Atkore Unistrut & Marco Catalogue

Atkore Unistrut | Atkore Marco

Steel Wire Cable Tray

Power & Data Containment Solutions

Atkore Marco is able to offer a comprehensive range of Steel Wire Cable Tray products, including a wide range of accessories and our new, pre-coupled, Quik-Clik Tray. For specialist projects, Atkore Marco is able to supply pre-cut lengths to suit installation requirements.

The entire Steel Wire Cable Tray range is available in the BIM download, found on the Atkore Marco website.
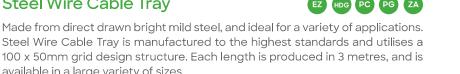
Steel Wire Cable Tray

EZ HDG PC PG ZA

Made from direct drawn bright mild steel, and ideal for a variety of applications. Steel Wire Cable Tray is manufactured to the highest standards and utilises a 100 x 50mm grid design structure. Each length is produced in 3 metres, and is available in a large variety of sizes.
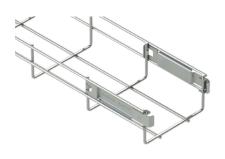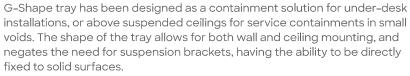
Quik-Clik System

EZ

The latest innovation in the Steel Wire Cable Tray range is the new Quik-Clik system. Enabling two lengths to be coupled in under two seconds, the new system comes with two pre-installed joining couplers for faster on-site installation. Another benefit to the Quik-Clik tray is the ability to remove and re-attach its couplers, allowing for modifications and size change to be easily made to the tray, without losing any of its installation benefits.

G-Shape Steel Wire Cable Tray

EZ

G-Shape tray has been designed as a containment solution for under-desk installations, or above suspended ceilings for service containments in small voids. The shape of the tray allows for both wall and ceiling mounting, and negates the need for suspension brackets, having the ability to be directly fixed to solid surfaces.

Fast-Fix Accessories

PG EZ GT TB

Steel Wire Cable Tray range is further enhanced by a large range of accessories and fittings, all designed to allow for quick and convenient on-site installation. In-particular, Fast Fix line of accessories have been designed for quicker installation, with a drastically reduced need for additional components such as nut & bolt or the need for heavy electrical or mechanical tools.

PG Pre-Galvanised	**HDG** Hot-Dip Galvanised	**GT** Geomet	**ZA** Zinc Aluminium
			See page 9 for more information
EZ Electro Zinc	**PC** Powder Coated	**TB** Turned Brass	

Steel Wire Cable Tray

Atkore™
Marco

Product Overview
30mm, 55mm & 106mm

UKCA   E90 FIRE RESISTANCE   CE

Atkore Marco's Steel Wire Cable Tray is made from direct-drawn bright mild steel, and uses a 100 x 50mm mesh grid.

Each tray is produced in 3 metre lengths and supplied in pack quantities.

The range is complemented by a wide variety of fittings and accessories, all designed to make modifying and installing the tray on site as easy as possible.

Finishes

EZ   Electro Zinc

BS EN ISO 2081:2008

Recommended for use in interior installations where the atmosphere is non-corrosive. EZ Steel Wire Cable Tray is coated with a thickness of between 5-12 microns.

HDG   Hot-Dip Galvanised

ISO 1461:2009

Recommended for exterior use and in more aggressive atmospheres. HG tray is coated to a minimum thickness of 55 microns. Hot-Dip Galv tray is special item and manufactured to order.

PG   Pre-Galvanised

BS EN 10244-2

Recommended for use in data centres and other interior applications. Marco PG Steel Wire Cable Tray is coated with a thickness of approximately 20 microns (135 gr/m2 - class B). Pre-Galvanised tray is special item and manufactured to order.

PC   Powder Coated

BS EN 13438

Powder-Coated is recommended for exterior and interior use in a range of atmospheric environments and is capable of withstanding a variety of corrosive conditions. Its installation is also suggested for data centres. Powder Coated tray is special item and manufactured to order.

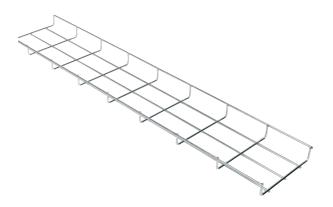Steel Wire Cable tray conforms to the following standards: BS EN 61537, IEC 61537.

Standard Range

Steel Wire Cable Tray Systems
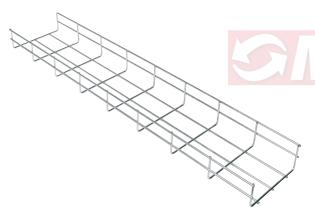
30mm Depth

Steel Wire Cable Tray

CODE	SIZE	LENGTH	FINISH
MC3050	30 x 50mm	3m	PG, EZ, HDG, PC
MC30100	30 x 100mm	3m	PG, EZ, HDG, PC
MC30150	30 x 150mm	3m	PG, EZ, HDG, PC
MC30200	30 x 200mm	3m	PG, EZ, HDG, PC
MC30300	30 x 300mm	3m	PG, EZ, HDG, PC
MC30400	30 x 400mm	3m	PG, EZ, HDG, PC
MC30450	30 x 450mm	3m	PG, EZ, HDG, PC
MC30500	30 x 500mm	3m	PG, EZ, HDG, PC

