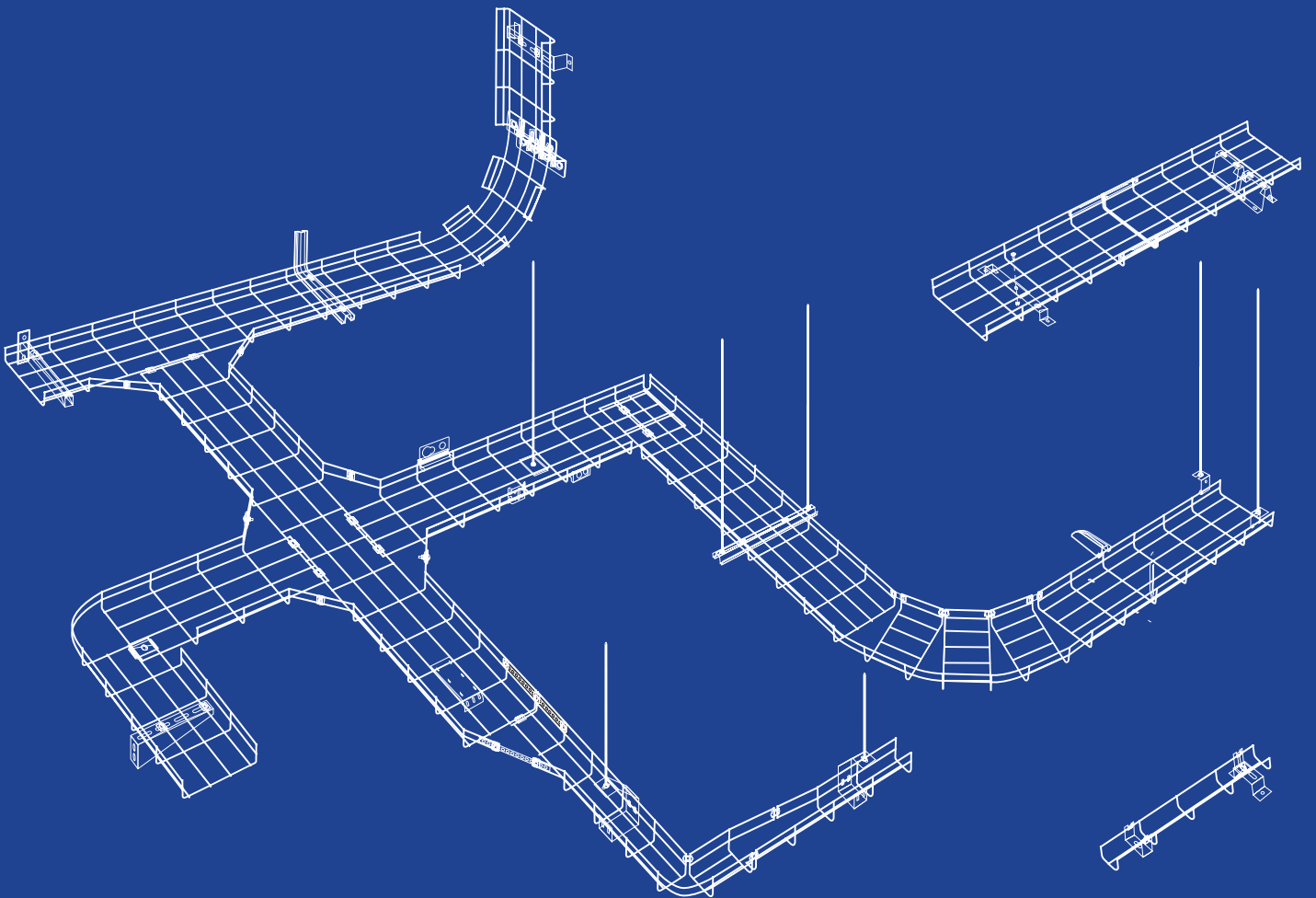


Steel Wire Cable Tray

Fabrication Guide



Steel Wire Cable Tray

Fabrication Guide

Introduction

Available in Electro-Zinc, Pre-Galvanised, Powder-Coated, Hot-Dip Galvanised, Marco's steel wire cable tray is offered in three depths - 30mm, 55mm and 106mm. A wide range of fittings is available to join and support the steel wire cable tray.

The following section is intended to be used as a guide to fabricating steel wire cable tray fittings on site. A wide range of fittings and accessories are available to join the tray.

