

Steel Cable Supports for Mining, Industrial & Commercial Applications



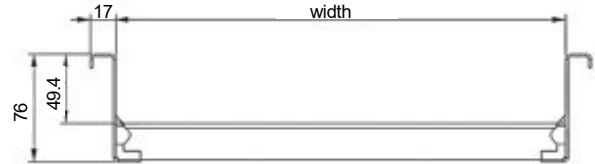
www.cablemanagement.africa

CM CABLE
MANAGEMENT
cable support solutions

F76 cable ladder (horizontally mounted)

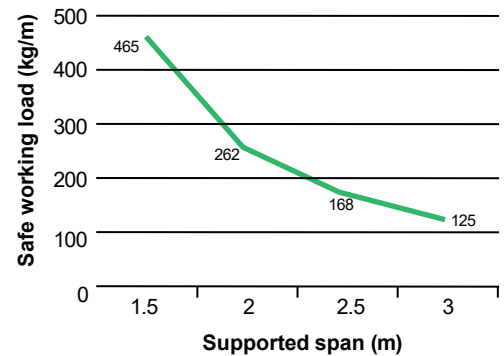


F76 cable ladder is manufactured in CQ steel and is available in stainless steel 314 and 316. Designed and tested for horizontally mounted application in mining, industrial and commercial applications.



Class designation	Horizontally mounted cable ladder side rail height
Material	Hot dip galvanized mild steel, Stainless steel 3CR12, SS304 & SS316
Thickness	t=1.5mm
Inside depth	50mm/49,4mm/49,4mm
Standard length	3.0m
Rung spacing	375mm
Side rail	76mm "Z" profile
Available widths (mm)	100, 150, 200, 300, 400, 500, 600, 800, 1000
Accessories min. bend	Radius 450, 650 & 1000mm
Weight (3.0m)	200mm = 10.0kg. 800mm = 15.2kg
Safe working load (swl)	Supports 2.0m 260kg/m 3.0m = 125kg/m

Safe working load



The F76 cable ladder is made with CQ mild steel. The stainless steel cable ladder is available with 3CR12, SS304, and SS316. They are all light weight and ideal for industrial or commercial applications where the cables need to be supported on a horizontally mounted cable ladder and the supports are at 1.5, 2.0 or 3.0m. The ladder is designed and tested for horizontally mounted applications according to NEMA. The working load capacity for 1.5, 2.0 or 3.0m is shown in the safe working load diagram. The safety factor is 1.5. NEMA test load deflection is 20mm for 112kg/m safe working load. For the site installation the span will be continuous and the deflection is 10mm (end span 15mm). The F76 cable ladder meets the requirements of NEMA VE01 Class 10 B (112kg/m)(75lb/ft), support at 3.0m. (table 2 NEMA VE1-2009). All accessories require support near each end and at the centre. It is recommended that the F76 be installed in accordance with NEMA VE2- available from www.nema.org.



F76 horizontal bend



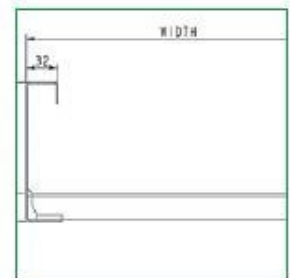
F76 internal bend



F76 external bend

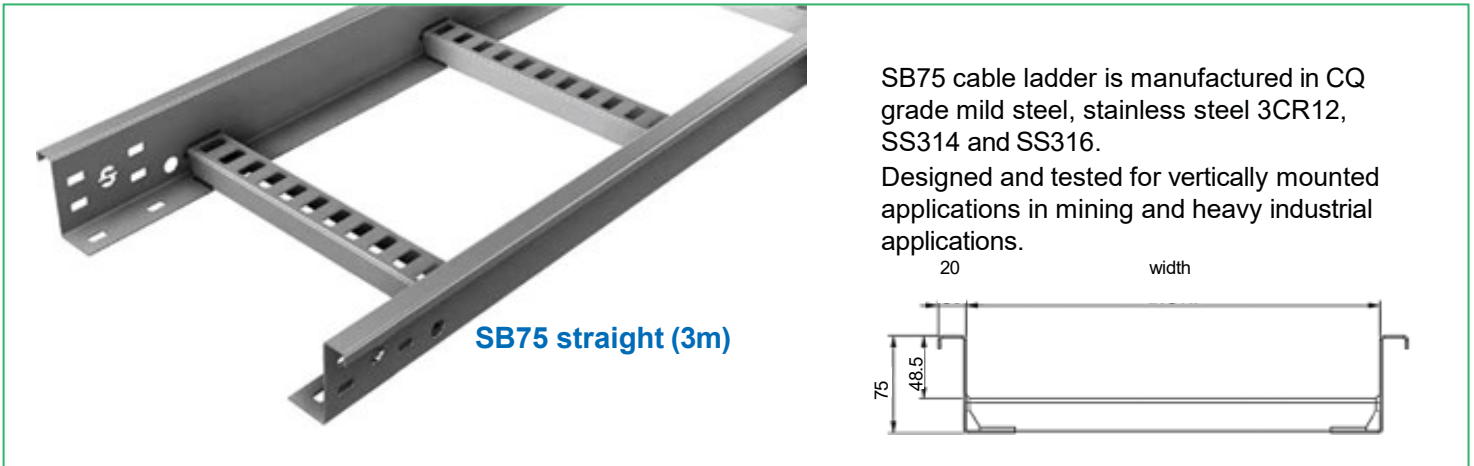


F76 tee



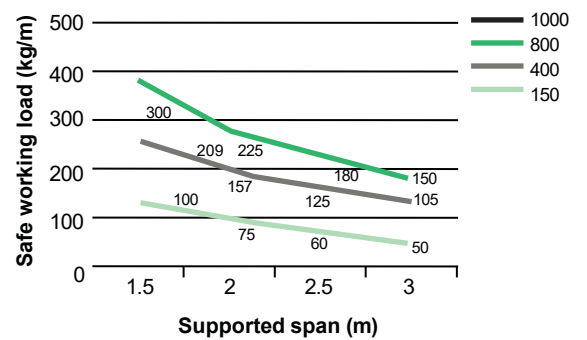
F76 4-way

SB75 cable ladder (vertically mounted)