55mm Depth

Steel Wire Cable Tray
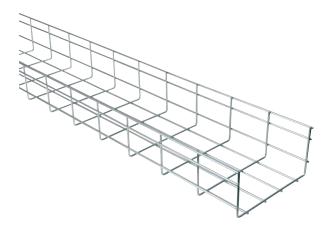
CODE	SIZE	LENGTH	FINISH
MC5550	55 x 50mm	3m	PG, EZ, HDG, PC
MC55100	55 x 100mm	3m	PG, EZ, HDG, PC
MC55150	55 x 150mm	3m	PG, EZ, HDG, PC
MC55200	55 x 200mm	3m	PG, EZ, HDG, PC
MC55300	55 x 300mm	3m	PG, EZ, HDG, PC
MC55400	55 x 400mm	3m	PG, EZ, HDG, PC
MC55450	55 x 450mm	3m	PG, EZ, HDG, PC
MC55500	55 x 500mm	3m	PG, EZ, HDG, PC
MC55600	55 x 600mm	3m	PG, EZ, HDG, PC

106mm Depth

Steel Wire Cable Tray

CODE	SIZE	LENGTH	FINISH
MC106100	106 x 100mm	3m	PG, EZ, HDG, PC
MC106150	106 x 150mm	3m	PG, EZ, HDG, PC
MC106200	106 x 200mm	3m	PG, EZ, HDG, PC
MC106300	106 x 300mm	3m	PG, EZ, HDG, PC
MC106400	106 x 400mm	3m	PG, EZ, HDG, PC
MC106450	106 x 450mm	3m	PG, EZ, HDG, PC
MC106500	106 x 500mm	3m	PG, EZ, HDG, PC
MC106600	106 x 600mm	3m	PG, EZ, HDG, PC

Some sizes and finishes are made to order and minimum quantities apply.

Steel Wire Cable Tray

Accessories

Steel Wire Cable Tray Systems

Fast-Fix Side Coupler

Screwdriver supplied
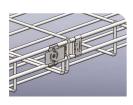
Product Information	
Code	MCSSC
Finish	EZ
Pack QTY	50
Supported Sizes	MC5550–MC55200

Fast-Fix Side Coupler - Large

Screwdriver supplied

Product Information	
Code	MCSSCL
Finish	EZ
Pack QTY	50
Supported Sizes	MC55300–MC55600 MC106100– MC106600

Fast-Fix Universal Strut Clip

Screwdriver supplied

Product Information	
Code	MCFUSC
Finish	GT
Pack QTY	50
Supported Sizes	MC30100–MC30500 MC55100–MC55600 MC106100– MC106600

Pre-Galvanised Hook Coupler

Suitable for use with PG trays only

Product Information	
Code	MCHC–S
Finish	PG
Pack QTY	50
Supported Sizes	MC5550 – MC55200

Quik-Clik Coupler - Small

Pre-Coupled version available, see page 291

Product Information	
Code	MCFJC
Finish	EZ
Pack QTY	50
Supported Sizes	MC5550 – MC55200

Quik-Clik Coupler - Medium

Pre-Coupled version available, see page 291
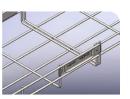
Product Information	
Code	MCFJCM
Finish	EZ
Pack QTY	50
Supported Sizes	MC55300 MC106100 – MC106200

Quik-Clik Coupler - Large

Pre-Coupled version available, see page 291

Product Information	
Code	MCFJCL
Finish	EZ
Pack QTY	50
Supported Sizes	MC55400 –MC55600 MC106300 – MC106600

Fast Fix Floor Bracket

Product Information	
Code	MCFFB
Finish	PG
Pack QTY	50
Supported Sizes	Fits all sizes

All products supplied with tools are subject to orders of pack quantities.

Steel Wire Cable Tray Systems

Quick-Lock Small

Product Information	
Code	MCQLS
Finish	EZ
Pack QTY	25
Supported Sizes	MC3050–MC30200 MC5550–MC55200 MC106100–MC106200

Quick-Lock Large

Product Information	
Code	MCQLL
Finish	EZ
Pack QTY	25
Supported Sizes	MC30300–MC30500 MC55300–MC55600 MC106300–MC106600

Quick Coupler

Pulling tool supplied

Product Information	
Code	MCQC
Finish	EZ, GT
Pack QTY	50
Supported Sizes	Fits all sizes

Suspension Hanger

Product Information	
Code	MCSH
Finish	EZ, GT, PG
Pack QTY	50
Supported Sizes	MC30100–MC30500 MC55100–MC55600 MC106100–MC106600

Clamp Large - 6.5mm Hole

Product Information	
Code	MCCL
Finish	EZ, GT, PG
Pack QTY	50
Supported Sizes	MC305100–MC30500 MC55100–MC55600 MC106100–MC106600

Divider Joining Bracket

Product Information	
Code	MCDJB
Finish	EZ
Pack QTY	10
Supported Sizes	Fits all sizes

Drop Out Plate

Product Information	
Code	MCDOP
Finish	PG
Pack QTY	50
Supported Sizes	Fits all sizes

All of Atkore Marco's Steel Wire Cable Tray products are available from our website as part of the BIM object download

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PG = Pre-Galvanised
TB = Turned Brass
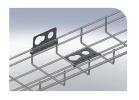
Accessories

Flexible Conduit Plate - 20 & 25mm

Product Information	
Code	MCFCP
Finish	PG, GT
Pack QTY	20
Supported Sizes	Fits all sizes

Flexible Conduit Plate - 20, 25 & 32mm

Product Information	
Code	MCFCP3
Finish	PG, GT
Pack QTY	20
Supported Sizes	Fits all sizes

