

Steel trunking Series 130, Series 170 and Series 210

Material

Steel trunking is manufactured from pre-galvanised steel with a powder coat finish to RAL 9010.

Installation

Positioning

- System 130: suitable for dado installation.
- System 170: suitable for dado and skirting installation.
- System 210: suitable for dado and skirting installation.

When used as a skirting system, sufficient clearance should be allowed between the floor covering and the profile fittings that clip over the cover i.e. 5mm + floor covering is recommended.

Fitting

- Secure trunking base every 750mm.
- Secure using No 8 round head screws and washers using the grooves in the outer compartments of the base to facilitate drilling 6mm holes.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To cut the trunking, use a fine tooth blade (32/36tpi) or, preferably, a circular saw with a 350mm fine tungsten blade (90/108tpi). This will produce an edge requiring minimal de-burring.
- Consecutive lengths of base are aligned and butt jointed together using the coupling/bonding set.

Earthing

- Trunking base, main fittings and accessories are fitted with earth connections.
- Bonding base to fittings: use coupling/bonding set or wire between fitted earth connections.
- Bonding base to cover: covers have pressed out side grippers which automatically establish earth contact when pressed into trunking base.
- Bonding base to end caps: use bonding strap LBS3.

Single lengths

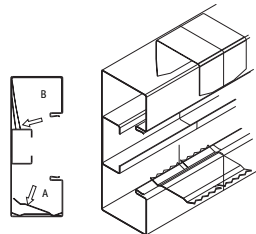
Where it is required to fit a single length of trunking (under 3 metres) between two inside walls and no accessory box is fitted, it is advisable to install a coupler in the centre of the run to facilitate the removal of the cover.

Joints and bends

- Base joints should be aligned and butt jointed together.
- Internal and external bends, flat angles and tees are prefabricated in steel, aligned and butt jointed to the base using coupling bonding sets.
- Clip-on external tolerance sleeve overlaps the joints to cover minor inaccuracies.

Internal coupling/bonding set

- Put coupling sleeve (B) halfway into already installed trunking base or fabricated fitting.
- Slide next section of base on to sleeve and fix base in position.
- Push serrated edge coupler component plate firmly into bottom of trunking/fitting base (A) overlapping base joint equally both side to make a good bond.
- Ensure that coupling sleeve (B) is pushed tightly into position.



Accessory boxes

Standard depth 40mm

Remove the appropriate box knockout and clip each side of the box into the trunking base.

When boxes are installed consecutively, use cover spacer UKO1085 between adjacent boxes.

Dividing fillet

Cut to length between boxes and bends. Clip into 'C' rail.



Covers

Covers are designed to limit unauthorised removal and to remain in position during normal conditions irrespective of impact and minor undulations of the mounting surface.

Covers – fitting

Covers are clipped into place from front. If accessory boxes are installed, covers are butt-joined to the edge of the box (RSSB1/2 only). Cover lengths are determined so that ends are covered by a fitting or accessory. Every cover must have at least one pair of side grippers to ensure earth continuity i.e. cover length must be at least 50mm with side grippers in the middle. External bends and flat angles should be fitted with the correct bend/flat angle cover.

Covers – removal

To remove a cover, first detach an external joint cover or accessory to gain access. The main cover can then be gently eased off the base.

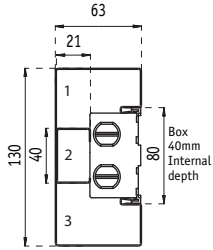
Screening

Steel containment protects internal circuits from external electromagnetic interference. For internal segregation and screening, use the steel dividing fillet 8510066.

Steel trunking Series 130, Series 170 and Series 210 – continued

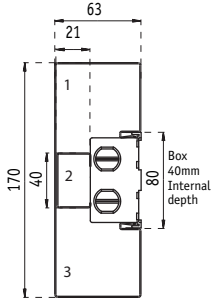
Dimensions

System 130 trunking 130 x 63mm



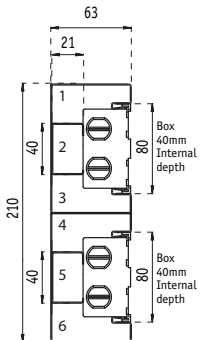
Compartments 1 & 3 = 1585mm² (each) total area
 Compartments 1 & 3 = 760mm² (each) 45% space factor
 Compartment 2 = 713mm² total area (with box)
 Compartment 2 = 342mm² 45% space factor (with box)

System 170 trunking 170 x 63mm



Compartments 1 & 3 = 2812mm² (each) total area
 Compartments 1 & 3 = 1265mm² (each) 45% space factor
 Compartment 2 = 760mm² total area (with box)
 Compartment 2 = 342mm² 45% space factor (with box)

System 210 trunking 210 x 63mm



Compartments 1, 3, 4 & 6 = 892mm² (each) total area
 Compartments 1, 3, 4 & 6 = 401mm² (each) 45% space factor
 Compartments 2 & 5 = 760mm² total area (with box)
 Compartments 2 & 5 = 342mm² 45% space factor (with box)

Cable capacities

- All calculations allow for a 45% space factor.

As there can be differences between data cable sizes, Marshall-Tufflex recommend that cable dimensions are confirmed with the manufacturing company.

Cable capacity chart	Compartment 1 Systems 130 & 170 (System 210 applies to comps 1 & 4)		Compartment 2 Systems 130 & 170 (System 210 applies to comps 2 & 5)		Compartment 3 Systems 130 & 170 (System 210 applies to comps 3 & 6)	
	No box	With box	No box	With box	No box	With box

PVC power cable 1.5mm² stranded copper

System 130	82	–	–	39	82	–
System 170	147	–	–	39	147	–
System 210	46	–	313	39	46	–

PVC power cable 2.5mm² stranded copper

System 130	60	–	–	27	60	–
System 170	100	–	–	27	100	–
System 210	31	–	214	27	31	–

PVC power cable 4.0mm² stranded copper

System 130	42	–	–	20	42	–
System 170	76	–	–	20	76	–
System 210	24	–	162	20	24	–

Data cable: Ø5.5mm

System 130	23	–	–	11	23	–
System 170	41	–	–	11	41	–
System 210	13	–	89	11	13	–

Data cable: Ø6.0mm

System 130	19	–	–	9	19	–
System 170	35	–	–	9	35	–
System 210	11	–	75	9	11	–

Data cable: Ø6.5mm

System 130	16	–	–	8	16	–
System 170	29	–	–	8	29	–
System 210	9	–	63	8	9	–

Conductor type	Size	Cable factor
Stranded PVC power	1.5mm ²	8.6
Stranded PVC power	2.5mm ²	12.6
Stranded PVC power	4.0mm ²	16.6
*Data cable	Ø5.5mm	30.2
*Data cable	Ø6.0mm	36.0
*Data cable	Ø6.5mm	42.2

*Check with manufacturer for typical values.

To determine cable capacity, select the size of the cable required and its corresponding cable factor from the table. Divide the compartment area figure (with or without 45% space factor) with the cable factor figure to achieve cable capacity.