

Bench trunking

Material

PVC-U is flame retardant and self-extinguishing. It provides a 100% recyclable material with good sustainability.

Installation

Positioning

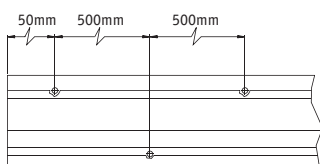
If used as a skirting system, a clearance of 5mm is recommended above the floor covering to allow the profile fittings to clip over the cover. Bench and desk installations: a single run can be fitted to rear of furniture or, if run down centre line, two units can be joined back to back presenting accessories on both sides.

Expansion/contraction

PVC-U expands and contracts at a uniform rate of approx 5.25mm in a 3 metre length for a temperature change of 25°C. Therefore, a 3mm gap between each length of trunking base is recommended. Fittings allow for thermal expansion of the covers.

Fitting

- Secure trunking base in one plane only every 500mm by drilling alternative 6mm holes either side of divider nib.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To provide cable segregation, dividing fillets are snapped on to internal nibs in base.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External profile fittings overlap joints by up to 10mm to cover cutting inaccuracies.
- Accepts Marshall-Tufflex and standard UK wiring and data accessories.



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 have a 3mm gap to allow for expansion.
- Internal and external bends are prefabricated.
- External moulded fittings overlap the joints to cover cutting inaccuracies.
- Couplers are required to align and join bend assemblies to trunking.
- Secure end caps using solvent adhesive MSC3.

Accessory boxes

- Remove the appropriate knock out that aligns with segregated compartment containing supply cable and clip the box into the trunking base.
- When boxes are installed consecutively, a 14mm wide spacer (ES1) is required to cover the space between the boxes.
- Part M box assemblies with contrasting coloured faceplates are available to meet the requirements of DDA regulations for Visual Impairment.

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, the cover is butt-joined to the edge of the box. Cut edges of the cover are concealed by the accessory. For couplers, a gap of 25mm is left between the two cover ends to permit the fitting to clip to base.

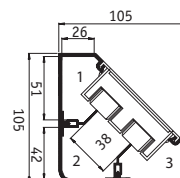
Covers – removal

To remove a cover, first detach a coupler to gain access. The cover can then be gently eased off the base.

Antimicrobial

For technical details of antimicrobial Bio Bench trunking, please refer to Laboratory and Healthcare section.

Dimensions



Bench trunking – with box

- 1 = 1285mm² total area
- 1 = 578mm² 45% space factor
- 2 = 2128mm² total area
- 2 = 957mm² 45% space factor
- 3 = 1285mm² total area
- 3 = 578mm² 45% space factor

Bench trunking – no box

- 1 = 1782mm² total area
- 1 = 802mm² 45% space factor
- 2 = 3282mm² total area
- 2 = 1477mm² 45% space factor
- 3 = 1782mm² total area
- 3 = 802mm² 45% space factor

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.

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Product Information

Cable capacity chart	Compartment 1		Compartment 2		Compartment 3	
	No box	With box	No box	With box	No box	With box
PVC power cable 1.5mm ² stranded copper	100	72	185	120	100	72
PVC power cable 2.5mm ² stranded copper	67	49	124	80	67	49
PVC power cable 4.0mm ² stranded copper	48	35	89	58	48	35
Data cable: Ø5.5mm	34	24	62	40	34	24
Data cable: Ø6.0mm	28	20	52	34	28	20
*Data cable: Ø6.5mm	25	18	46	30	25	18
*Data cable: Ø7.0mm	21	15	38	25	21	15
*Data cable: Ø8.4mm	14	10	27	17	14	10

*Only for straight runs. If bends are required please contact the Technical Team on +44 (0)1424 856688.

Cornice trunking

Material

PVC-U is flame retardant and self-extinguishing. It provides a 100% recyclable material with good sustainability.

Installation

Positioning

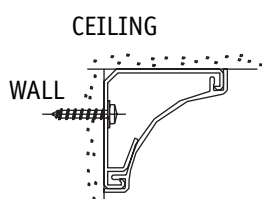
For surface wiring around ceilings.