Wall Bracket/ACC Mounting Plate

Product Information	
Code	MCAMP
Finish	PG, GT
Pack QTY	20
Supported Sizes	MC5550–MC55600 MC106100–MC106600

Multi-Fix Plate

Product Information	
Code	MCMFP
Finish	PG
Pack QTY	50
Supported Sizes	Fits all sizes

Universal Support Bracket

Product Information	
Code	MCUSB
Finish	PG
Pack QTY	50
Supported Sizes	MC30100–MC30500 MC55100–MC55600 MC106100–MC106600

Nut, Bolt & Clamp Assembly

Product Information	
Code	MCCA
Finish	EZ, GT , PG
Pack QTY	50
Supported Sizes	Fits all sizes

Nut, Bolt & Clamp Fixing Assembly

Product Information	
Code	MCCB
Finish	EZ, GT
Pack QTY	50
Supported Sizes	Fits all sizes

Clamp Small

Product Information	
Code	MCCS
Finish	EZ, GT
Pack QTY	50
Supported Sizes	Fits all sizes

Steel Wire Cable Tray

Steel Wire Cable Tray Systems

Clamp Medium

Product Information	
Code	MCCM
Finish	EZ , GT
Pack QTY	50
Supported Sizes	Fits all sizes

M6 x 20 Screw, Nut & Washer

Product Information	
Code	MCM620NW
Finish	EZ, GT
Pack QTY	50
Supported Sizes	Fits all sizes

Splice Plate

Product Information	
Code	MCSP
Finish	PG, GT
Pack QTY	50
Supported Sizes	Fits all sizes

90° Splice Plate

Product Information	
Code	MCSP90
Finish	PG
Pack QTY	20
Supported Sizes	Fits all sizes

Suspension Bracket 6mm & 8mm Rod

Max safe working load 100kg
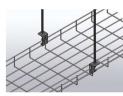
Product Information	
Code	MCSB68
Finish	PG, GT
Pack QTY	20
Supported Sizes	Fits all sizes

Suspension Bracket 10mm & 12mm Rod

Max safe working load 100kg

Product Information	
Code	MCSB1012
Finish	PG, GT
Pack QTY	20
Supported Sizes	Fits all sizes

Suspension Bracket – 50mm Tray

Max safe working load 30kg

Product Information	
Code	MCSB50
Finish	PG, GT
Pack QTY	50
Supported Sizes	MC3050 MC5550

Suspenstion Bracket – 100mm Tray

Max safe working load 30kg

Product Information	
Code	MCSB100
Finish	PG, GT
Pack QTY	50
Supported Sizes	MC30100 MC55100

Steel Wire Cable Tray

Accessories

Suspension Bracket – 150mm Tray

Max safe working load 30kg

Product Information	
Code	MCSB150
Finish	PG, GT
Pack QTY	50
Supported Sizes	MC30150 MC55150

Bracket

Max safe working load 20kg

Product Information	
Code	MCB35
Finish	PG
Pack QTY	50
Supported Sizes	MC3050 MC5550

Tray Support Bracket – 50mm Tray

Product Information	
Code	MCTS35
Finish	PG
Pack QTY	50
Supported Sizes	MC3050 MC5550

Earth Terminal

Product Information	
Code	MCET16
Finish	TB
Pack QTY	10
Supported Sizes	MC5550–MC55600 MC106100– MC106600

Earth Terminal – 30mm Tray

Supplied with PG mounting bracket & accessories for mounting to 30mm tray.

Product Information	
Code	MCET16–30
Finish	TB
Pack QTY	10
Supported Sizes	MC3050 – MC30500

ID Tags

Product Information	
Code	MCTAG
Finish	–
Pack QTY	50

Coloured ID tags are used to differentiate which services are being carried in which containment. ID Tags can be supplied printed with ID labels to quickly identify cabling being carried in runs of tray. Labels include:

- ELV
- LV
- DATA/COMMS
- FIRE
- ANCILLARY
- SUB MAINS

EZ = Electro Zinc
GT = Geomet
HDG = Hot-Dip Galvanised
PC = Powder Coated
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Bolt Croppers

Product Information	
Code	MCROP
Pack QTY	1

Steel Wire Cable Tray

Atkore™ Marco

Steel Wire Cable Tray Systems

Divider

CODE	DESCRIPTION	DEPTH	LENGTH	FINISH	PACK QTY
MCD30	Steel Wire Cable Tray Divider	30mm	30mm x 3m	PG	20
MCD55	Steel Wire Cable Tray Divider	55mm	55mm x 3m	PG	16
MCD106	Steel Wire Cable Tray Divider	106mm	106mm x 3m	PG	12

Steel Wire Cable Tray Lid

CODE	DESCRIPTION	TRAY WIDTH	LENGTH	FINISH	PACK QTY
MCL100	100mm Steel Wire Cable Tray Lid	100	2m	PG	6 x 2m
MCL150	150mm Steel Wire Cable Tray Lid	150	2m	PG	4 x 2m
MCL200	200mm Steel Wire Cable Tray Lid	200	2m	PG	4 x 2m
MCL300	300mm Steel Wire Cable Tray Lid	300	2m	PG	2 x 2m
MCL400	400mm Steel Wire Cable Tray Lid	400	2m	PG	2 x 2m
MCL450	450mm Steel Wire Cable Tray Lid	450	2m	PG	2 x 2m
MCL500	500mm Steel Wire Cable Tray Lid	500	2m	PG	2 x 2m
MCL600	600mm Steel Wire Cable Tray Lid	600	2m	PG	2 x 2m