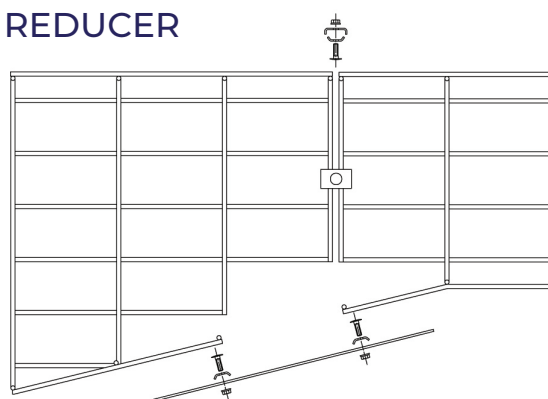
Reducers

Steel Wire Cable Tray



MC55300 and MC55100

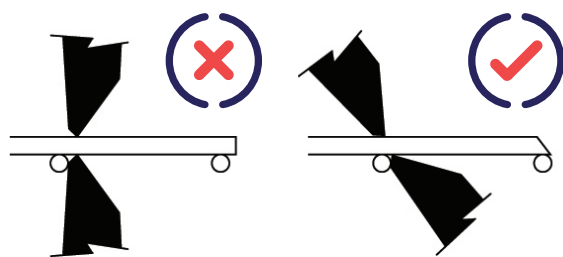
REDUCER



Example of MC55300 - MC55200
MCCA x 3 of MCCB x 2 plus MCSP x 50mm

Wire Cutting Directions

Steel Wire Cable Tray

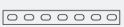


Incorrect

Correct

Typical Fabricated Reducer Components

Steel Wire Cable Tray

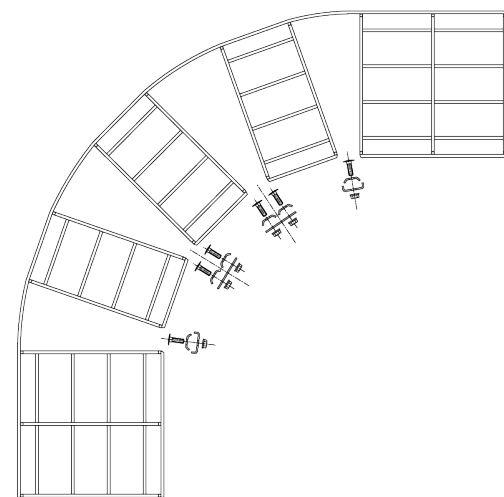
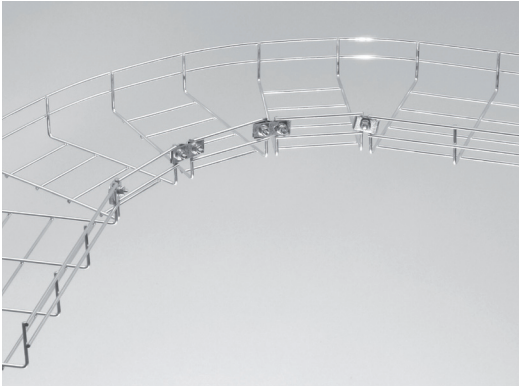
CODE	COMPONENT	QTY
MCCA		x2
MCCA		x2
MCSP		x1

All bends easily fabricated on site

Fabrication Guide / Large Radius Bend

Large Radius Bend

Steel Wire Cable Tray



Alternate sections to be removed. Example of MC55200, MCCA x 2, MCCB x 2, MCSP x 50mm x 1 [to be cut to size on site]

NEW LARGE RADIUS BEND - QUICK ASSEMBLY GUIDE

TRAY WIDTH	100mm	150mm	200mm	300mm	400mm	450mm	500mm	600mm
REMOVE SEGMENTS	2	3	4	6	8	9	10	12
MCQLS	2	3	4					
MCQLL				6	8	9	10	12

TRAY WIDTH (mm)	FASTENING TYPE	MCCB	MCCA	REMOVED SEGMENTS
100	MCCB x 4	 x4		2
150	MCCB x 2 MCSP x 50mm x 1	 x3		3
200	MCCB x 2 MCSP x 50mm x 1	 x4		4
300	MCCB x 2 MCSP x 50mm x 1	 x2	 x2	4
400	MCCB x 2 MCSP x 50mm x 1	 x2	 x4	6
450	MCCB x 2 MCSP x 50mm x 1	 x2	 x6	8
500	MCCA x 9		 x9	9
600	MCCA x 11		 x11	11

STANDARDS:

Marco steel wire cable tray conforms to the following standards: BSEN 61537:2007, IEC 61537

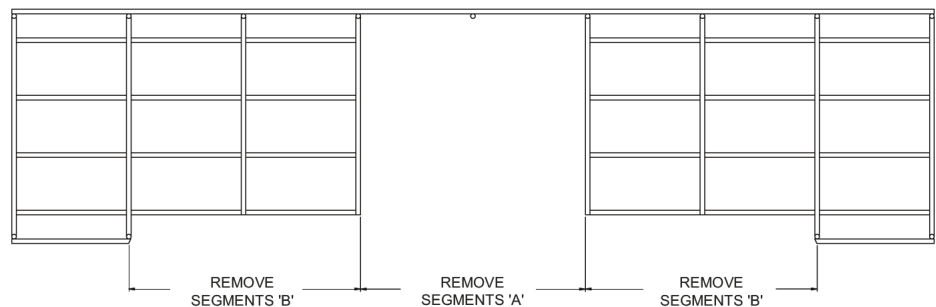
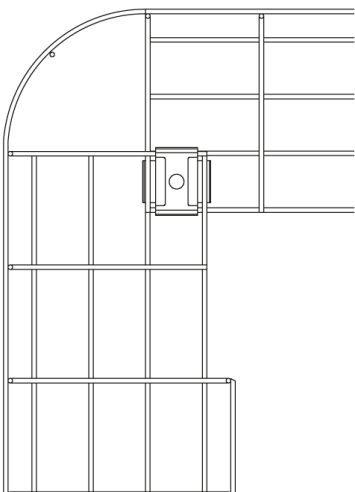
Fabrication Guide / Small Radius Bend