Expansion/contraction

PVC-U expands and contracts at a uniform rate of approx 5.25mm in a 3 metre length for a temperature change of 25°C. Therefore, a 3mm gap between each length of trunking base is recommended. Fittings allow for thermal expansion of the covers.

Fitting

- Secure trunking base in one plane every 500mm by drilling 6mm holes in the wall side of the trunking and use round head screws and washers.
- 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-toothed panel or power jig-saw.
- External profile fittings overlap joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.



Joints and bends

- Base joints should have a 3mm gap to allow for expansion.
- Base must be mitred 45° to ensure total closure of trunking.
- End caps with clips ensure security of trunking.

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

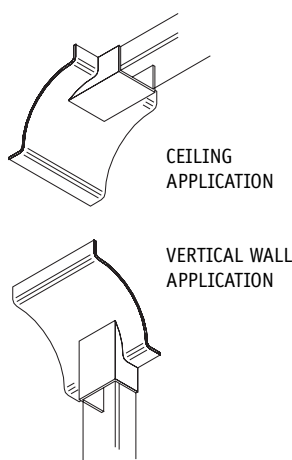
Covers are clipped into place from front. For external moulded fittings, a gap of 25mm is left between the two cover ends to permit the fitting to clip to base.

Covers – removal

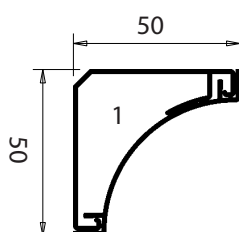
To remove a cover, first remove a fitting to gain access. Insert blade of terminal screwdriver between captive legs of cover and base and gently ease off.

Accessories

Accessories are serviced through a spur using a mini trunking adaptor and mini trunking across the ceiling to a pendant drop or down the wall to an appropriate accessory box.



Dimensions



1 = 837mm² total area
1 = 376mm² 45% space factor

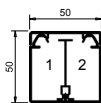
Cable capacities

- 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.

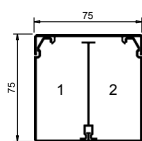
Cable capacity chart	Cable factor	Compartment 1
PVC power cable 1.5mm ² stranded copper	8.0	47
PVC power cable 2.5mm ² stranded copper	11.9	31
PVC power cable 4.0mm ² stranded copper	16.6	22
Data cable: Ø5.5mm	23.8	15
Data cable: Ø6.0mm	28.3	13
Data cable: Ø6.5mm	33.2	11
Data cable: Ø7.0mm	38.5	9
Data cable: Ø8.4mm	55.4	6

Maxi and Sceptre trunking



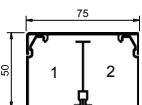
Maxi MTRS50

Total = 1979mm² total area
 Total = 890mm² 45% space factor
 1 & 2 = 911mm² total area
 1 & 2 = 410mm² 45% space factor



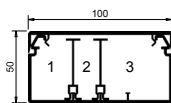
Maxi MTRS75

Total = 4709mm² total area
 Total = 2119mm² 45% space factor
 1 & 2 = 2196mm² total area
 1 & 2 = 988mm² 45% space factor



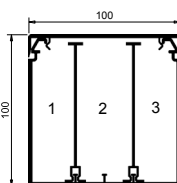
Maxi MTRS75/50

Total = 3032mm² total area
 Total = 1365mm² 45% space factor
 1 & 2 = 1347mm² total area
 1 & 2 = 606mm² 45% space factor



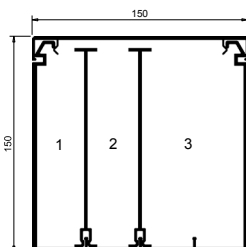
Maxi MTRS100/50

Total = 4040mm² total area
 Total = 1818mm² 45% space factor
 1 = 1056mm² total area
 1 = 475mm² 45% space factor
 2 = 660mm² total area
 2 = 297mm² 45% space factor
 3 = 1829mm² total area
 3 = 823mm² 45% space factor