Fast-Fix Support Bracket

CODE	DESCRIPTION	LUGS	FINISH	PACK QTY
MCCSB100	Fast–Fix Channel Support Bracket for 100mm wide tray, 200mm long	2	PG	50
MCCSB150	Fast–Fix Channel Support Bracket for 150mm wide tray, 250mm long	3	PG	50
MCCSB200	Fast–Fix Channel Support Bracket for 200mm wide tray, 300mm long	4	PG	50
MCCSB300	Fast–Fix Channel Support Bracket for 300mm wide tray x 400mm long	6	PG	25
MCCSB400	Fast–Fix Channel Support Bracket for 400mm wide tray x 500mm long	8	PG	25
MCCSB450	Fast–Fix Channel Support Bracket for 450mm wide tray x 550mm long	9	PG	25
MCCSB500	Fast–Fix Channel Support Bracket for 500mm wide tray x 600mm long	10	PG	25
MCCSB600	Fast–Fix Channel Support Bracket for 600mm wide tray x 700mm long	12	PG	25
MCCSB1000	Fast–Fix Channel Support Bracket for 1000mm wide tray x 1000mm long	20	PG	25

Product Shown
MCCSB200

Fast-Fix Wall Bracket

CODE	DESCRIPTION	TRAY WIDTH	LOAD (KG)	FINISH	PACK QTY
MCWFB100	Fast–Fix Wall Bracket	100	175	PG	12
MCWFB150	Fast–Fix Wall Bracket	150	200	PG	12
MCWFB200	Fast–Fix Wall Bracket	200	140	PG	12
MCWFB300	Fast–Fix Wall Bracket	300	100	PG	12
MCWFB400	Fast–Fix Wall Bracket	400	95	PG	12
MCWFB450	Fast–Fix Wall Bracket	450	70	PG	12

Steel Wire Cable Tray

Accessories

Fast-Fix Ceiling Bracket

CODE	DESCRIPTION	TRAY WIDTH	LOAD (KG)	FINISH	PACK QTY
MCCFB100	Fast-Fix Ceiling Bracket	100	135	PG	50
MCCFB150	Fast-Fix Ceiling Bracket	150	125	PG	50
MCCFB200	Fast-Fix Ceiling Bracket	200	90	PG	50
MCCFB300	Fast-Fix Ceiling Bracket	300	75	PG	50
MCCFB400	Fast-Fix Ceiling Bracket	400	50	PG	50
MCCFB450	Fast-Fix Ceiling Bracket	450	44	PG	50

Cantilever Bracket

CODE	DESCRIPTION	TRAY WIDTH	FINISH	PACK QTY
MCCB100	Cantilever Bracket	100	PG	20
MCCB150	Cantilever Bracket	150	PG	20
MCCB200	Cantilever Bracket	200	PG	20
MCCB300	Cantilever Bracket	300	PG	20
MCCB400	Cantilever Bracket	400	PG	20

Wall/Floor Bracket

CODE	DESCRIPTION	TRAY WIDTH	ADDITIONAL COMPONENTS	FINISH	PACK QTY
MCWB50	Wall/Floor Bracket	50	MCTCS35 / MCCB or MCB35 / MCM620NW	PG	100
MCWB100	Wall/Floor Bracket	100	MCCL / MCM620NW	PG	100
MCWB150	Wall/Floor Bracket	150	MCCL / MCM620NW	PG	100
MCWB200	Wall/Floor Bracket	200	MCCL / MCM620NW	PG	50
MCWB300	Wall/Floor Bracket	300	MCCL / MCM620NW	PG	50
MCWB400	Wall/Floor Bracket	400	MCCL x 2 / MCM620NW x 2	PG	50
MCWB450	Wall/Floor Bracket	450	MCCL x 2 / MCM620NW x 2	PG	25
MCWB500	Wall/Floor Bracket	500	MCCL x 2 / MCM620NW x 2	PG	25
MCWB600	Wall/Floor Bracket	600	MCCL x 2 / MCM620NW x 2	PG	25

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Steel Wire Cable Tray

Atkore™
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Pre Fabrication Guide

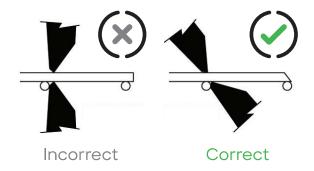## Steel Wire Cable Tray Systems

Introduction

Available in Electro-Zinc, Pre-Galvanised, Powder-Coated, Hot-Dip Galvanised, 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

MC55300 and MC55100

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

Wire Cutting Directions

Incorrect   Correct

Typical Fabricated Reducer Components

CODE	COMPONENT	QTY
MCCA		x2
MCCA		x2
MCSP		x1

All bends are easily fabricated on-site!
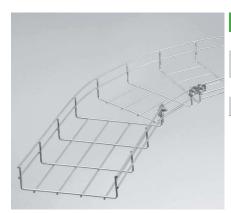
Find us in the Beama best practice guide for additional installation instructions

Steel Wire Cable Tray

Large Radius Bend
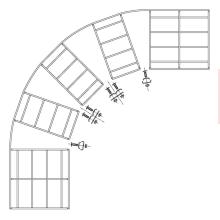
NEW LARGE RADIUS BEND – QUICK ASSEMBLY GUIDE

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

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]

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 MCCA x 2 MCSP x 50mm x 1	x2	x2	6
400	MCCB x 2 MCCA x 4 MCSP x 50mm x 1	x2	x4	8
450	MCCB x 2 MCCA x 6 MCSP x 50mm x 1	x2	x6	9
500	MCCA x 9		x9	10
600	MCCA x 11		x11	12

Steel Wire Cable tray conforms to the following standards: BS EN 61537:2007, IEC 61537.