Small Radius Bend

Steel Wire Cable Tray



TRAY WIDTH (mm)	FASTENING TYPE	MCM620NW MCCL x 2	MCCA	REMOVED SEGMENTS A	REMOVED SEGMENTS B
100	MCCA		 x1	1	-
150	MCCA		 x1	1	1
200	MCCL x2 MCM620NW x1	 x1		1	2
300	MCCL x2 MCM620NW x1	 x1		1	2
400	MCCL x2 MCM620NW x1	 x1		2	2
450	MCCL x2 MCM620NW x1	 x1		2	4
500	MCCL x2 MCM620NW x1	 x1		2	5
600	MCCL x2 MCM620NW x1	 x1		2	6



Example of MC55200, MCCL x 2, MC-M620NW x 1

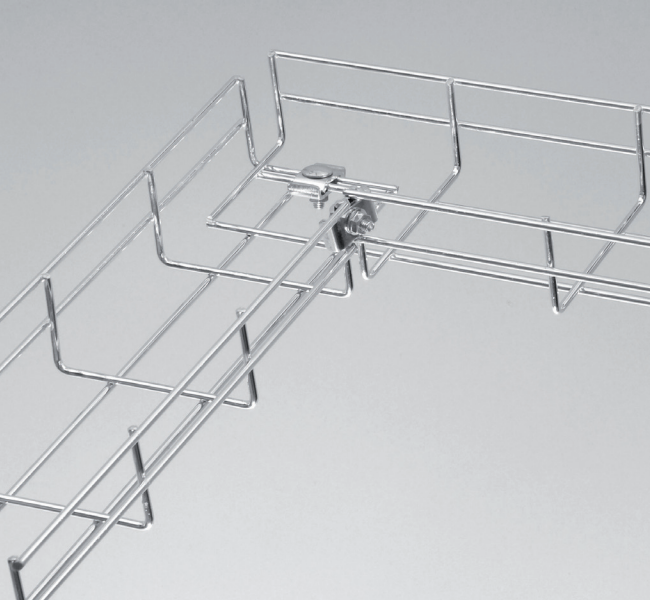
STANDARDS:

Marco steel wire cable tray conforms to the following standards: BSEN 61537:2007, IEC 61537

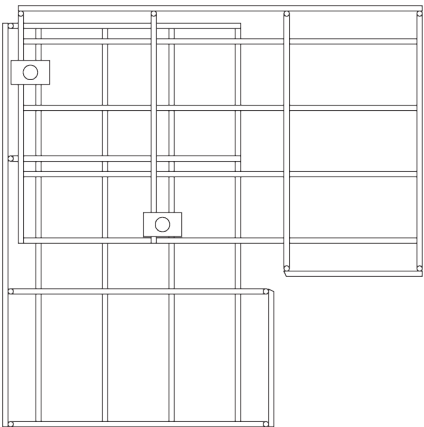
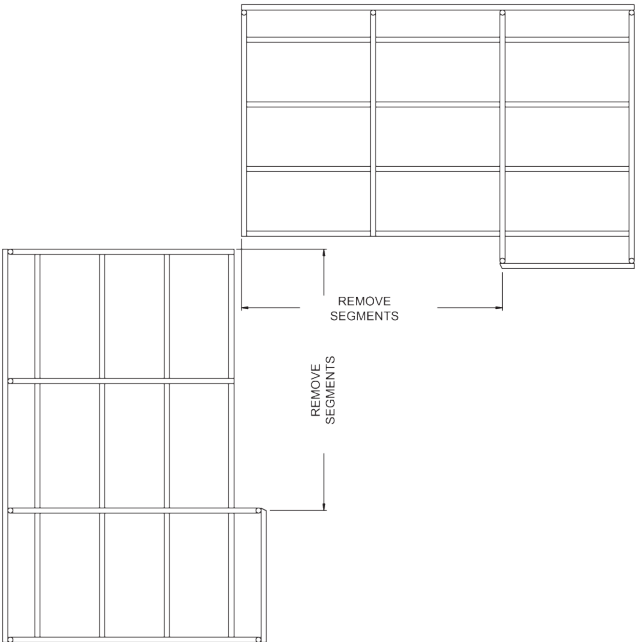
Fabrication Guide / Right Angle Bend