Class designation	Edge mounted cable ladder
Material	Hot dip galvanized mild steel, stainless steel 3CR12, SS304 & SS316
Thickness	t=1.5mm
Inside depth	48.5mm
Standard length	3.0m
Rung spacing	300mm
Side rail	75mm "Z" profile
Available widths (mm)	100, 150, 200, 300, 400, 500, 600, 800, 1000
Accessories min. bend	Radius 450, 650 & 1000mm
Weight (3.0m)	150mm = 11.7kg. 800mm = 18.2kg
Safe working load (swl)	See table

Safe working load



The SB range of cable ladder is made with CQ mild steel. The stainless steel cable ladder is made with 3CR12, SS304, and SS316. They are ideal for heavy duty applications where the cables need to be supported on a vertically mounted cable ladder and the supports are at 1.5, 2.0 or 3.0m. The ladder is designed and tested for vertically mounted applications. The working load capacity for 1.5, 2.0 or 3.0m is shown in the safe working load diagram. The safety factor is 1.5. Test load & deflection is 10mm for the safe working load. For the site installation the span will be continuous and the deflection is 5mm (end span 8mm). All accessories require support near each end and at the centre. It is recommended that the SB75 be installed in accordance with NEMA VE2- available from www.nema.org.



SB75 horizontal bend



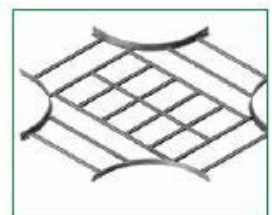
SB75 internal bend



SB75 external bend



SB75 tee



SB75 4-way



SB75 equal reducer

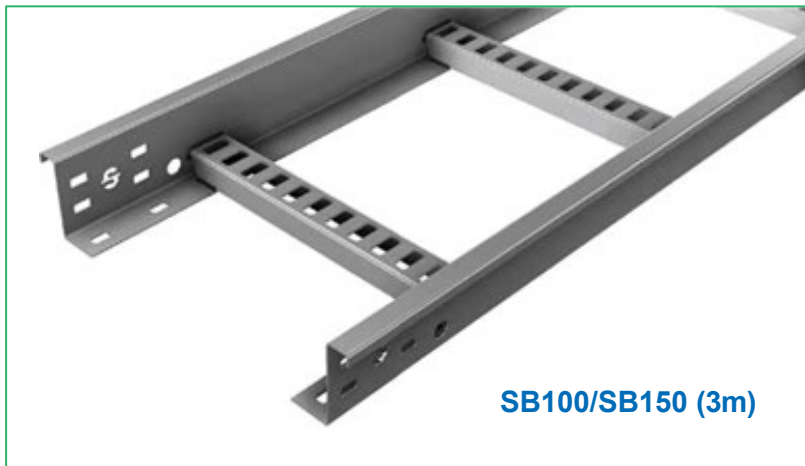


SB75 right hand reducer



SB75 left hand reducer

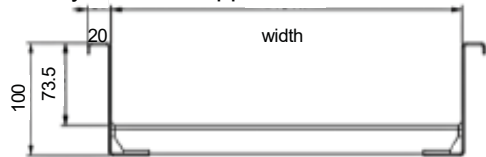
SB100/SB150 cable ladder (vertically mounted)



SB100/SB150 (3m)

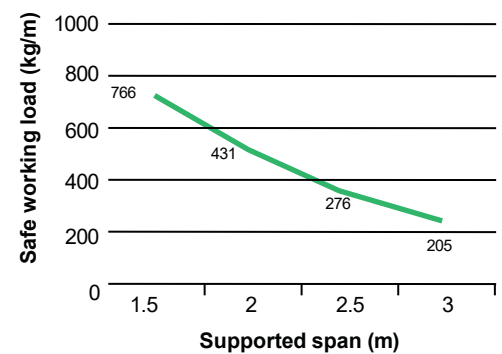
SB100 & 150 cable ladder is manufactured in CQ grade mild steel, stainless steel 3CR12, SS314 and SS316.

Designed and tested for vertically mounted applications in mining and heavy industrial applications.



Class designation	Edge mounted cable ladder
Material	Hot dip galvanized mild steel, stainless steel 3CR12, SS304 & SS316
Thickness	t=1.5mm
Inside depth	73.5mm
Standard length	3.0m
Rung spacing	300mm
Side rail	100mm "Z" profile
Available widths (mm)	100, 150, 200, 300, 400, 500, 600, 800, 1000
Accessories min. bend	Radius 450, 650 & 1000mm
Weight (3.0m)	200mm = 15.0kg. 800mm = 20.8kg
Safe working load (swl)	Supports 2.0m 430kg/m 3.0m = 205kg/m

Safe working load



The SB range of cable ladder is made with CQ mild steel. The stainless-steel cable ladder is made with 3CR12, SS304, and SS316. They are ideal for heavy duty applications where the cables need to be supported on a vertically mounted cable ladder and the supports are at 1.5, 2.0 or 3.0m. The working load capacity for 1.5, 2.0 or 3.0m is shown in the safe working load diagram. The safety factor is 1.5. test load & deflection is 10mm for the safe working load. For the site installation the span will be continuous and the deflection is 5mm (end span 8mm). It is recommended that the SB range be installed in accordance with NEMA VE2- available from www.nema.org.



