

## Steel trunking Series 130 and Series 170

### 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.

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

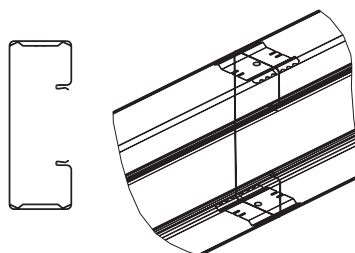
- Base joints should be aligned and butt jointed together.
- Internal and external bends, flat angles and tees are prefabricated in steel, aligned and butt jointed to the base using coupling bonding sets.
- Clip-on external tolerance sleeve overlaps the joints to cover minor inaccuracies.

### Screening

Steel containment protects internal circuits from external electromagnetic interference. For internal segregation and screening, use the steel dividing fillet 351189.

### Internal coupling/bonding set

- Comprises of two identical parts.
- Insert both parts into end of one length of trunking. Slide next section of base onto couplers and fix into position.



### Accessory boxes

Standard depth 40mm

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

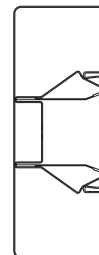
When boxes are installed consecutively, use cover spacer WG01085 between adjacent boxes.

### Dividing fillet

Dividing fillet 351189 is supplied in 1 metre lengths. It is held in place through using the universal multi-purpose clip. A minimum of 3 clips are required to hold 2 lengths of the dividing fillet in place.

The trunking can be divided into up to 3 compartments using the dividing fillet.

Please refer to element 3 of the diagram on page 204.



### 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 (RSSB10WH end RSSB20WH). Cover lengths are determined so that ends are covered by a fitting or accessory. External bends and flat angles should be fitted with the correct bend/flat angle cover.

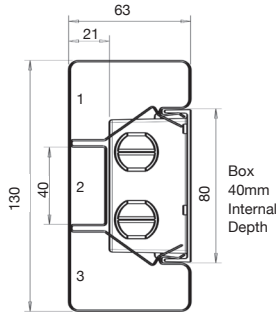
### Covers – removal

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.

**Steel trunking Series 130 and Series 170 – continued**

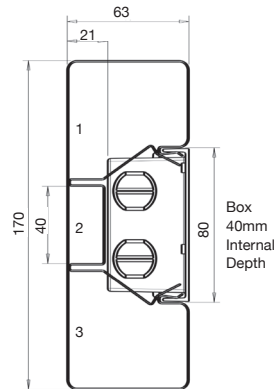
**Dimensions**

**System 130 trunking  
130 x 63mm**



Compartments 1 & 3 = 1585mm<sup>2</sup> (each) total area  
 Compartments 1 & 3 = 760mm<sup>2</sup> (each) 45% space factor  
 Compartment 2 = 713mm<sup>2</sup> total area (with box)  
 Compartment 2 = 342mm<sup>2</sup> 45% space factor (with box)

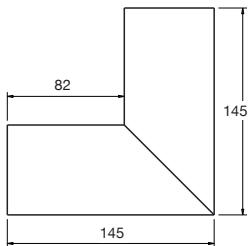
**System 170 trunking  
170 x 63mm**



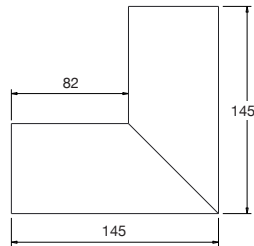
Compartments 1 & 3 = 2812mm<sup>2</sup> (each) total area  
 Compartments 1 & 3 = 1265mm<sup>2</sup> (each) 45% space factor  
 Compartment 2 = 760mm<sup>2</sup> total area (with box)  
 Compartment 2 = 342mm<sup>2</sup> 45% space factor (with box)

**Template dimensions for angles, tees and bends**

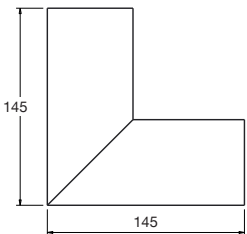
**System 130 external bend**



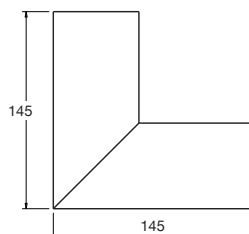
**System 170 external bend**



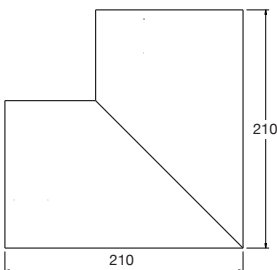
**System 130 internal bend**



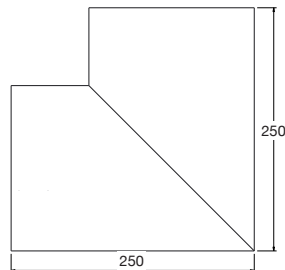
**System 170 internal bend**



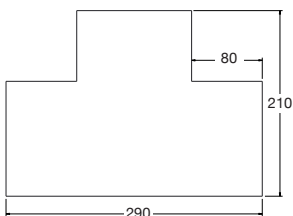
**System 130 flat angle**



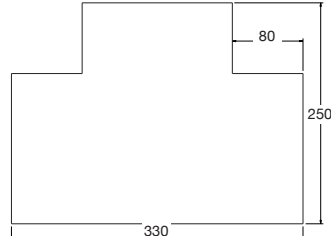
**System 170 flat angle**



**System 130 flat tee**



**System 170 flat tee**



TECHNICAL INFORMATION



### 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		Compartment 2 Systems 130 & 170		Compartment 3 Systems 130 & 170	
	No box	With box	No box	With box	No box	With box
<b>PVC power cable 1.5mm<sup>2</sup> stranded copper</b>						
System 130	89	–	–	40	89	–
System 170	158	–	–	43	158	–

<b>PVC power cable 2.5mm<sup>2</sup> stranded copper</b>						
System 130	60	–	–	27	60	–
System 170	106	–	–	29	106	–

<b>PVC power cable 4.0mm<sup>2</sup> stranded copper</b>						
System 130	43	–	–	19	43	–
System 170	76	–	–	21	76	–

<b>Data cable: Ø5.5mm</b>						
System 130	30	–	–	13	30	–
System 170	53	–	–	14	53	–

<b>Data cable: Ø6.0mm</b>						
System 130	25	–	–	11	25	–
System 170	45	–	–	12	45	–

<b>Data cable: Ø6.5mm</b>						
System 130	22	–	–	10	22	–
System 170	39	–	–	11	39	–

<b>Data cable: Ø7.0mm</b>						
System 130	19	–	–	8	19	–
System 170	33	–	–	9	33	–

<b>Data cable: Ø8.4mm</b>						
System 130	13	–	–	6	13	–
System 170	23	–	–	6	23	–

Conductor type	Size	Cable factor
Stranded PVC power	1.5mm <sup>2</sup>	8.0
Stranded PVC power	2.5mm <sup>2</sup>	11.9
Stranded PVC power	4.0mm <sup>2</sup>	16.6
*Data cable	Ø5.5mm	23.8
*Data cable	Ø6.0mm	28.3
*Data cable	Ø6.5mm	33.2
*Data cable	Ø7.0mm	38.5
*Data cable	Ø8.4mm	55.4

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.

For Data cable information, please see page 246