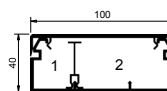
Maxi MTRS100

Total = 8733mm² total area
 Total = 3930mm² 45% space factor
 1 = 2375mm² total area
 1 = 1069mm² 45% space factor
 2 = 1464mm² total area
 2 = 659mm² 45% space factor
 3 = 4075mm² total area
 3 = 1834mm² 45% space factor



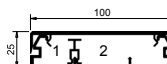
Maxi MTRS150

Total = 20193mm² total area
 Total = 9087mm² 45% space factor
 1 = 4406mm² total area
 1 = 1983mm² 45% space factor
 2 = 4728mm² total area
 2 = 2128mm² 45% space factor
 3 = 9482mm² total area
 3 = 4267mm² 45% space factor



Sceptre DTR1

Total = 3168mm² total area
 Total = 1426mm² 45% space factor
 1 = 816mm² total area
 1 = 367mm² 45% space factor
 2 = 2002mm² total area
 2 = 901mm² 45% space factor



Sceptre DTR2

Total = 1731mm² total area
 Total = 779mm² 45% space factor
 1 = 435mm² total area
 1 = 196mm² 45% space factor
 2 = 1197mm² total area
 2 = 538mm² 45% space factor

Conductor type	Size	Cable factor
Stranded PVC power	1.5mm ²	8.0
Stranded PVC power	2.5mm ²	11.9
Stranded PVC power	4.0mm ²	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.

Note: When 30mm deep accessory boxes are installed in MTRS100, MTRS100/50 and DTR1, reduce the area by 2600²mm.

For Data cable information, please see page 246

Maxi and Sceptre trunking – continued

Material

PVC-U is flame retardant and self-extinguishing. It provides a 100% recyclable material with good sustainability.

Installation

Positioning

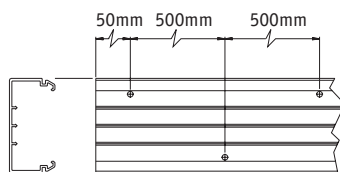
Feeder or distribution trunking.

Expansion/contraction

PVC-U expands and contracts at a uniform rate of approx 5.25mm in a 3 metre length for a temperature change of 25°C. Therefore, a 3mm gap between each length of trunking base is recommended. Fittings allow for thermal expansion of the covers.

Fitting

- Secure trunking base in one plane only every 500mm by drilling alternate 6mm holes.
- Use roundhead screws.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To provide cable segregation, dividing fillets are snapped on to internal ribs in base.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External profile fittings overlap joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.
- Maxi only:** trunking lengths are connected using internal couplers as follows:
 - Cement one end of the internal coupler to one base using adhesive solvent MSC. Leave other end of coupler free in adjoining base to facilitate thermal movement.

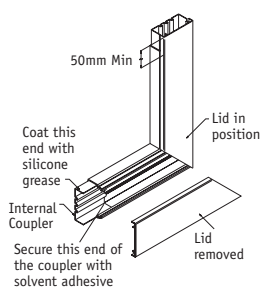


Single lengths

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

- Clip-on fittings and 2-part moulded flat angle: base must be mitred at 45° to ensure total enclosure of trunking, including any internal fitted segregator.
- Fabricated fittings: a 3mm gap between trunking base and bend or flat angle is recommended.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- Maxi fabricated fittings are supplied with internal couplers (see Fittings)
- Secure end caps using solvent adhesive MSC3.



Accessories

- Sceptre DTR1, Maxi MTRS100/50 and MTRS100:** accessory boxes and plates can be used.
- Remove appropriate knockout and clip box into base.
- Sceptre DTR2:** only accessory plates can be used.
- When boxes or plates are installed consecutively, fit a 25mm cover spacer (MTRS100LID25WH) between the accessories to conceal space between the boxes.