SB100 horizontal bend



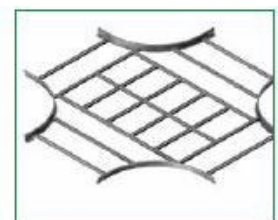
SB100 internal bend



SB100 external bend



SB100 tee



SB100 4-way



SB100 equal reducer

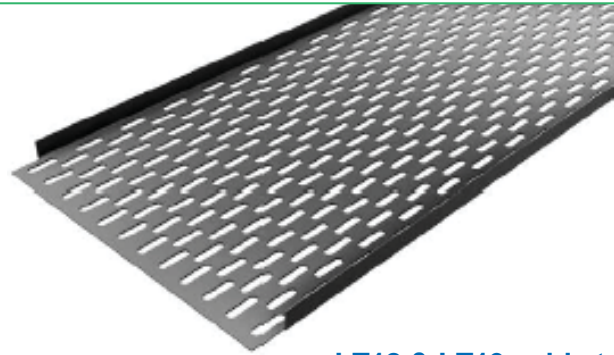


SB100 right hand reducer



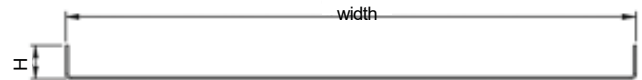
SB100 left hand reducer

LT12 & LT19 cable trays



LT12 & LT19 cable tray (3m)

LT12 & LT19 cable trays is manufactured in pre-galvanized steel Z275. Designed for horizontal and vertical application.



Class designation	Horizontally & vertically mounted cable trays
Material	Pre-galvanized steel Z275
Thickness	t=1.2mm
Standard length	3.0m
Dim. "H" may vary	12 & 19 mm "U" profile
Available widths (mm)	50, 76, 101, 152, 203, 228 & 308

Overview

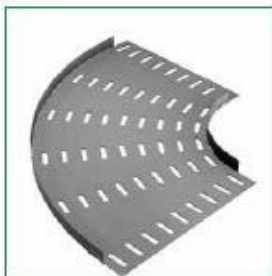
This cable tray range is a cable support system that is easily assembled on site. The LT12 & LT19 tray system is designed to carry electrical/data/voice cables in a horizontal and vertical application, up to a maximum width off 304mm. LT12 & LT19 system is recommended in a light to medium-duty commercial application. With a full range of accessories this product provides an economical & flexible user-friendly solution that will satisfy the installing contractor's as well as the end user's electrical cable managing needs.

Technical criteria

The LT12 & LT19 straight comprises, a flat sheet 3,0min. length, bent up on both sides- 12mm high (up to 76mm wide) & this product provides an economical & flexible user-friendly solution that will satisfy the installing contractor's as well as tray, to form a rigid channel like support. This tray system is manufactured as a standard, in pre-galvanized steel according to SABS ISO 3575:1996.

Loading criteria

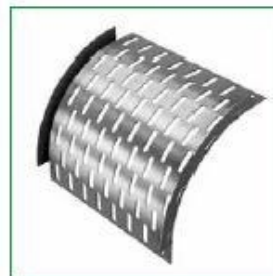
LT12 & LT19 cable tray is designed to carry a static electrical cable load not exceeding 140kg/m. The LT12 & LT19 straight must be supported every 1.0m maximum distance, where as the accessories require support near each end and at the centre.



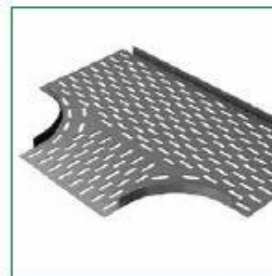
LT12/19 horizontal bend



LT12/19 internal bend



LT12/19 external bend



LT12/19 tee



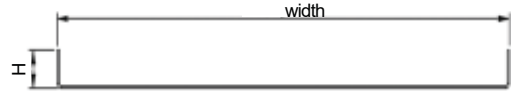
LT12/19 4-way

MT38 cable tray



MT38 cable tray (3m)

MT38 cable tray is manufactured in commercial quality mild steel. Designed for horizontal and vertical application.



Class designation	Horizontally & vertically mounted cable trays
Material	Commercial quality mild steel
Thickness	t=1.6mm
Standard length	3.0m
Dim. "H" may vary	38mm "U" profile
Available widths (mm)	76, 114, 152, 228, 304, 457 & 609

Overview

This cable tray range is a complete cable support system that is easily assembled on site. The MT38 tray system is designed to carry electrical cables in a horizontal and vertical application, up to a maximum width off 609mm. MT38 system is recommended in a medium to heavy-duty commercial application. With a full range of accessories this product provides an economical and flexible user-friendly solution that will satisfy the installing contractor's as well as the end user's electrical cable managing needs.

