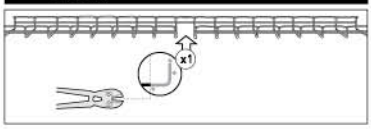


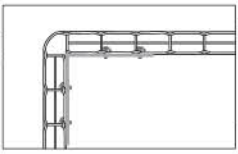
90° BENDS: EZ T 90 KIT

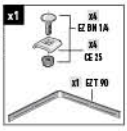


One EZ T 90 KIT will make two 90° Bends. For complete kit description see page 25.

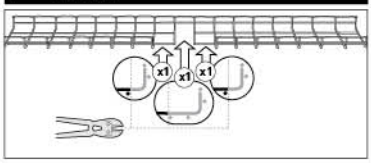
2" (50 мм)

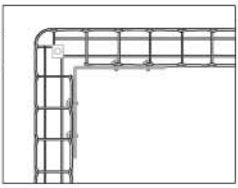


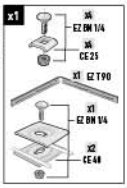




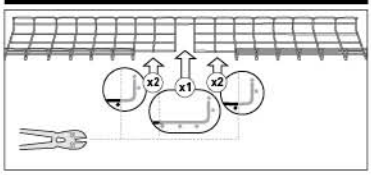
4" (100 мм)

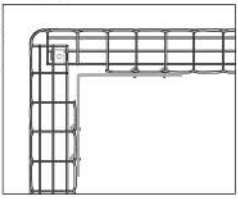


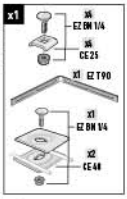




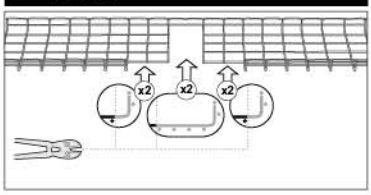
6" (150 мм)

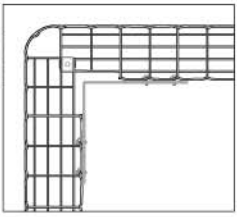


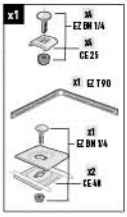




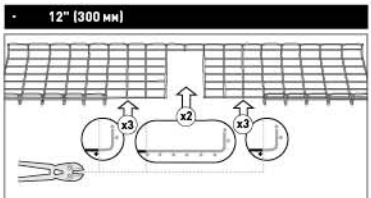
8" (200 мм)

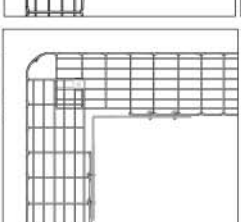


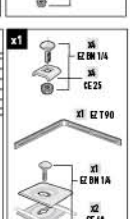




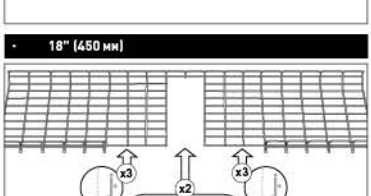
12" (300 мм)

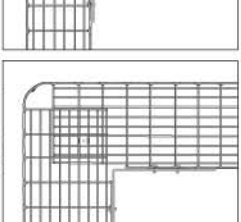


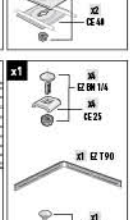




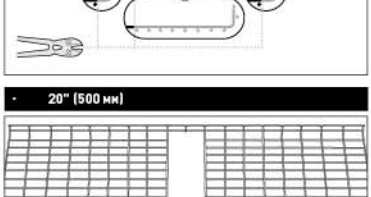
18" (450 мм)

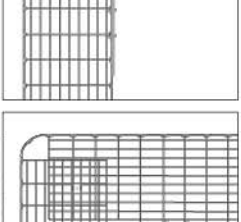


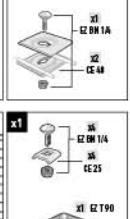




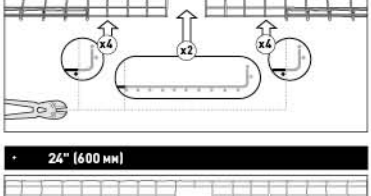
20" (500 мм)

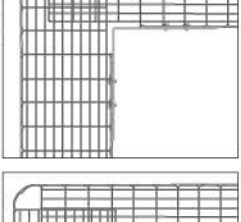


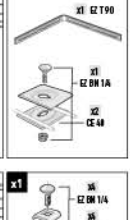




24" (600 мм)