Right Angle Bend

Steel Wire Cable Tray



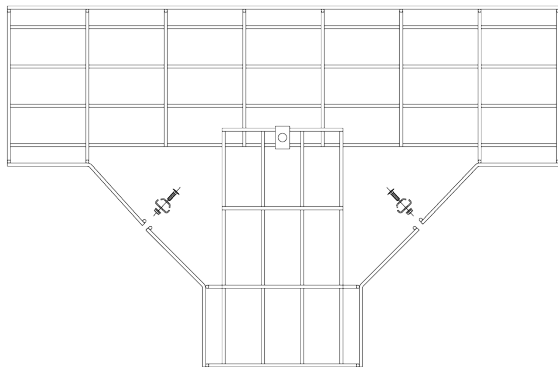
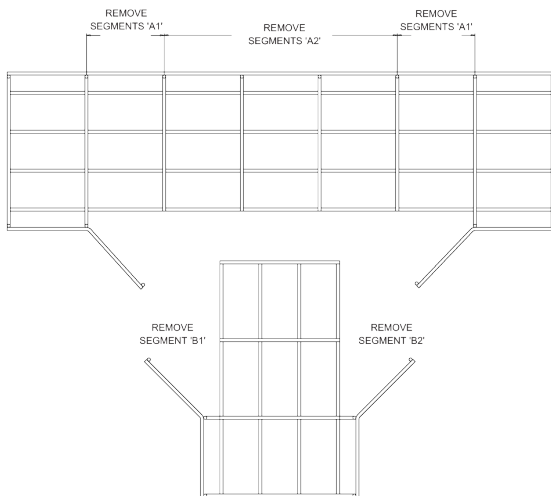
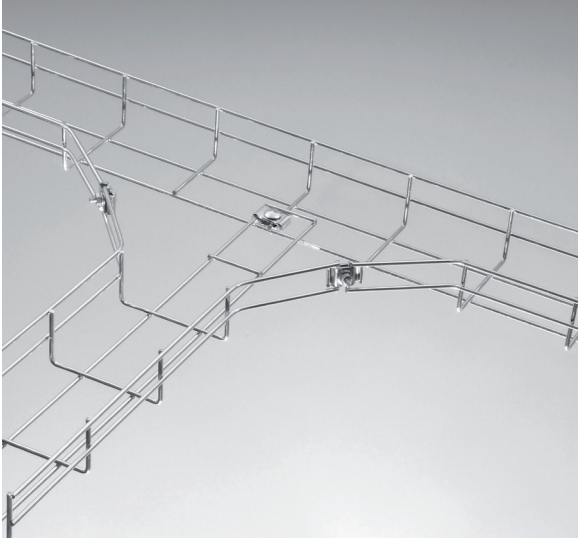
TRAY WIDTH (mm)	FASTENING TYPE	MCCA	REMOVED SEGMENTS
100	MCCA	 x2	1
150	MCCA	 x2	1
200	MCCA	 x2	1
300	MCCA	 x2	2
400	MCCA	 x2	2
450	MCCA	 x2	2
500	MCCA	 x2	2
600	MCCA	 x2	2



Fabrication Guide / Radius Tee-Junction and Crossovers

Radius Tee-Junction and Crossovers

Steel Wire Cable Tray

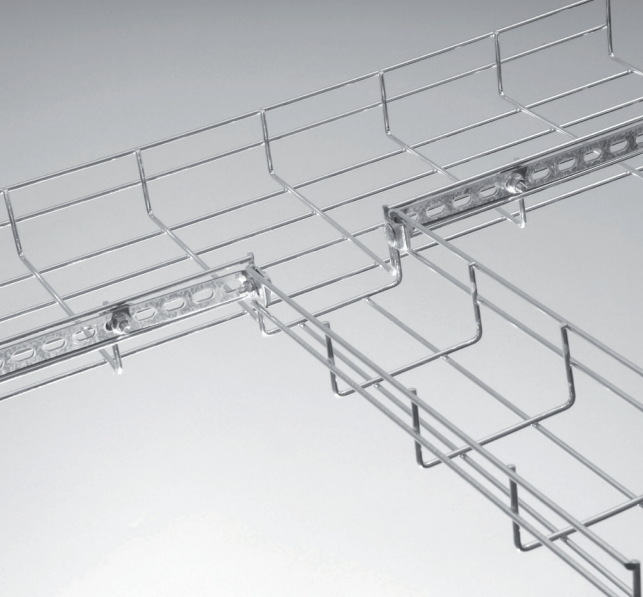


TRAY WIDTH (mm)	FASTENING TYPE	MCCB	MCCA	REMOVED SEGMENTS		REMOVED SEGMENTS	
				A1	A2	B1	B2
100	MCCA		 x3			1	1
150	MCCA MCCB x 2 MCSP x 50mm	 x2	 x1	3	2	1	1
200	MCCA		 x3	3	2	1	1
300	MCCA		 x4	4	2	1	1
400	MCCA		 x4	5	2	1	1
450	MCCA MCCB x 2 MCSP x 50mm		 x4	5	2	1	1
500	MCCA MCCB x 2 MCSP x 50mm	 x2	 x2	6	2	1	1
600	MCCA MCCB x 2 MCSP x 50mm	 x2	 x2	6	2	1	1