Technical criteria

The MT38 straight comprises, a flat sheet 3.0m in length, bent up on both sides (38mm high formed to a "u" profile) with Ø 11 x 25mm slotted perforations on the bottom of the tray, to form a rigid channel like support. This tray system is manufactured as a standard, in commercial grade mild steel, hot dip galvanized to ISO 1461:1999. Straight lengths and accessories are available in widths of 76, 114, 152, 228, 304, 457 and 609mm as a standard. All accessories cater for a minimum cable-bending radius of 450mm.

Loading criteria

MT38 cable tray is designed to carry a static electrical cable load not exceeding 140kg/m. The MT38 straight must be supported every 1.8m (MT38) maximum distance, where as the accessories require support near each end and at the centre.



MT38 horizontal bend



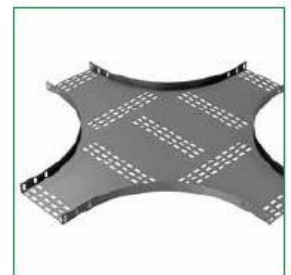
MT38 internal bend



MT38 external bend

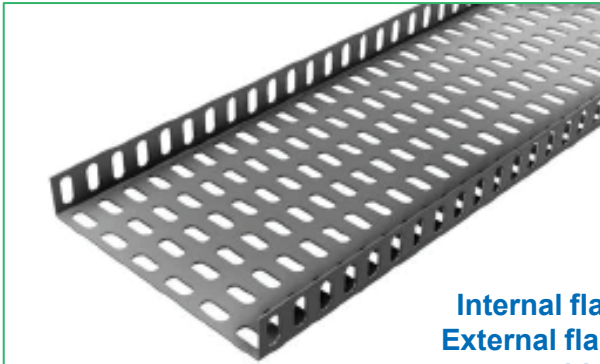


MT38 tee



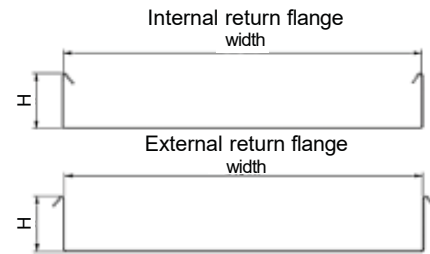
MT38 4-way

RM30/RME30 cable trays



**Internal flange RM30
External flange RME30
cable tray**

The return flange cable trays is manufactured in Z275 pre-galvanized mild steel. Designed for horizontal and vertical application.



Class designation	Horizontally & vertically mounted cable trays
Material	Z275 pre-galvanized mild steel
Thickness	t=1.2mm
Standard length	3.0m
Dim. "H" may vary	30mm "U" profile
Available widths (mm)	75, 100, 150, 225, 300, 450, 600, 750 & 900

Overview

This cable tray range is a complete cable support system that is easily assembled on site. The MT38 tray system is designed to carry electrical cables in a horizontal and vertical application, up to a maximum width off 609mm. MT38 system is recommended in a medium to heavy-duty commercial application. With a full range of accessories this product provides an economical & flexible user-friendly solution that will satisfy the installing contractor's as well as the end user's electrical cable managing needs.

Technical criteria

The MT38 straight comprises, a flat sheet 3.0m in length, bent up on both sides (38mm high formed to a "u" profile) with Ø 11 x 25mm slotted perforations on the bottom of the tray, to form a rigid channel like support. This tray system is manufactured as a standard, in commercial grade mild steel, hot dip galvanized to ISO 1461:1999. Straight lengths and accessories are available in widths of 76, 114, 152, 228, 304, 457 and 609mm as a standard. All accessories cater for a minimum cable-bending radius of 450mm.

Loading criteria

MT38 cable tray is designed to carry a static electrical cable load not exceeding 140kg/m. The MT38 straight must be supported every 1.8m (MT38) maximum distance, where as the accessories require support near each end and at the centre.



RM30/RME30
horizontal bend

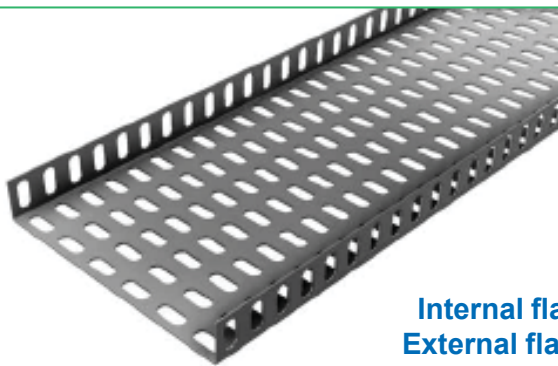


RM30/RME30 tee



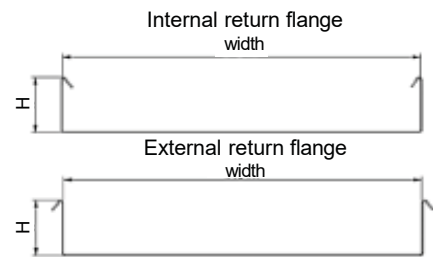
RM30/RME30 4-way

RH50/RME50 cable trays



**Internal flange RM50
External flange RME50
cable tray**

The return flange cable trays is manufactured in Z275 pre-galvanized mild steel. Designed for horizontal and vertical application.



Class designation	Horizontally & vertically mounted cable trays
Material	Z275 pre-galvanized mild steel
Thickness	t=1.2mm
Standard length	3.0m
Dim. "H" may vary	50mm "U" profile
Available widths (mm)	75, 100, 150, 225, 300, 450, 600, 750 & 900

Overview

This cable tray range is a complete cable support system that is easily assembled on site. The return flange cable tray system is designed to carry electrical cables in a horizontal and vertical application, up to a maximum width of 900mm. This system is recommended in a commercial environment. With a full range of accessories, this product provides an economical & flexible user-friendly solution that will satisfy the installing contractor's as well as the end user's electrical cable managing needs.