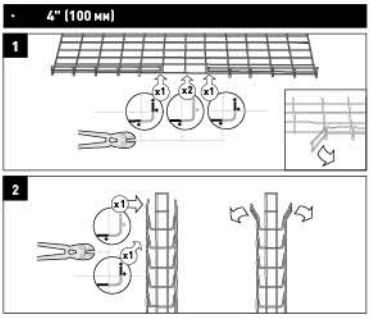


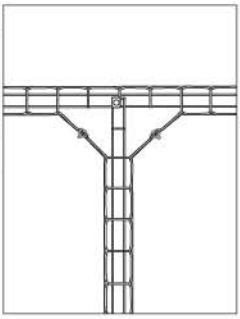




Y JUNCTIONS

• 4" (100 мм)

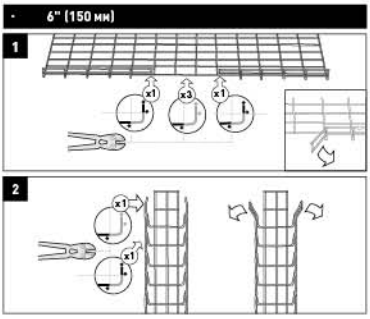


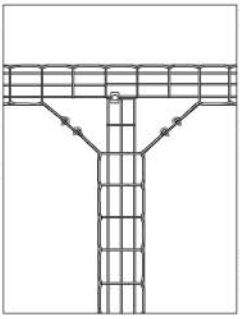


x3

See pages 72-73.

• 6" (150 мм)





x1

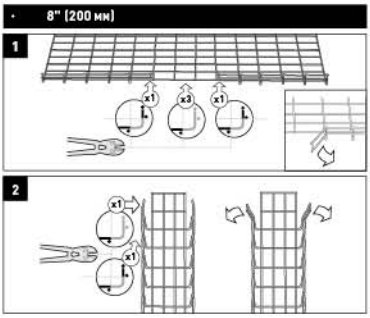
See pages 72-73.

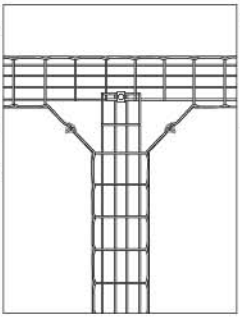
x2

See pages 72-73.

*Use bolt cutters to fabricate this part from ED 275.

• 8" (200 мм)

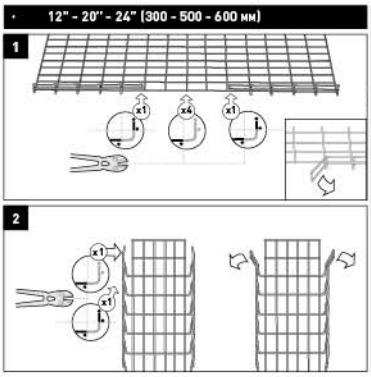


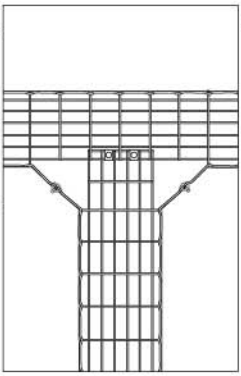


x3

See pages 72-73.

• 12" - 20" - 24" (300 - 500 - 600 мм)

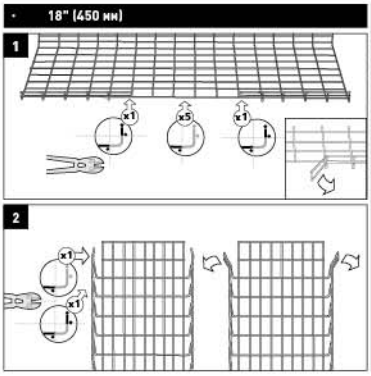


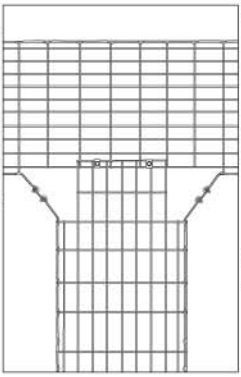


x4

See pages 72-73.

• 18" (450 мм)





x2

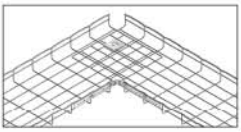
See pages 72-73.

x2

See pages 72-73.

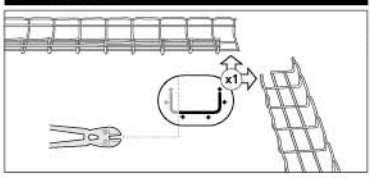
*Use bolt cutters to fabricate this part from ED 275.

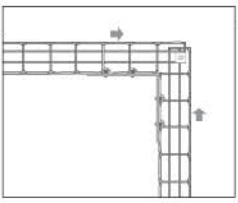
90° JUNCTIONS

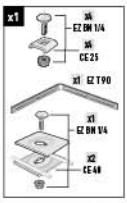


One EZ T 90 KIT will make two 90° Junctions.