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, the cover is butt-joined to the edge of the box. Cut edges of the cover are concealed by the accessory. For external fitting couplers, the following gaps should be left between the two cover ends to permit the fitting to clip to base:

DTR2	20mm
MTRS50	20mm
MTRS75	20mm
MTRS75/50	20mm
MTRS100/50	20mm
MTRS100	30mm

DTR1: DTR1 couplers are held in place by the two covers. To install, slide coupler up against first installed cover. Fit adjoining cover and slide up to coupler, ensuring the coupler moulding extends over the two covers.

Covers removal

To remove a cover, first detach a coupler or internal/external bend to gain access. The main cover can then be gently eased off the base.

Maxi and Sceptre trunking – continued

Maxi trunking Cable capacity chart	Total	Compartment 1 With box	Compartment 2 No box	Compartment 3 With box
PVC power cable 1.5mm ² stranded copper				
MTRS50	111	51	51	-
MTRS75	265	124	124	-
MTRS75/50	171	76	76	-
MTRS100/50	227	59	37	103
MTRS100	491	134	82	229
MTRS150	1136	248	266	533
PVC power cable 2.5mm ² stranded copper				
MTRS50	75	34	34	-
MTRS75	178	83	83	-
MTRS75/50	115	51	51	-
MTRS100/50	153	40	25	69
MTRS100	330	90	55	154
MTRS150	764	167	179	359
PVC power cable 4.0mm ² stranded copper				
MTRS50	54	25	25	-
MTRS75	128	60	60	-
MTRS75/50	82	37	37	-
MTRS100/50	110	29	18	50
MTRS100	237	64	40	110
MTRS150	547	119	128	257
Data cable: Ø5.5mm				
MTRS50	37	17	17	-
MTRS75	89	42	42	-
MTRS75/50	57	25	25	-
MTRS100/50	76	20	12	35
MTRS100	165	45	28	77
MTRS150	382	83	89	179
Data cable: Ø6.0mm				
MTRS50	31	14	14	-
MTRS75	75	35	35	-
MTRS75/50	48	21	21	-
MTRS100/50	64	17	10	29
MTRS100	139	38	23	65
MTRS150	321	70	75	151
Data cable: Ø6.5mm				
MTRS50	28	13	13	-
MTRS75	66	31	31	-
MTRS75/50	42	19	19	-
MTRS100/50	56	15	9	26
MTRS100	122	33	20	57
MTRS150	282	62	66	133
Data cable: Ø7.0mm				
MTRS50	23	11	11	-
MTRS75	55	26	26	-
MTRS75/50	35	16	16	-
MTRS100/50	47	12	8	21
MTRS100	102	28	17	48
MTRS150	236	51	55	111
Data cable: Ø8.4mm				
MTRS50	16	7	7	-
MTRS75	38	18	18	-
MTRS75/50	25	11	11	-
MTRS100/50	33	9	5	15
MTRS100	71	19	12	33
MTRS150	164	36	38	77

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.

Sceptre trunking Cable capacity chart	Total	Compartment 1 No box	Compartment 2 No box
PVC power cable 1.5mm ² stranded copper			
DTR1	178	46	113
DTR2	97	24	67
PVC power cable 2.5mm ² stranded copper			
DTR1	120	31	76
DTR2	65	16	45
PVC power cable 4.0mm ² stranded copper			
DTR1	86	22	54
DTR2	47	12	32
Data cable: Ø5.5mm			
DTR1	60	15	38
DTR2	33	8	23
Data cable: Ø6.0mm			
DTR1	50	13	32
DTR2	28	7	19
Data cable: Ø6.5mm			
DTR1	44	11	28
DTR2	24	6	17
Data cable: Ø7.0mm			
DTR1	37	10	23
DTR2	20	5	14
Data cable: Ø8.4mm			
DTR1	26	7	16
DTR2	14	4	10

Mini trunking

Material

PVC-U is flame retardant and self-extinguishing. It provides a 100% recyclable material with good sustainability.

Installation

Positioning

As feeder trunking.