Technical criteria

The return flange cable tray straight comprises, a flat sheet 3.0m in length, bent up on both sides with returned flanges (50mm high formed to a lipped "C" profile). Punched slots - Ø7.5 x 25mm longitudinal and Ø11 x 20mm lateral - on the bottom of the tray, allows continuous airflow throughout the entire installation. This tray system is manufactured as a standard, in commercial grade Z275 pre-galvanized mild steel. Hot dip galvanized to ISO 1461:1999 is manufactured to order. Straight lengths and accessories are available in widths of 75, 100, 150, 225, 300, 450, 600, 750 and 900mm as a standard. All standard accessories have splices built-in and cater for a minimum cable-bending radius of: 50 - 225mm wide = 125mm, 300 - 450mm wide = 150mm, 600 - 900mm wide = 200mm and variable risers all widths = 240mm.

Loading criteria

Return flange cable tray is designed to carry a static electrical cable load not exceeding 140kg/m. The return flange cable tray straight must be supported every 1.8m (RH50/ RHE50), maximum distance, where as the accessories require support near each end and at the centre. The return flange cable tray must not be used as a walkway.



RM50/RME50
horizontal bend

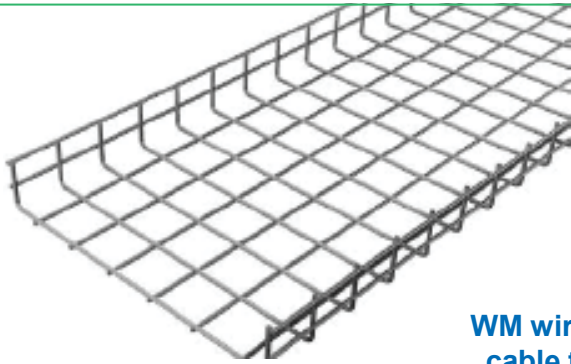


RM50/RME50 tee



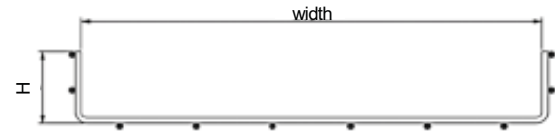
RM50/RME50 4-way

WM50 cable tray



**WM wire mesh50
cable tray (3m)**

WM50 cable tray is manufactured in commercial grade mild steel wire. Designed for horizontal and vertical application.



Class designation	Horizontally & vertically mounted cable trays
Material	Commercial grade mild steel
Thickness	Ø=4 mm & 5 mm
Standard length	3.0m
Dim. "H" may vary	50mm "U" profile
Available widths (mm)	50, 100, 150, 200, 300, 400, 500 & 600

Overview

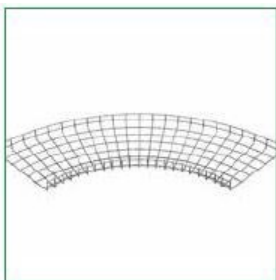
This wire mesh cable tray range is a complete cable support system that is easily assembled on site. It is a light to medium duty support system. The WM50 tray system is designed to carry electrical cables in a horizontal and vertical application.

Technical criteria

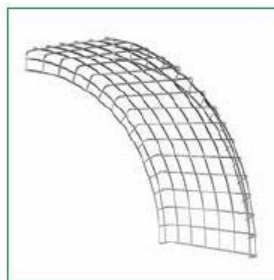
WM50 system is recommended in a medium to heavy-duty commercial application. With its full range of accessories this product provides an extremely flexible and a user-friendly solution that will satisfy the installing 100 x 25mm apertures on both sides. This tray system is manufactured as a standard, in commercial grade mild steel wire, Zinc plated to Fe/Zn25A/T2 service condition 3, to ISO 2081:2008(E). WM50 straight and accessories is available in widths of 50, 100, 150, 200, 300, 400, 500 and 600mm as a standard. All accessories cater for a minimum cable-bending radius of 450mm.

Loading criteria

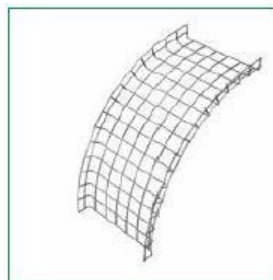
Wire mesh cable tray is designed to carry a static electrical cable load not exceeding 140kg/m. The WM50 straight must be supported every 1.0m maximum distance, where as the accessories require support near each end and at the centre.



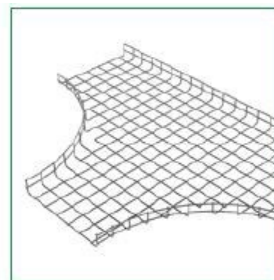
WM50 horizontal
bend



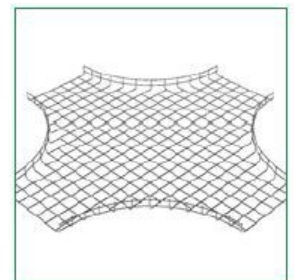
WM50 internal bend



WM50 external bend



WM50 tee



WM50 4-way

Channels and spring nuts

Channel and combinations

Channels and combinations are cold formed to size from low carbon strip steel (minimum yield strength of 250 Mpa) on a rolling mill. The channel is manufactured with a continuous opening with the two edges turned inwards. Rigid mechanical fixing may be achieved by engaging the in-turned edges of the channel with the serrated grooves in the spring nuts.