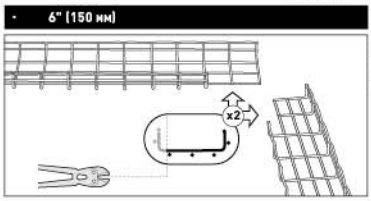
- 4" (100 мм)

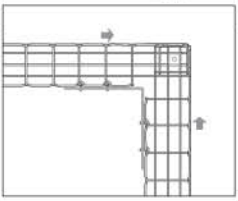


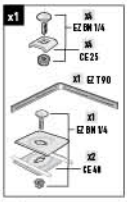




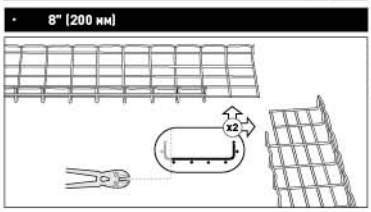
- 6" (150 мм)

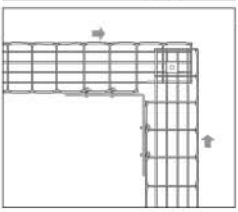


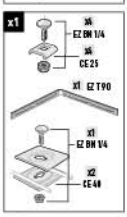




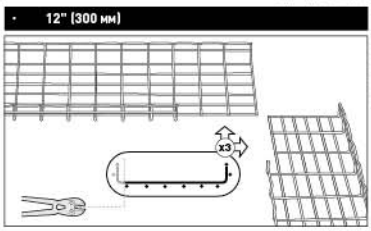
- 8" (200 мм)

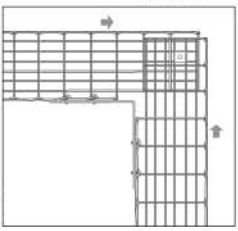


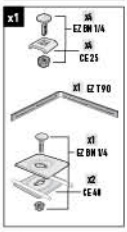




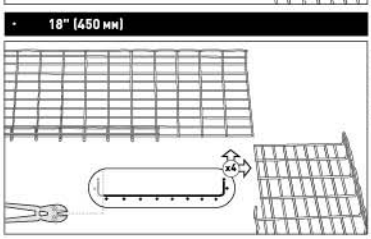
- 12" (300 мм)

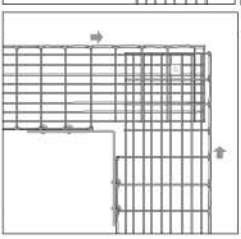


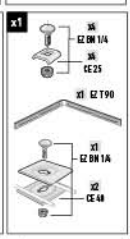




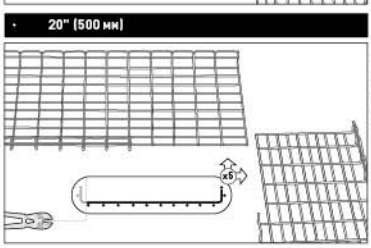
- 18" (450 мм)

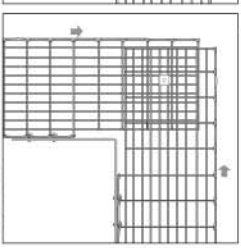


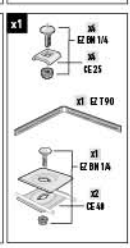




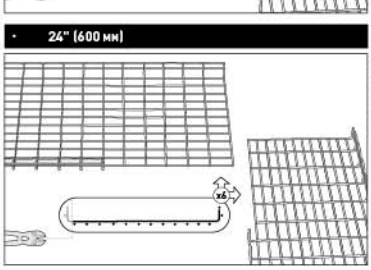
- 20" (500 мм)

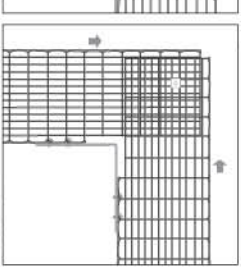


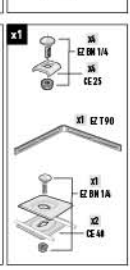




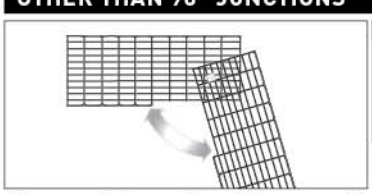
- 24" (600 мм)

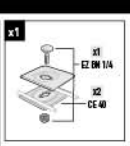


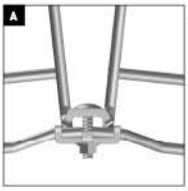


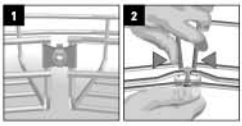


OTHER THAN 90° JUNCTIONS





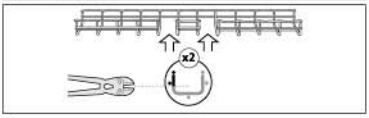


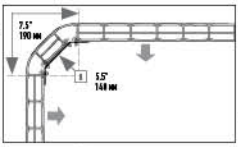


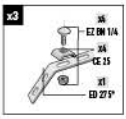
Sweeps can be formed easily on site by cutting some of the side and bottom wires. Use the SWK method to secure desired curve.