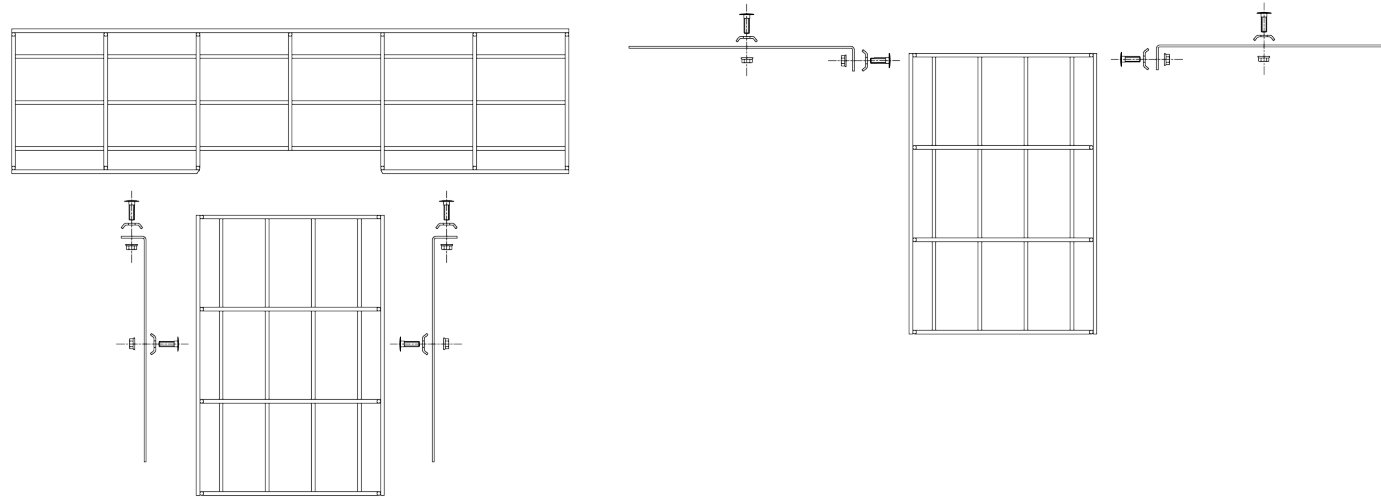
Fabrication Guide / Tee-Junction with Right Angle and Crossovers

Tee-Junction with Right Angle and Crossovers

Steel Wire Cable Tray



TRAY WIDTH (mm)	FASTENING TYPE	MCCB	MCSP90	REMOVED SEGMENTS
100	MCCB MCSP90	 x4	 x2	1
150	MCCB MCSP90	 x4	 x2	1
200	MCCB MCSP90	 x4	 x2	2
300	MCCB MCSP90	 x4	 x2	2
400	MCCB MCSP90	 x4	 x2	3
450	MCCB MCSP90	 x4	 x2	4
500	MCCB MCSP90	 x4	 x2	5
600	MCCB MCSP90	 x4	 x2	6



STANDARDS:
 Marco steel wire cable tray conforms to the following standards: BSEN 61537:2007, IEC 61537

Fabrication Guide / Recommendations

Wall Support Bracket Recommendations

Steel Wire Cable Tray

REF NO	MCQC QUICK COUPLER		MCCA COUPLER		MCSSC COUPLER	MCSSCL COUPLER	MCFJC COUPLER	MCFJCM COUPLER	MCFJCL COUPLER
	SIDE	BASE	SIDE	BASE	SIDE	SIDE	SIDE	SIDE	SIDE
MC3050	2	0	2	0					
MC30100	2	0	2	1					
MC30150	2	0	2	1					
MC30200	2	1	2	1					
MC30300	2	1	2	2					
MC30400	2	2	2	2					
MC30450	2	2	2	2					
MC30500	2	2	2	2					
MC5550	2	0	2	0	2		2		
MC55100	2	0	2	1	2		2		
MC55150	2	1	2	1	2		2		
MC55200	2	1	2	1	2		2		
MC55300	2	1	2	2		2		2	
MC55400	2	2	2	2		2			2
MC55450	2	2	2	2		2			2
MC55500	2	2	2	2		2			2
MC55600	2	3	2	3		2			2
MC106100	2	1	2	1		2		2	
MC106150	2	1	2	1		2		2	
MC106200	2	1	2	1		2			2
MC106300	2	2	2	2		2			2
MC106400	2	3	2	3		2			2
MC106450	2	3	2	3		2			2
MC106500	2	3	2	3		2			2
MC106600	2	3	2	3		2			2

This table is intended to be used as a guide only.
For large volumes of cable, more support may be necessary.