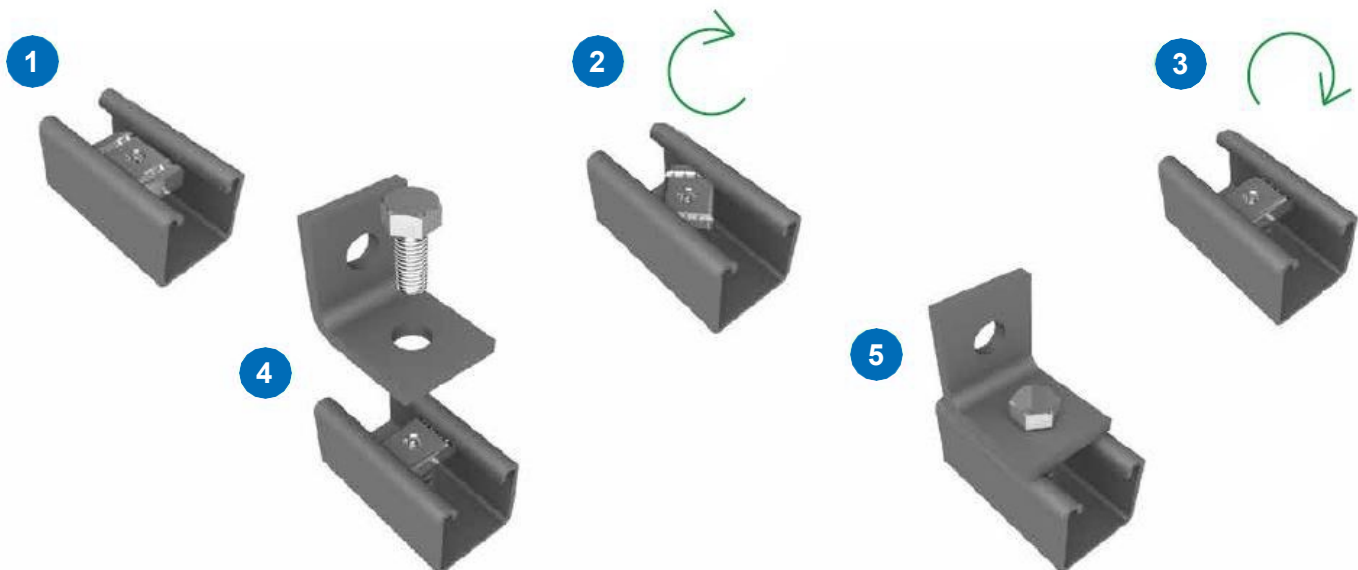
Spring nuts

Spring nuts are produced from steel bar and, after manufacture, zinc plated nuts can be case hardened to order. Hardened spring nuts should be used with grade 8.8 zinc plated hex set screw. Generally, the South African market uses only unhardened spring nuts together with grade 4.8 zinc plated hex set screw. Spring nuts are rectangular in shape with the ends shaped as to allow a quarter turn clockwise and to prevent further turning in the channel. Two toothed grooves in the top of the nut engage the return lips of the channel, in a vice-grip like manner. Allowable pull out strength and resistance to slip loads for torques shown.

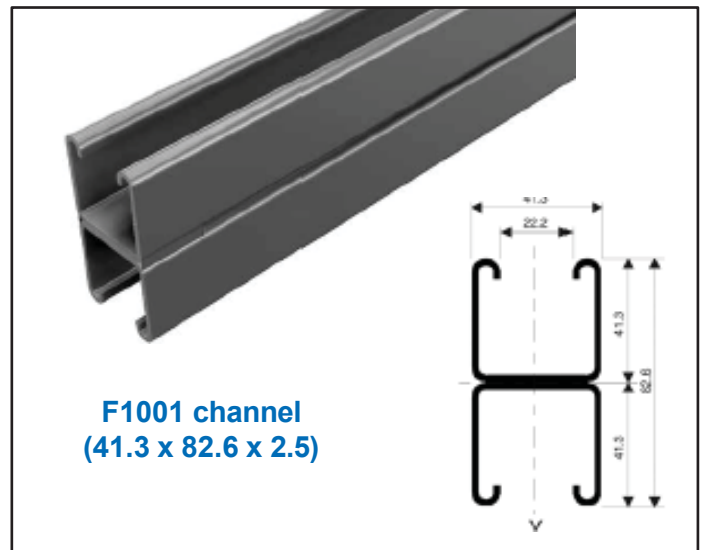
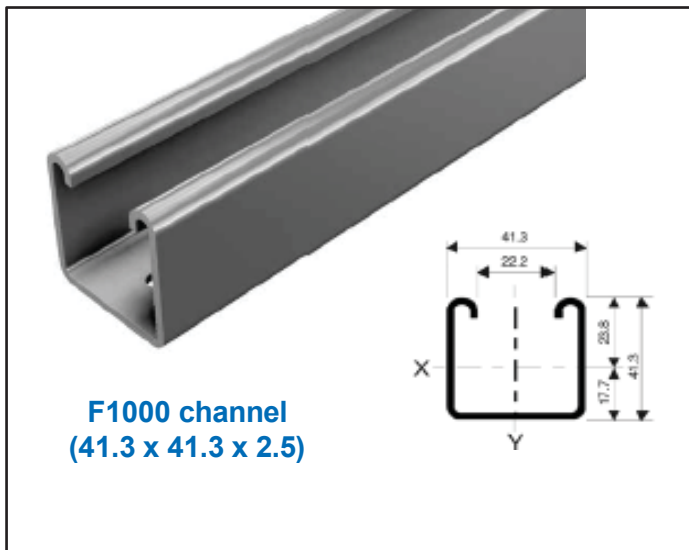
M12 Spring Nut	Unhardened Spring Nut and Grade 4.8 Hex Set Screw		
	Pull out Strength	Resistance to Slip	Maximum Tightening Torque
Size	kg	kg	kg
Use in F1000	350	180	50
Use in F3300	250	180	50