Always place bolt heads to inside of tray to prevent frayed wires.

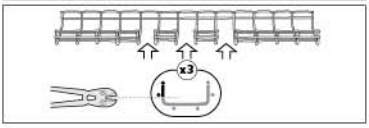
2" (50 мм)

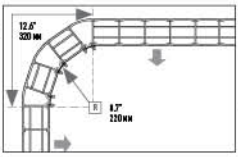


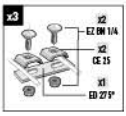




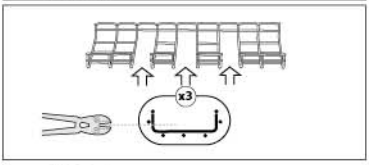
4" (100 мм)

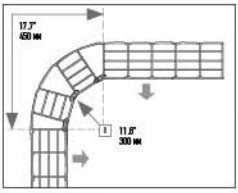


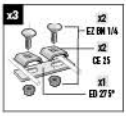




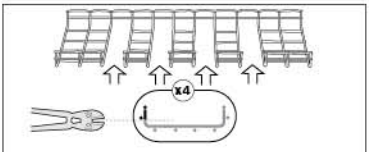
6" (150 мм)

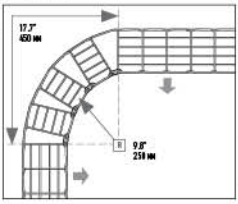


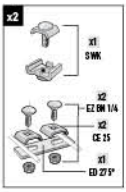




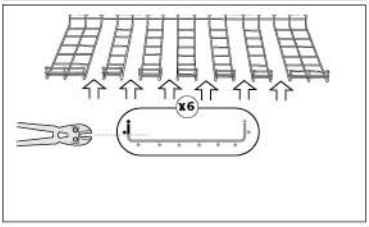
8" (200 мм)

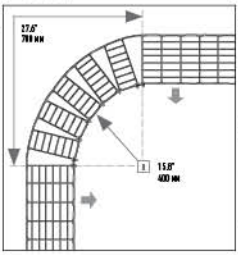


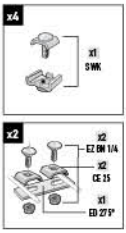




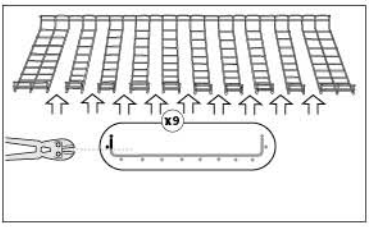
12" (300 мм)

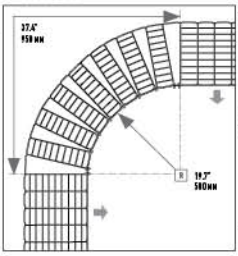


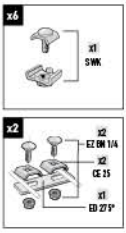




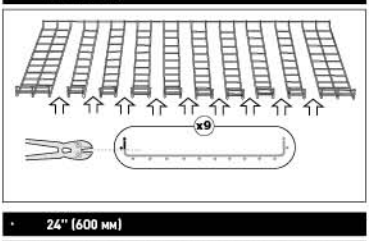
18" (450 мм)

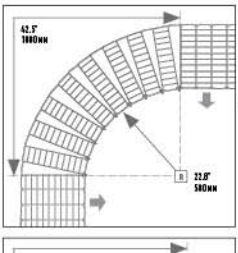


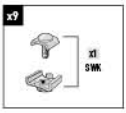




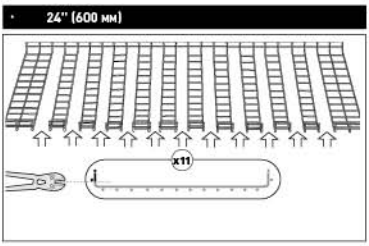
20" (500 мм)

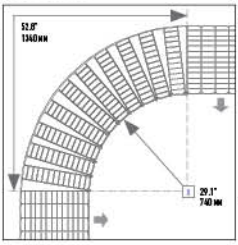






24" (600 мм)



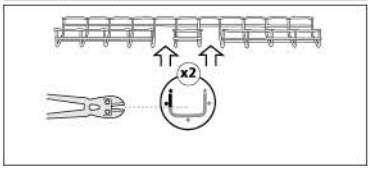


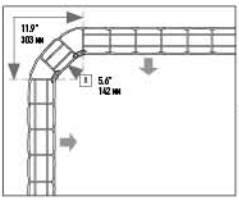
*Use bolt cutters to cut to fit.