Expansion/contraction

PVC-U expands and contracts at a uniform rate of approx 5.25mm in a 3 metre length for a temperature change of 25°C. Therefore, a 3mm gap between each length of trunking base is recommended. Fittings allow for thermal expansion of the covers.

Fitting

- **Mini trunking**
- Secure trunking base at least every 375mm by drilling 6mm holes.
- Fasten using roundhead screws.
- **Self-fixing mini trunking**
- Remove protective film exposing 100-150mm of adhesive foam.
- Line up accurately and press firmly into position.
- Repeat until base is installed.
- For long term performance we recommend additional securing with screws and washers.

Note: the bond created by the tape can be very strong. Maximum adhesion occurs after 24 hours. Ensure surface is dust-free, dry, clean and flat. Uneven surface contact will reduce bonding performance. Installation in cold conditions below +5°C may affect adhesion.

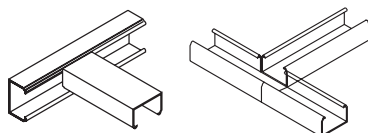
Mini and Mini SF trunking

- 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-toothed panel or power jig-saw.
- External profile fittings overlap joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.
- End caps are secured using adhesive solvent MSC.

Joints and bends

- All fittings incorporate clip-on design.
- 3mm gap between trunking base and bend or flat angle is recommended.

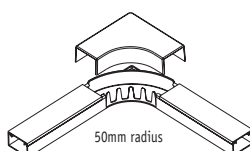
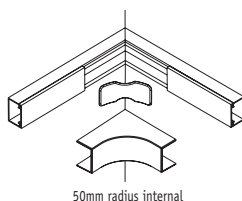
- For internal bends and flat angles, bases should be mitred 45°.
- For external bends, bases should be cut square to the corner.
- For tees, bases should be cut square and butt up to each other.



- External clip on fittings overlap trunking base by up to 10mm to cover cutting inaccuracies.
- Secure end caps using solvent adhesive MSC3.

Bend radius control – MMT4 only

- For internal bends, base should be mitred at 45°
- For external bends, base should be cut square with the corner and the radius control fitted.
- For flat angles and tees, allowance should be made when cutting base, for moulded components.



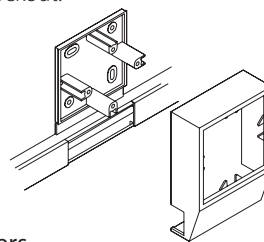
Accessory boxes

- Select appropriate surface box.
- Remove required knockout.
- Clean burrs from around aperture.
- Snap mini adaptor into position on box and place in position.
- Ensure trunking seats securely into adaptor.
- Secure box using diagonally opposite fixing holes.

Shrouded entry boxes

- For use with MMT2 or MMT3 only.
- Fit back plate in position, secure using diagonally opposite fixing holes.
- Run mini base up to back plate (for terminal accessory) or continue through.
- Remove required knockout from outer cover to fit mini trunking and fit over base plate. Install wiring leaving sufficient to wire accessory.

- Complete assembly is finally secured together when the wired accessory is screwed to accessory front plate.
- Fit mini trunking cover to base, ensuring cover extends into knockout.



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.

Covers – removal

To remove a cover, first detach a coupler or internal/external bend to gain access. The cover can then be gently eased off the base.

Cable capacities

- All calculations allow for a 45% space factor.
- Divide cable factor (1st table) into capacity (2nd table) to ascertain number of cables.

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

Conductor type	Size	Cable factor
Stranded PVC power	1.5mm ²	8.0
Stranded PVC power	2.5mm ²	11.9
Stranded PVC power	4.0mm ²	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

Mini trunking	Size mm	45% capacity
MMT100	10 x 8	18.5mm ²
MMT0	16 x 10	42mm ²
MMT1	16 x 16	77.2mm ²
MMT2	25 x 16	119.7mm ²
MMT3	38 x 16	193mm ²
MMT4	38 x 25	342mm ²
MMT5	50 x 25	449mm ²
MMT6	38 x 38	501mm ²
MMT7	75 x 16	397mm ²

Sovereign Plus trunking

Material

PVC-U is flame retardant and self-extinguishing. It provides a 100% recyclable material with good sustainability.