Safety factor of 2

Channel and spring nut installation



Channels



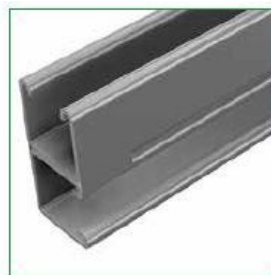
Metal Framing Channel Description	Thickness (mm)	Area of Section (mm ²)	Weight of Product g/m	AXIS X-X			AXIS Y-Y		
				1 10 ³ mm ⁴	Z 10 ³ mm ³	R mm ⁴	1 10 ³ mm ⁴	Z 10 ³ mm ³	R mm
F100	2.50	336.75	2644	72.367	3.147	14.66	91.904	4.45	16.25
F1001	2.50	673.49	5287	370.48	8.97	23.454	183.81	8.901	16.52



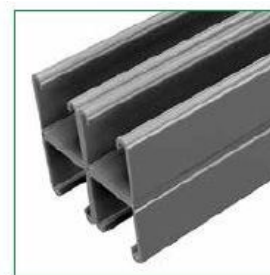
F1001A



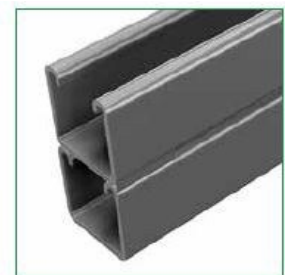
F1001B



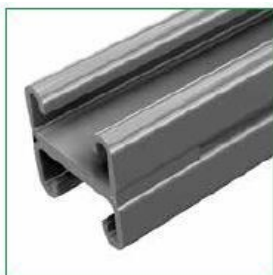
F1001C



F1001-C4

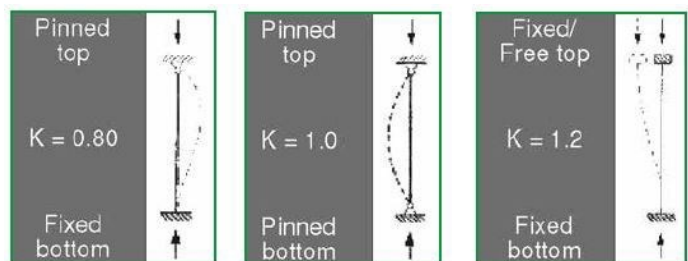


F1001D



F3301

Design fundamentals - column end conditions
K = the effective length factor, which mathematically describes the column end conditions.



Cantilever brackets



Single cantilever bracket

Length	Fixing Holes	Unit Mass kg	Total ULG kg
150	1	0.60	473
200	1	0.80	347
250	1	1.00	272
350	1	1.20	192
450	2	1.60	150
550	2	1.80	124
650	2	2.00	102

Length	Unit Mass kg	Total ULG kg
150	0.91	473
200	1.10	347
250	1.30	272
350	1.50	192
450	1.70	150
550	2.00	124
650	2.20	102

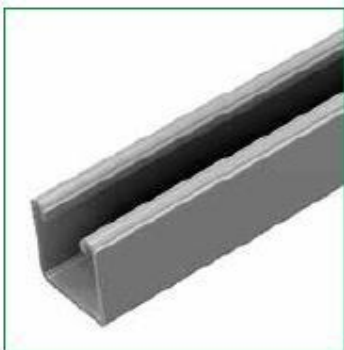
F233, F254, F254S, F254D & F251 Cantilever brackets

The cantilever bracket system is manufactured from mild steel and utilises F1000 channels welded to a back plate. All cantilever support arms for cable ladders and trays should be 50mm longer than the width of the cable ladder or tray used. The safe working load for cantilever arms is uniformly distributed over the length of the cantilever support arm. Standard finish on cantilever brackets is hot dip galvanised.

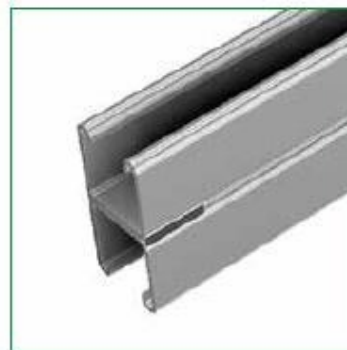
Length Long	Length Short	Unit Mass kg	Total ULG kg
650	250	3.00	288
850	300	3.60	208
1050	350	4.40	180

Length	Unit Mass kg	Total ULG kg
650	4.20	288
850	5.20	208
1050	6.40	280

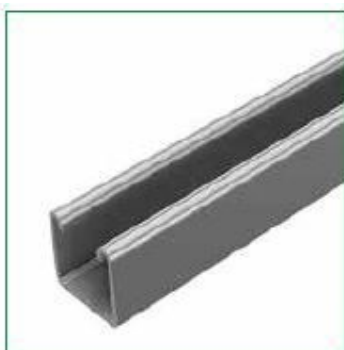
Length	Unit Mass kg	Total ULG kg
150	0.88	473
200	1.02	347
250	1.16	272
350	1.43	192
450	1.70	150
550	1.97	124
650	2.24	102