SWEEPS: FASLOCK

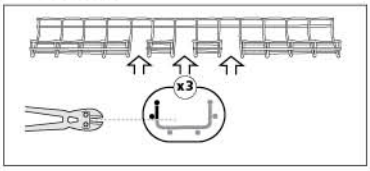
Sweeps can be formed easily on site by cutting some of the side and bottom wires. Use the FASLOCK method to secure desired curve.

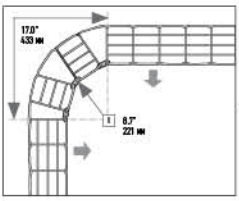
4" (100 мм)



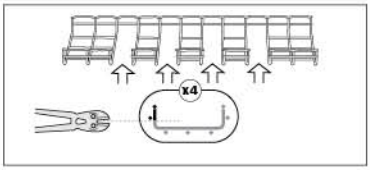


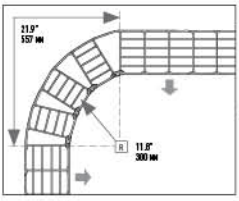
6" (150 мм)



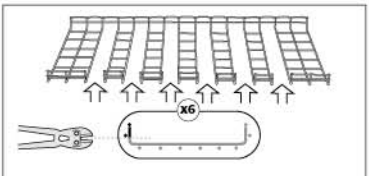


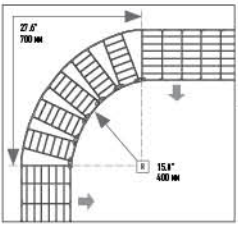
8" (200 мм)



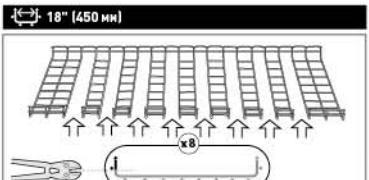


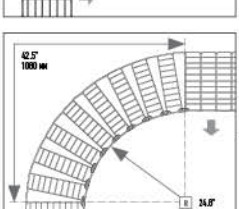
12" (300 мм)



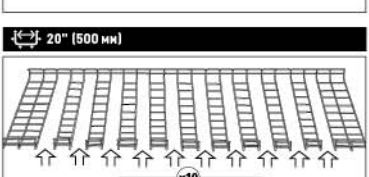


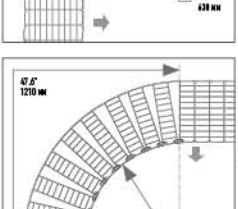
18" (450 мм)



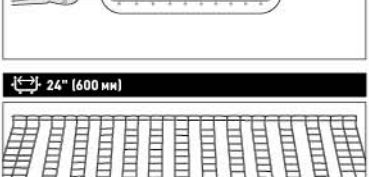


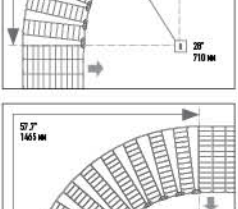
20" (500 мм)





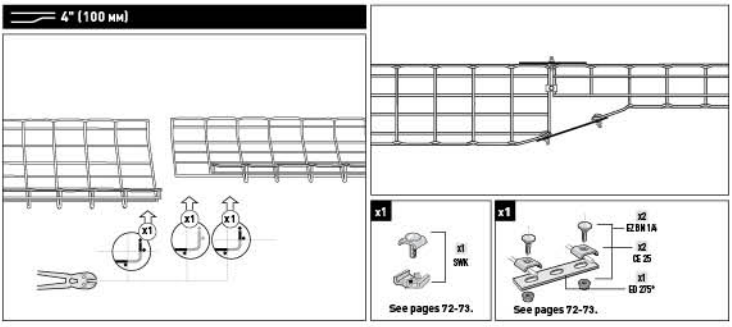
24" (600 мм)