Steel Wire Cable Tray

Small Radius Bend

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

REMOVE SEGMENTS 'B'   REMOVE SEGMENTS 'A'   REMOVE SEGMENTS 'B'

Example of MC55200, MCCL x 2, MCM620NW x 1

Steel Wire Cable Tray
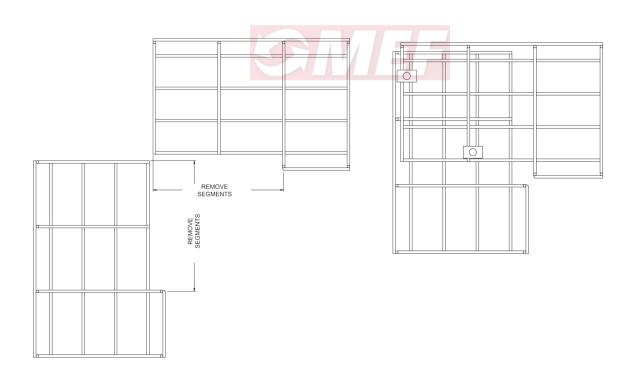
Right Angle Bend

Fabrication Guide

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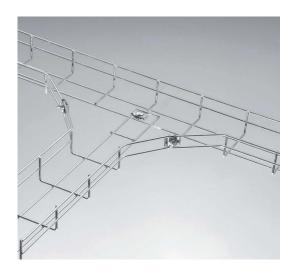
REMOVE SEGMENTS

REMOVE SEGMENTS

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Steel Wire Cable Tray

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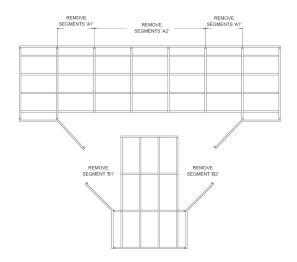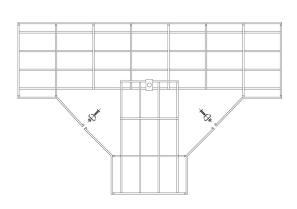
TRAY WIDTH (mm)	FASTENING TYPE	MCCB	MCCA	REMOVED SEGMENTS		REMOVED SEGMENTS	
				A1	A2	B1	B2
100	MCCA		x3			1	1
150	MCCA MCCB x 2 MCSP x 50mm	x2	x1	3	2	1	1
200	MCCA		x3	3	2	1	1
300	MCCA		x4	4	2	1	1
400	MCCA		x4	5	2	1	1
450	MCCA		x4	5	2	1	1
500	MCCA MCCB x 2 MCSP x 50mm	x2	x2	6	2	1	1
600	MCCA MCCB x 2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

REMOVE SEGMENTS 'A1'   REMOVE SEGMENTS 'A2'   REMOVE SEGMENTS 'A1'

REMOVE SEGMENT 'B1'   REMOVE SEGMENT 'B2'
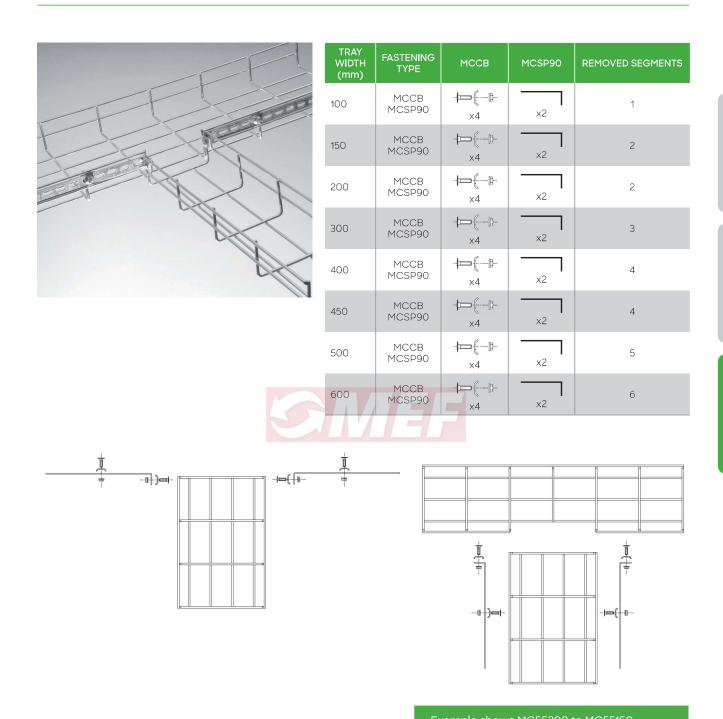
Find us in the Beama best practice guide for additional installation instructions

Right Angle Bend

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

Example shows MC55200 to MC55150

Steel Wire Cable tray conforms to the following standards: BS EN 61537:2007, IEC 61537.