Fabrication Guide / Recommendations

Suspension Bracket Recommendations

Steel Wire Cable Tray

REF NO	DIMENSIONS (MM)	SUPPORT CHANNEL STANDARD/FAST FIX	MCSB68 MCSB1012	MCSH	MCSB50	MCSB100	MCSB150
MC3050	30 x 50	-	2	-	1	-	-
MC30100	30 x 100	MCCSB100	2	1	-	1	-
MC30150	30 x 150	MCCSB150	2	1**	-	-	1
MC30200	30 x 200	MCCSB200	2	1	-	-	-
MC30300	30 x 300	MCCSB300	-	-	-	-	-
MC30400	30 x 400	MCCSB400	-	-	-	-	-
MC30450	30 x 450	MCCSB450	-	-	-	-	-
MC30500	30 x 500	MCCSB500	-	-	-	-	-
MC5550	55 x 50	-	2	-	1	-	-
MC55100	55 x 100	MCCSB100	2	1	-	1	-
MC55150	55 x 150	MCCSB150	2	1**	-	-	1
MC55200	55 x 200	MCCSB200	2	1	-	-	-
MC55300	55 x 300	MCCSB300	-	-	-	-	-
MC55400	55 x 400	MCCSB400	-	-	-	-	-
MC55450	55 x 450	MCCSB450	-	-	-	-	-
MC55500	55 x 500	MCCSB500	-	-	-	-	-
MC55600	55 x 600	MCCSB600	-	-	-	-	-
MC106100	106 x 100	MCCSB100	2	1	-	-	-
MC106150	106 x 150	MCCSB150	2	1**	-	-	-
MC106200	106 x 200	MCCSB200	-	-	-	-	-
MC106300	106 x 300	MCCSB300	-	-	-	-	-
MC106400	106 x 400	MCCSB400	-	-	-	-	-
MC106450	106 x 450	MCCSB450	-	-	-	-	-
MC106500	106 x 500	MCCSB500	-	-	-	-	-
MC106600	106 x 600	MCCSB600	-	-	-	-	-

Suspension brackets can be used effectively only up to a certain weight. For larger Steel Wire Cable Tray, support channels are recommended. * Due to a central wire running down the length of the tray a MCB35 is needed.

** Due to a central wire running down the length of the tray, central suspension brackets would need to be staggered.

Fabrication Guide / Recommendations

Coupler Recommendations

Steel Wire Cable Tray

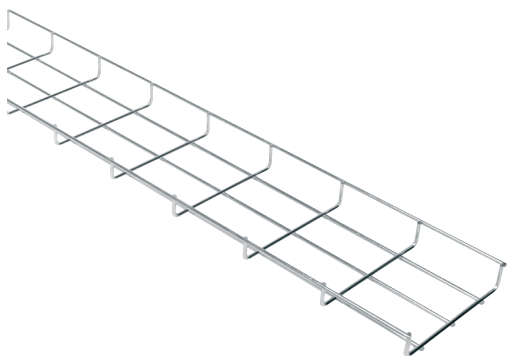
REF NO	MCQC QUICK COUPLER		MCCA COUPLER		MCSSC COUPLER	MCSSCL COUPLER	MCFJC COUPLER	MCFJCM COUPLER	MCFJCL COUPLER
	SIDE	BASE	SIDE	BASE	SIDE	SIDE	SIDE	SIDE	SIDE
MC3050	2	0	2	0					
MC30100	2	0	2	1					
MC30150	2	0	2	1					
MC30200	2	1	2	1					
MC30300	2	1	2	2					
MC30400	2	2	2	2					
MC30450	2	2	2	2					
MC30500	2	2	2	2					
MC5550	2	0	2	0	2		2		
MC55100	2	0	2	1	2		2		
MC55150	2	1	2	1	2		2		
MC55200	2	1	2	1	2		2		
MC55300	2	1	2	2		2		2	
MC55400	2	2	2	2		2			2
MC55450	2	2	2	2		2			2
MC55500	2	2	2	2		2			2
MC55600	2	3	2	3		2			2
MC106100	2	1	2	1		2		2	
MC106150	2	1	2	1		2		2	
MC106200	2	1	2	1		2			2
MC106300	2	2	2	2		2			2
MC106400	2	3	2	3		2			2
MC106450	2	3	2	3		2			2
MC106500	2	3	2	3		2			2
MC106600	2	3	2	3		2			2

This table is intended to be used as a guide only.
For large volumes of cable, more support may be necessary.

Fabrication Guide / Cable Capacities

30mm Depth

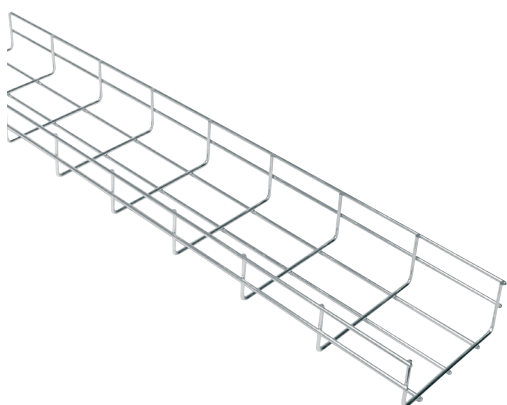
Steel Wire Cable Tray



TABLES SHOWING APPROXIMATE CABLE CAPACITIES OF ALL STEEL WIRE CABLE TRAYS USING A 50% FILL RATIO					
MC30			APPROX CABLE CAPACITY UNDER NEC 50% RULE		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)	CAT5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (8.9 diam)
MC3050	1400	700	37	21	11
MC30100	2800	1400	74	42	23
MC30150	4200	2100	111	63	34
MC30200	5600	2800	148	84	45
MC30300	8400	4200	223	127	68