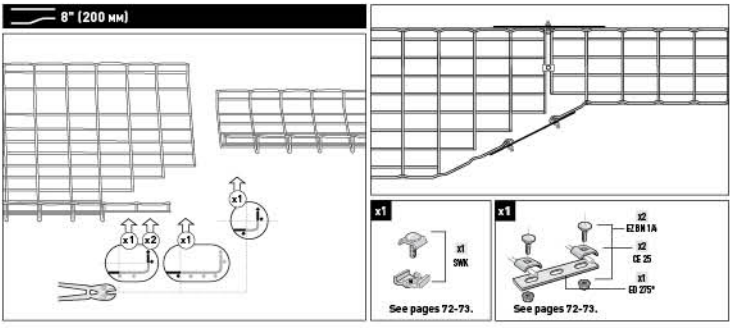




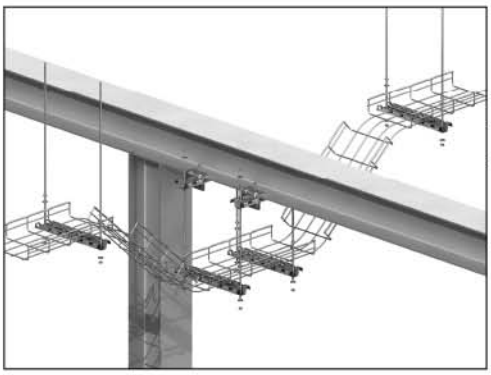
*Use FASLOCK S for CF56/100, 150, 200, 300, CF105/100, 150, 200. Use FASLOCK XL for all other larger sizes.

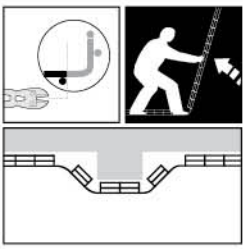
REDUCTIONS





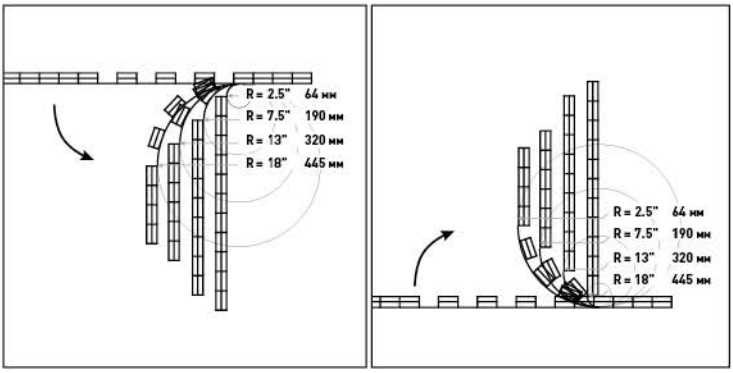
CHANGING LEVELS





To avoid obstructions or change levels, cut the side wires as shown and bend Cablofil cable tray to the angles needed.

CUTTING AND BENDING



BONDING AND GROUNDING

Per NEC 392, the national electrical code section for cable tray, all cable tray systems must be properly BONDED, per section 259.96. To meet this requirement, Cablofil recommends that ULclassified splices are used to joins sections and that the cable tray be bonded to building steel or the facility grounding system every 50'-60'. By bonding the tray every 50'-60', the tray will maintain a low potential to ground which reduces EMI and provides a continuous path for stray currents. Steel trapeze type hangers clamped securely to building steel usually provide a solid bond. Cablofil standard splices (SWK, EDRN, EZBN, EDT, EZT90, RADT90) are designed to have less than 1 milliohm of resistance between connections and provide bonding between sections. These splices have been tested by UL as part of the cable tray grounding system. Painted Cablofil wire mesh tray requires the outer mask of the conductive surface be removed at each end of the tray prior to installing the (SWK) splice. This (SWK) splice provides a UL Classified Bonding continuity between painted tray sections. All cable tray needs to be electrically continuous per NEC 250.96. Standard Cablofil splices provide continuity per 250.96. Cutting and removal of cable tray sections still allow continuity per 250.96 and only affects the rare use of cable tray as the EGC. Use of cable tray as an EGC is rare since UL requires all multiconductor cables to contain an integral EGC and single conductor cables are only used in a few industrial applications.

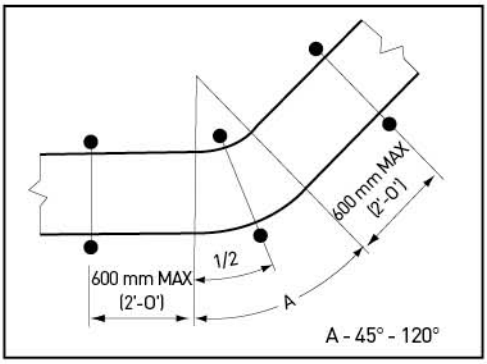
LOADING

Cablofil has been tested to UL, CSA, NEMA VE1 and IEC standards. Cablofil wire mesh tray and supports are designed to support any cable load allowed by the NEC when supports are spaced on 8' spans. Only the heaviest cables (750 kcmil multiconductor power or larger) may require shorter spans. For specific loading go to the interactive load table on www.cablofil.com and choose your exact cable for detailed cable capacity and span requirements.