Cable Capacities

30mm Depth
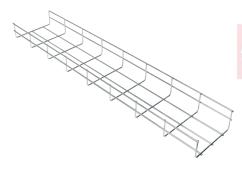
Steel Wire Cable Tray

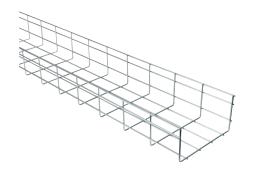| TABLES SHOWING APPROXIMATE CABLE CAPACITIES OF ALL STEEL WIRE CABLE TRAYS USING A 50% FILL RATIO					
MC30			**APPROX CABLE CAPACITY UNDER NEC 50% RULE**		
CABLE TRAY	TOTAL FILL AREA (mm²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm²)	CAT5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (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 (mm²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm²)	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 (mm²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm²)	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

Atkore™ Marco

Specification for MC30 Steel Wire Cable Tray

Product Code

MC30 Range

Product Description

30mm deep Steel Wire Cable Tray
50 x 100 mm mesh configuration

Product Dimensions

MC3050 – 30 x 50 mm
MC30100 – 30 x 100 mm
MC30150 – 30 x 150 mm
MC30200 – 30 x 200 mm
MC30300 – 30 x 300 mm
MC30400 – 30 x 400 mm
MC30450 – 30 x 450 mm
MC30500 – 30 x 500 mm

Standard 3M Length

PART CODE	'A' DIMENSION	'B' DIMENSION	'C' DIMENSION
MC3050	50	30	64
MC30100	100	30	114
MC30150	150	30	164
MC30200	200	30	214
MC30300	300	30	316
MC30400	400	30	416
MC30450	450	30	466
MC30500	500	30	516

Applicable Standards:

BS EN 61537 (Cable tray systems)
BS EN ISO 10244 (Steel wire and wire products)
BS EN ISO 1461(Hot dip galvanised coatings)
BS EN ISO 2081 (Metallic and other inorganic coatings)
BS EN 13438 (Powder organic coatings)

Product Specification:

Manufactured: Machine welded from steel wire rod

Cable Capacities

MC30			APPROX CABLE CAPACITY UNDER NEC 50% RULE		
CABLE TRAY	TOTAL FILL AREA (mm²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm²)	CAT 5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (8.9mm 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

Finishes

PG – Pre-Galvanised
HDG – Hot-Dip Galvanised
EZ – Electro Zinc
PC – Powder Coated

Steel Wire Cable Tray

MC55 Range

Product Code

MC55 Range

Product Description

55mm deep Steel Wire Cable Tray
50 x 100 mm mesh configuration

Product Dimensions

MC5550 – 55 x 50 mm
MC55100 – 55 x 100 mm
MC55150 – 55 x 150 mm
MC55200 – 55 x 200 mm
MC55300 – 55 x 300 mm
MC55400 – 55 x 400 mm
MC55450 – 55 x 450 mm
MC55500 – 55 x 500 mm
MC55600 – 55 X 600 mm

Standard 3M Length

Applicable Standards:

BS EN 61537 (Cable tray systems)
BS EN ISO 10244 (Steel wire and wire products)
BS EN ISO 1461(Hot dip galvanised coatings)
BS EN ISO 2081 (Metallic and other inorganic coatings)
BS EN 13438 (Powder organic coatings)

Product Specification:

Manufactured: Machine welded from steel wire rod

PART CODE	'A' DIMENSION	'B' DIMENSION	'C' DIMENSION
MC5550	50	55	64
MC55100	100	55	114
MC55150	150	55	164
MC55200	200	55	214
MC55300	300	55	316
MC55400	400	55	416
MC55450	450	55	468
MC55500	500	55	518
MC55600	600	55	618

Cable Capacities

MC55			APPROX CABLE CAPACITY UNDER NEC 50% RULE		
CABLE TRAY	TOTAL FILL AREA (mm²)	NEC 50% RULE: ALLOWABLE FILL AREA (mm²)	CAT 5e 4-pr UTP (4.9mm diam)	CAT 6 4-pr UTP (6.5mm diam)	CAT 6a 4-pr UTP (8.9mm 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

Finishes

PG – Pre-Galvanised
HDG – Hot-Dip Galvanised
EZ – Electro Zinc
PC – Powder Coated

Steel Wire Cable Tray

MCFJC Range

Product Code

MCFJC Range

Product Description

Fast Joining Coupler Small, Medium, Large

Product Dimensions

S – 115 x 20 x 1.2mm
M – 116.5 x 18.5 x 1.2mm
L – 117 x 18.5 x 1.2mm
MCFJC30 – 115 x 30 x 1,2mm
MCFJC30–M – 116.50 x 28.5 x 1.2mm

Utilisation

Pre-attached to lengths of Steel Wire Cable Tray.
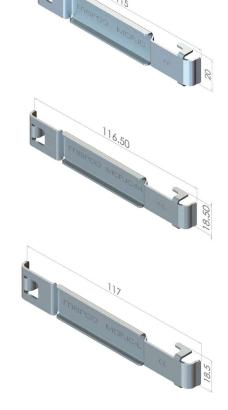Couples two lengths of tray quickly and securely.