Installation

Positioning

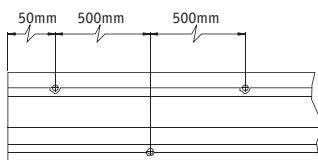
Suitable for skirting and architrave installation. When used as a skirting system, sufficient clearance should be allowed between the floor covering and the profile fittings that clip over the cover i.e. 5mm + floor covering is recommended.

Expansion/contraction

PVC-U expands and contracts at a uniform rate of approx 5.25mm in a 3 metre length for a temperature change of 25°C. Therefore, a 3mm gap between each length of trunking base is recommended. Fittings allow for thermal expansion of the covers.

Fitting

- Secure base every 500mm by drilling alternate 6mm in the two outer slots provided.
- Secure using No 8 round head screws and washers.
- Avoid over-tightening to permit thermal movement. Internal couplers on base units not required.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External profile fittings overlap joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.
- For segregation, use the cable retainers to retain cables in correct compartments.



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

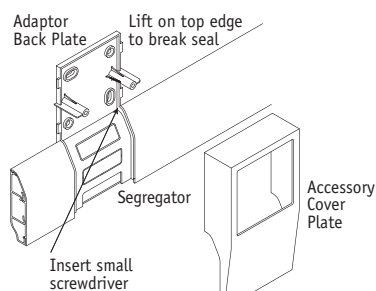
- Base joints should have a 3mm gap to allow for expansion.
- Mitre bases for internal bends, external bends and flat angles at 45° to ensure total enclosure of trunking.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- Trunking cover holds external moulded fittings in place when they are clipped on to base.

Bend radius control

Not available.

Accessory boxes

- Mounted on to trunking body with accessory external to the trunking.
- Remove required knockout in back segregator plate that aligns with trunking cable compartment.
- Clip to trunking base and secure to wall surface using 2 diagonally opposite fixing holes.
- Feed cables through knockout.
- After trunking cover has been fitted to base, clip front cover plate to back plate.
- Complete assembly is finally secured together when the wired accessory is screwed to accessory front plate.



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 assembly. Cut edges of the cover are concealed by the accessory. For fittings, a gap of 4mm is left between the two cover ends to permit the fitting to clip to base.

Covers – removal

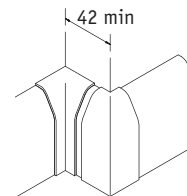
To remove a cover, isolate circuit and detach an accessory and front mounting component. Insert blade of screwdriver between captive legs of cover and gently peel off.

Screening

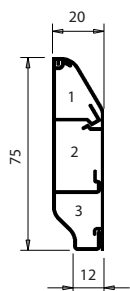
Not available.

Offset dimensions

The minimum set that can be accommodated in the same plane (from internal to external bend), is shown below:



Dimensions



Sovereign Plus skirting

- 1 = 238mm² total area
- 1 = 107mm² 45% space factor
- 2 = 416mm² total area
- 2 = 187mm² 45% space factor
- 3 = 261mm² total area
- 3 = 117mm² 45% space factor

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	Compartment 2	Compartment 3
	No box	No box	No box
PVC power cable 1.5mm ² stranded copper			
Sovereign Plus skirting	13	23	15
PVC power cable 2.5mm ² stranded copper			
Sovereign Plus skirting	9	16	10
PVC power cable 4.0mm ² stranded copper			
Sovereign Plus skirting	6	11	7
Data cable: Ø5.5mm			
Sovereign Plus skirting	5	8	5
Data cable: Ø6.0mm			
Sovereign Plus skirting	4	7	4
Data cable: Ø6.5mm			
Sovereign Plus skirting	3	6	4
Data cable: Ø7.0mm			
Sovereign Plus skirting	3	5	3
Data cable: Ø8.4mm			
Sovereign Plus skirting	2	3	2