SUPPORT SPACING

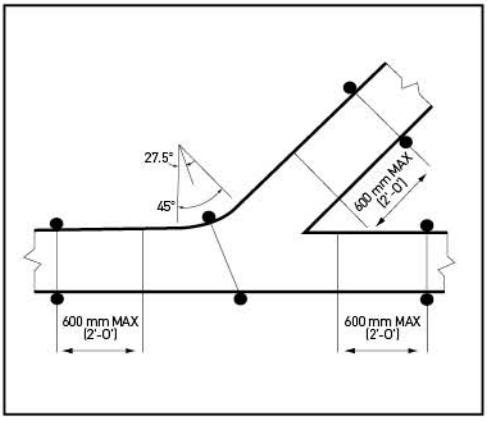
Cablofil comes in 118" lengths and straight sections are designed for 6'-8' support spacing; (building joists or purlins are typically on 6'-7' spacing)

Cablofil has developed the following diagrams as a general guideline for supporting Field Fabricated Wire Mesh Tray. These guidelines will provide assistance in estimating and locating supports for the most common wire mesh tray installations. Supports are required as some of the side wires have been cut and the load capacity has been reduced. In actual installation, shallow and narrow trays may not require as many supports just as deep and wide trays may require additional supports. The installer should keep in mind that unique requirements arise in the field and practical solutions are often simple.



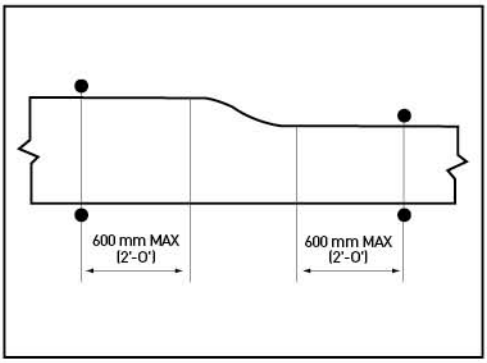
Horizontal Sweep Support

Center support not required on trays less than 12" wide and sweeps less than 45 degrees.

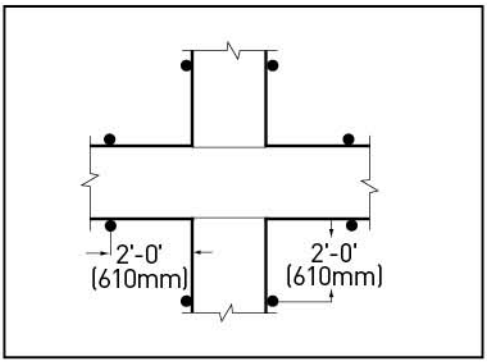


Horizontal Y Support

Center support not required on trays less than 12" wide.

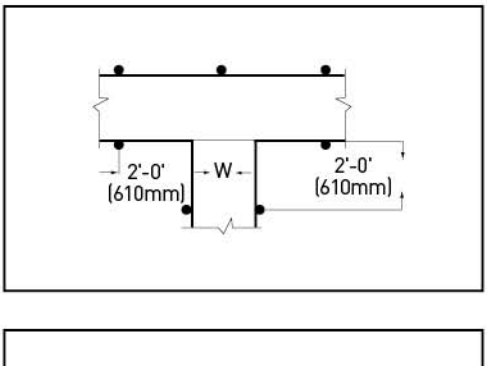


Reduction Support



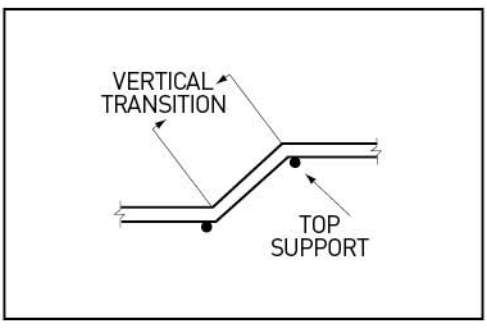
Horizontal Cross Support

On 24' wide items, recommended distance is 1 ft. 6 in. (457mm) from splice connection.



Horizontal Tee Support

Additional support recommended at back of tee (shown) or directly under tee, diagonally positioned, for 4" and 6" deep trays, 18" and wider.



Vertical Transition

Support vertical transition at top support location. Distances of 3 ft. and larger should be supported at each end as illustrated.