55mm Depth

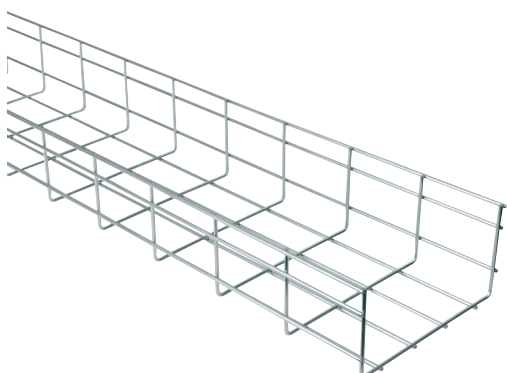
Steel Wire Cable Tray



MC55			APPROX CABLE CAPACITY UNDER NEC 50% RULE		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)	CAT5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (8.9 diam)
MC5550	2600	1300	69	39	21
MC55100	5200	2600	138	78	42
MC55150	7800	3900	207	118	63
MC55200	10400	5200	276	157	84
MC55300	15600	7800	414	235	125
MC55400	20800	10400	552	313	167
MC55450	23400	11700	620	353	188
MC55500	26000	13000	689	392	209
MC55600	31200	15599.95	827	470	251

106mm Depth

Steel Wire Cable Tray



MC106			APPROX CABLE CAPACITY UNDER NEC 50% RULE		
CABLE TRAY	TOTAL FILL AREA (mm ²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm ²)	CAT5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (8.9 diam)
MC106100	10303	5152	273	155	83
MC106150	15452	7726	410	233	124
MC106200	20600	10300	546	310	166
MC106300	30903	15452	819	466	248
MC106400	41200	20600	1092	621	331
MC106450	46348	23174	1229	698	373
MC106500	51503	26752	1366	776	414
MC106600	617800	30900	1639	931	497

Steel Wire Cable Tray



MCFUSC
Fast fix universal
strut clip



MCWFB
Fast fix wall bracket



MCWB
Wall bracket



MCFJC
Quik-Click side coupler



MCCA
Nut, bolt & clamp
assembly



MCFCP3
Flexible conduit plate
22, 25 & 32 glands



MCSH
Suspension hanger



MCFCP
Flexible conduit plate
20 & 25mm glands



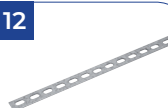
MCCB200
Cantilever bracket
(other widths available)