Applicable Standards:

BS EN 61537 (Cable tray systems)
BS EN ISO 2081 (Metallic and other inorganic coatings)

Product Specification:

Manufactured: Power-pressed from stripped steel

Material Specification: (if applicable)

65Mn sprung steel

C	S	Si	Mn	P	Cr	Ni	Cu
0.65%	0.018%	0.25%	1.13%	0.021%	0.22%	0.19%	0.17%

Yield Strength	785 MPa
Tensile Strength	981 MPa
Elongation	21%

The above are typical test results and do not constitute any part of a specification
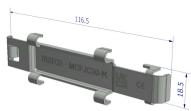
Finishes

EZ – Electro Zinc, suitable for use with Electro–Zinc trays

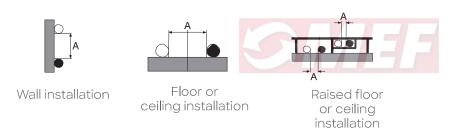## MCFJC30 Range

MCFJC30

MCFJC30–M

Separation between telecoms cabling

BS 50174-2 – Separation between Power & Information Technology Cables

In installations where the horizontal wire cable tray length is less than 35m no separation is required, in case of screened cabling. For lengths greater than 35m, the separation distances apply to the full length excluding the final 15m attached to the outlet.
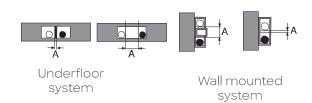
Please see table below:

	Distance A		
	Without divider or non metallic divider	Aluminium Divider	Steel Divider
Unscreened power and data cable	200mm	100mm	50mm
Unscreened power cable and screened IT cable	50mm	20mm	5mm
Screened power cable and unscreened IT cable	30mm	20mm	2mm
Screened power cable and screened IT cable	0mm	0mm	0mm

Wall installation

Floor or ceiling installation

Raised floor or ceiling installation

Note – All cables should be fixed. For cables with fixing, minimum distance is the distance that is the worst situation between fixing points. Without fixing, 0mm distance shall be taken into consideration.

Example of power cable and information technology cables that run parallel without divider.

Underfloor system

Wall mounted system

Steel Wire Cable Tray

Product Testing Methods

Installation Test Area

Atkore Marco has created an installation test area at our factory premises, where all uPVC trunking and fittings can be installed and tested in a realistic setting.

Atkore Marco has a spectrophotometer to carry out in-house colour testing, external fire testing (Warrington Fire Testing), in-house quality/testing procedures and supplier test measurements for the uPVC compound Marco purchases.

Thermal Expansion uPVC

It is recommended not to run the installation at high temperatures for long periods of time. The table below shows the various temperatures for the different uPVC trunking stages:

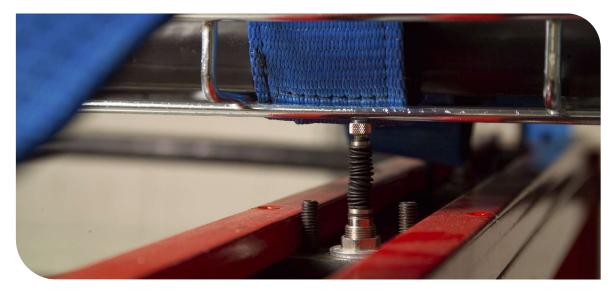| TEMPERATURE RANGE °C	MIN	MAX
STORAGE	-5	+50
INSTALLATION	-5	+50
OPERATING	-5	+50

Water Absorption uPVC

Negligible.

Testing Facility

Atkore Marco has further demonstrated its commitment to producing the highest quality products on the market by investing in a high-tech suite of specialist test equipment.
To date, Atkore Marco is the only UK manufacturer of Steel Wire Cable Tray to own such high specification in-house testing equipment, which will ensure all products are fully compliant with IEC61537 and related standards. Atkore Marco is now able to regularly carry out full deflection tests on all products, and is testing alternative configurations with a view to developing the next generation of trays for the UK and European Markets.
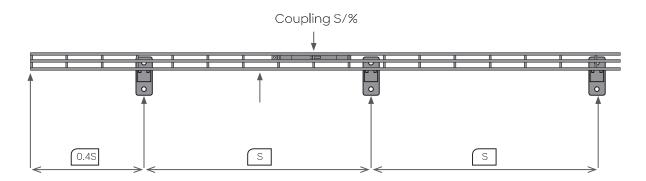
Safe Working Load

Steel Wire Cable Trays are tested across two spans and a cantilever.
The deflection is measured on the central span using three sensors placed on the sides and at the centre to the tray.
The test method conforms to the BSEN 61537 standard.

Note: The maximum deflection of 1/100 is always reached for a lesser load than that of the safety load. (The breaking point divided by a safety co-efficient of 1.7). CEI/61537

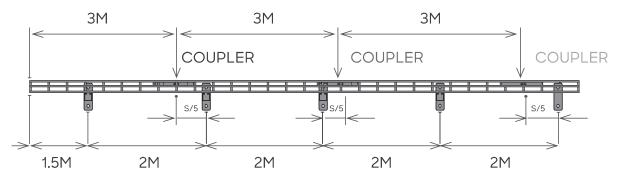Coupling S/%

0.4S S S

Recommended Support Spacing

There is an optimum configuration to obtain 2 metre spans without the couplings being positioned at the supports or in the middle of the spans.

To obtain this result, the first span is deliberately limited to 1.5 metres, then the supports are placed approximately every 2 metres. The coupling points are therefore always 0.5 metres from a support.
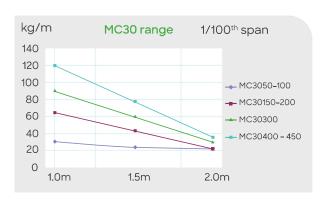

3M 3M 3M

COUPLER COUPLER COUPLER

S/5 S/5 S/5

1.5M 2M 2M 2M 2M

Product Testing Methods

Permissible Load

Permissible loads are tested for a maximum deflection of 1/100th of the span, with a coupling positioned at 1/5th of the span from the support.