TRAY

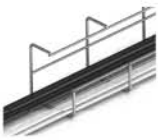
CF 54
2" DEEP TRAY
2", 4", 6", 8", 12", 18", 20", & 24" WIDE

CF 105
4" DEEP TRAY
4", 6", 8", 12", 18", 20", & 24" WIDE

CF 150
6" DEEP TRAY
12", 18", 20", & 24" WIDE

EasyPack

CFG
G CABLOFIL TRAY



CFG
G MINI

CFL
L CABLOFIL TRAY

TXF35
TELEXRAIL

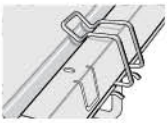
FCF 54
FASCLIC TRAY

TRAY COVERS

CTXF 35
TELEX RAIL COVER

UC35
TELEX RAIL STANDOFF SUPPORT

CVN
CABLOFIL TRAY COVER



CLIP FO2
CABLOFIL COVER CLIP

COT 30/COT 54
DIVIDER STRIP

COT 105/COT 150
DIVIDER STRIP

COT J
DIVIDER COUPLER

SPLICING

EDRN
FAST SPLICE

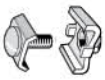
EDRNTOOL
MOUNTING TOOL

PRE-CLICK
SPLICE

EDT
SPLICE PLATE

ED 275
UNIVERSAL SPLICE BAR

SPLICING

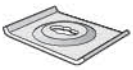


SWK
SPLICE WASHER KIT

EZBN 1/4

CE 25 - CE 30
SQUARE SPLICE WASHER

FASLOCK
SPLICE



CE 40
SQUARE SPLICE WASHER

EZT 90 KIT
90° BEND KIT

RAD T 90 KIT
RADIUS TEE 90° KIT

ACCESSORIES

EZBN
1/4"

EZHN
1/4", 3/8", 1/2"

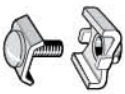
EZFW
1/4", 3/8", 1/2"

THRD
1/4", 3/8", 1/2"

ACCESSORIES

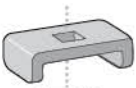
TRP
THREADED ROD PROTECTOR

EZCN
1/4", 3/8", 1/2"



SWK

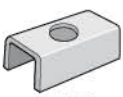
CE 25



CE 30

CE 40

FASLOCK



ECLI

CA

COUPFIL

CUTYFIL

ED 250/90

ED 275/1100

WALL MOUNTINGS

FAS P
FAS PROFILE

FV
VERTICAL BRACKET

FAS L
BRACKET

FAS C
BRACKET

FAS U
UNIVERSAL BRACKET

EDF
RAIL

CS
STANDARD L BRACKET

CSC
STANDARD C BRACKET

CRP
UNIVERSAL WALL BRACKET

WALL MOUNTINGS

UC 50
CABLE TRAY STANDOFF

CAT 30/41
SNAP-IN WALL
HANGER SUPPORT

C 50
WALL MOUNT ATTACHMENT

CEILING MOUNTINGS

SF 50
CENTER HANGER

SF 100
CENTER HANGER

PAT 30
SUSPENSION SHOE

SAS
SINGLE HANGER
SUSPENSION BRACKET

FAS PCH
CENTER HANGER

FAS P
FAS PROFILE

CEILING MOUNTINGS CONT.

FAS C
BRACKET

AS
TRAPEZE HANGING CLIP

EDF
RAIL

PFREDF
MOUNTING BRACKET

DF
ANGLE MOUNTING BRACKET

ERD 10
BRACE PLATE

PROCS
STANDARD PROFILE

CS
STANDARD L BRACKET

CSC
STANDARD C BRACKET

PS L
PENDANT BRACKET

UNDER FLOOR MOUNTINGS

UFC
UNDER FLOOR SUPPORT CLAMP

UFCN
UNDER FLOOR CLAMP

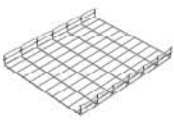
EDF
RAIL

DF
ANGLE MOUNTING BRACKET

UFS
UNDER FLOOR SUPPORT

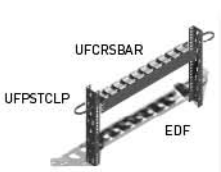
UFS 150
UNDER FLOOR SUPPORT STAND

UC 50
CABLE TRAY STANDOFF



UFCF2
WIRE TRAY SECTIONS

UFS 90° KIT
UFFLAT & UFTXSPRCLP



UFSUP KIT
UFS SUPPORT KIT

UFS CANTILEVER BRACKET

OTHER MOUNTINGS

FASCLM
FAS CLAMP

ETC
TRAY BEAM SUPPPORT

EZBC
THREADED ROD HANGER

C 50
ELECTRICAL BOX SUPPORT

SBDA
CONDUIT AND BOX SUPPORT

CM50I
INDUSTRIAL BOX MOUNTING BRACKET

CABLEXIT

HB 2
WALL/FLOOR TERMINATION BRACKET

DROP OUT
CABLE DROP OUT

CCLMP
CABLE CLAMP

MFM
METALLIC MULTIFIX PLATE

CABLE LABEL CLIP

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