Staggered cantilever bracket



F254D cantilever bracket 1A



F223-90 cantilever bracket



F223-135 cantilever bracket



F223-135T cantilever bracket



F223-135T cantilever bracket 1B

General fittings

Angular fittings



F1026



F1033



F1034



F1035



F1068



F1074



F1130/31



F1186/45



F1325



F1359



F1546/45



F1713



F1747



F1749

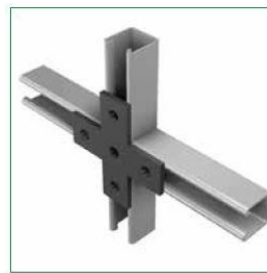


F2484

Flat fittings



F1036



F1028



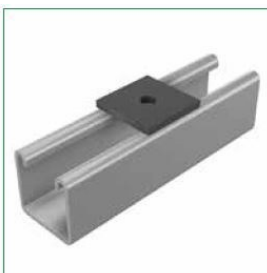
F1066



F1031



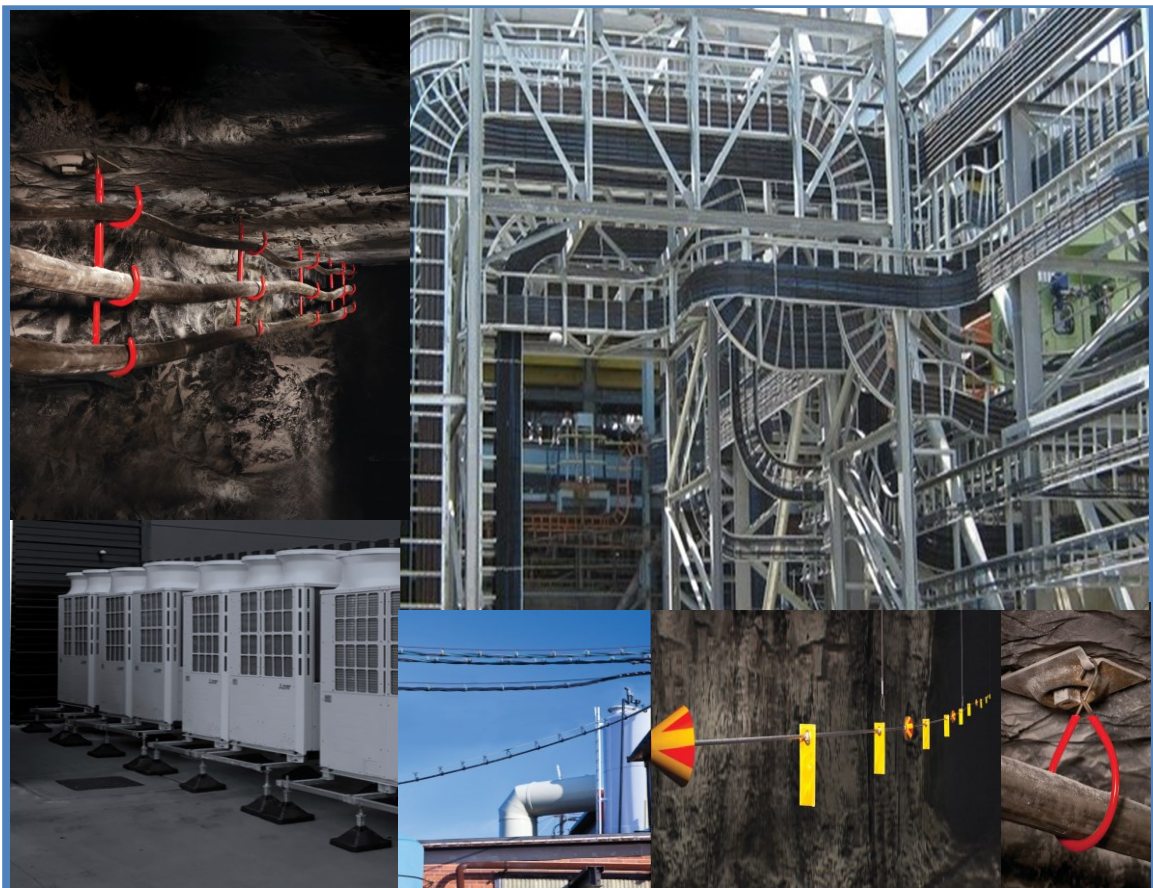
F1065



F1062/3/4

Cable Management PTY Ltd is an independently owned company that provides a range of speciality cable management products & solutions to the Mining, Heavy Industrial and Renewables markets across Africa. With extensive experience in the cable management and mechanical supports sectors, we provide a high level of technical support and advice on the latest innovations in system design, safety and value add applications. We offer extremely innovative solutions for even the most arduous & complex cable support application that would fall outside the scope of standard cable management products.

We distribute across the African continent and are able to service the most complex project site and remote locations. We also offer localised training on our products for all relevant applications.



Cable Management Pty Ltd

Tel: +27 100 130372

sales@cablemanagement.co.za

Offices in Johannesburg & Cape Town

Distribution in Botswana, DRC, Ghana, Kenya, Malawi,
Mozambique, Namibia, Tanzania, Uganda, Zambia, Zimbabwe.

CM CABLE
MANAGEMENT
cable support solutions

www.cablemanagement.africa