The coefficient applied to the load for coupling in the middle of the span – 0.7.
Permissible load for maximum sag = L/100 on the intermediate span, coupling at 1/5th of the span.

MC30	
CODE	**SIZE (mm)**
MC3050	30 x 50
MC30100	30 x 100
MC30150	30 x 150
MC30200	30 x 200
MC30300	30 x 300
MC30400	30 x 400
MC30450	30 x 450
MC30500	30 x 500

MC55	
CODE	**SIZE (mm)**
MC5550	55 x 50
MC55100	55 x 100
MC55150	55 x 150
MC55200	55 x 200
MC55300	55 x 300
MC55400	55 x 400
MC55450	55 x 450
MC55500	55 x 500
MC55600	55 x 600

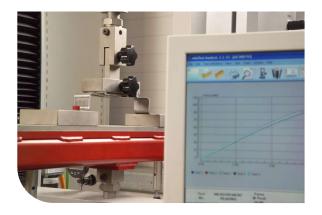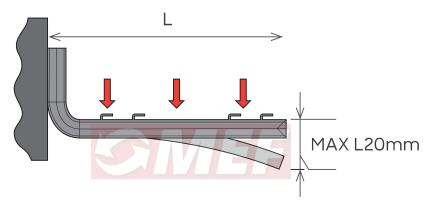| MC106	
CODE	**SIZE (mm)**
MC106100	106 x 100
MC106150	106 x 150
MC106200	106 x 200
MC106300	106 x 300
MC106400	106 x 400
MC106450	106 x 450
MC106500	106 x 500
MC106600	106 x 600

Testing

Supports

The brackets are characterised by their permissible loads (in Kg).

The hangers are characterised by their permissible torques (in Kg.m). All supports are tested and conform with the standard BSEN61537.

The safe working load (SWL) as defined by the standard is the lowest value of either:

The load creating a deflection of L/20 at the end
The breaking load divided by 1.7, if the deflection at L/20 is not reached

MAX L20mm

Electro-Magnetic Compatibility

Atkore Marco engage the services of York EMC, part of The University of York, to investigate shielding effectiveness of Marco Steel Wire Cable Tray.

Steel Wire Cable Tray is found to outperform the 200mm pacing configuration required by BSEN50174–2 proven by the independently commissioned EMC tests.

This indicates that Atkore Marco's Steel Wire Cable Tray can offer a more efficient and compact installation (rather than relying on spacing).

source → coupling → victim

power cable　　　data cable

Testing

Fast-Fix Strut Clip (MCFUSC)

The quick fit strut clip (MCFUSC) is ideal for a wide range of installations, including modular builds, as it is able to be fitted prior to transit, without the need of additional securing clips.

In order to prove that the MCFUSC cab be used in even the most complex of installations, Atkore Marco undertake bespoke testing to the conditions of British Standard BSEN61537.

To determine a safe working load for the MCFUSC, a test is devised by fitting a length of MC55200EZ (55 x 200mm) Steel Wire Cable Tray to a piece of Unistrut channel, attached using two MCFUSC clips.

The machine is then set to pull away from the centre position up to a maximum force of 80Kg, until either the Steel Wire Cable Tray deflected 5mm in height, or the MCFUSC failed.

The Steel Wire Cable Tray reaches the desired deflection of 5mm with the MCFUSC holding securely in place.

Atkore Marco can therefore prove that the MCFUSC has a safe working load of 80Kg.

Environmental

All products are produced to all applicable environmental standards. No compounds used contain any substances classified as health hazards according to EEC directive 1999/45/EC and the UK CHIP Statutory Instrument 2002 to 1689.

100% of all possible recycled uPVC material is re-used in the manufacture of Atkore Marco trunking systems. Recycled material is only used in the manufacture of our uPVC trunking bases, in order to allow the visible elements and accessories to retain their pure white finish. In order to maintain the highest quality possible and keep tolerances above the required level, the ratio of regrind to virgin material does not exceed a predetermined percentage.

All Atkore Marco Steel Wire Cable Trays are manufactured from a steel wire rod comprising 100% recycled material. 100% of the minimal amount of scrap Steel Wire Cable Tray produced is sold locally for reprocessing. Atkore Marco Steel Wire Cable Tray production is UK based, reducing both it's 'product-miles' and carbon footprint to a minimum and setting it apart from it's main competitors.

Atkore Marco recognises that it can extend its sustainability policy beyond its own business and encourage customers to return old products for recycling and reprocessing into good production.

All products are RoHS compliant and meet REACh credentials and the company is supporting their customers towards achieving a high BREEAM rating or other accreditations.

Atkore™

Allied Tube & Conduit ▴ AFC Cable Systems ▴ Heritage Plastics ▴ Unistrut

Unistrut Construction ▴ Cope ▴ US Tray ▴ Calbrite ▴ Calbond ▴ Kaf-Tech

Power-Strut ▴ Calconduit ▴ Razor Ribbon ▴ Calpipe Security ▴ Vergokan ▴ Cii

Columbia-MBF ▴ Eastern Wire + Conduit ▴ ACS/Uni-Fab ▴ Sasco Strut ▴ Marco

FRE Composites ▴ Queen City Plastics ▴ Four Star Industries ▴ Flexicon

Atkore Unistrut & Marco
Delta Point,
Greets Green Road
West Bromwich
B70 9PL

PHONE/ +44 (0) 121 580 6300
FAX / +44 (0) 121 580 6370

atkore.com/marco
atkore.com/unistrut