MCAMP
Wall bracket/ACC
mounting plate



MCDOP
Drop out plate



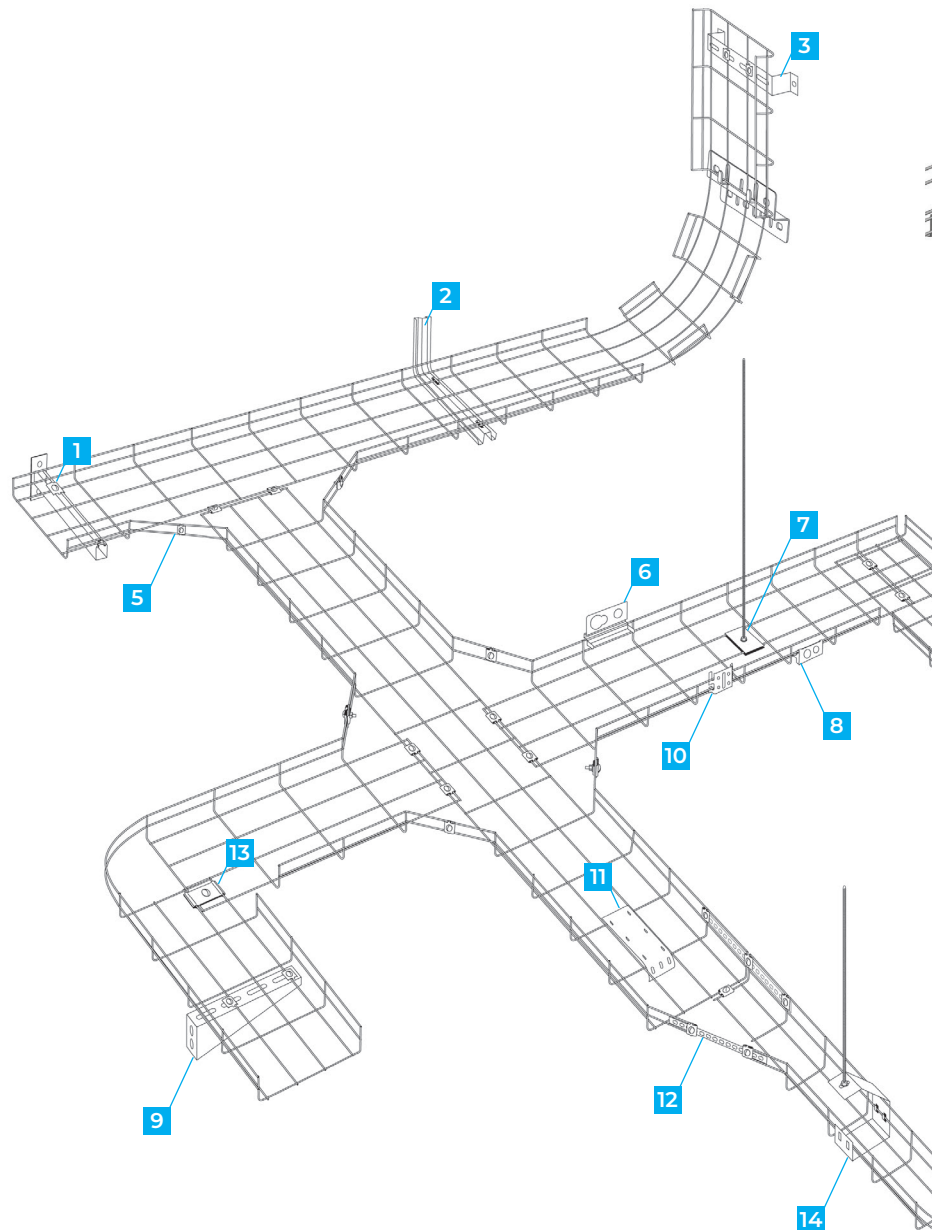
MCSP
Splice plate

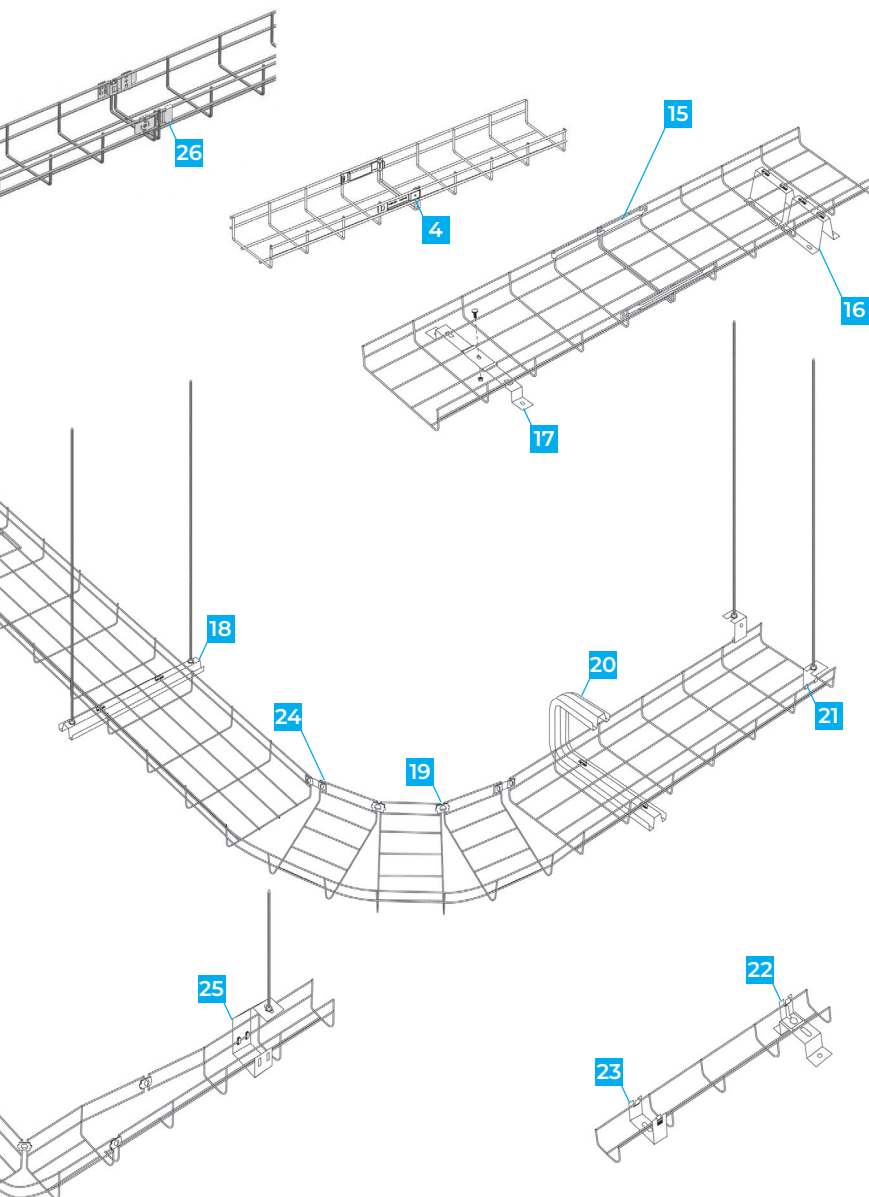


MCCL
2 MCCL large clamps
with MCM620NW hex
screw & flanged nut



MCSB100
Suspension bracket for
MC30100 & MC55100
MCSB50 & MCSB150 also
available





Bends, T-Junctions and Crossovers.
Easily fabricated on-site using MCCA clamps and MCSP splice plates.

For More Information Please Contact
DP Building Systems
0121 706 7777
sarah.prickett@dpbuildingsystems.co.uk



UNISTRUT®



Columbia-MBF™



COBRASYSTEMS INC™

