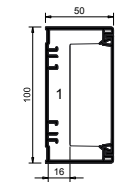


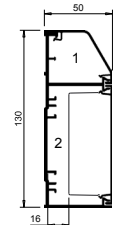
PVC-U perimeter trunking capacity guide

Trunking sizes up to 150mm



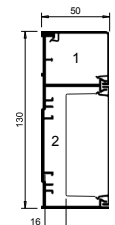
Mono 10 no box
 1 = 4141mm² total area
 1 = 1863mm² 45% space factor

With box in comp 1
 1 = 1874mm² total area
 1 = 843mm² 45% space factor



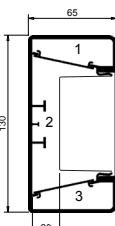
Compact 1 no box
 1 = 1280mm² total area
 1 = 576mm² 45% space factor
 2 = 3763mm² total area
 2 = 1693mm² 45% space factor

With box in comp 2
 2 = 1497mm² total area
 2 = 673mm² 45% space factor



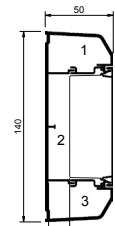
Compact 2 no box
 1 = 1534mm² total area
 1 = 690mm² 45% space factor
 2 = 3763mm² total area
 2 = 1693mm² 45% space factor

With box in comp 2
 2 = 1497mm² total area
 2 = 673mm² 45% space factor



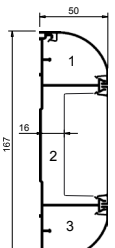
Series R 130 with box and segregators
 1 & 3 = 957mm² total area
 1 & 3 = 431mm² 45% space factor
 2 = 2210mm² total area
 2 = 995mm² 45% space factor

Without segregators
 1 = 4272mm² total area
 1 = 1922mm² 45% space factor



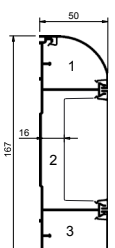
Mono Plus 20 - no box
 1 & 3 = 1024mm² total area
 1 & 3 = 461mm² 45% space factor
 2 = 3451mm² total area
 2 = 1553mm² 45% space factor

With box in comp 2
 2 = 1185mm² total area
 2 = 533mm² 45% total area



Sterling Curve Profile 1 - no box
 1 & 3 = 1170mm² total area
 1 & 3 = 527mm² 45% space factor
 2 = 3858mm² total area
 2 = 1736mm² 45% space factor

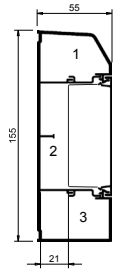
With box in comp 2
 2 = 1376mm² total area
 2 = 619mm² 45% total area



Sterling Curve Profile 2 - no box
 1 = 1170mm² total area
 1 = 527mm² 45% space factor
 2 = 3858mm² total area
 2 = 1736mm² 45% space factor
 3 = 1542mm² total area
 3 = 694mm² 45% space factor

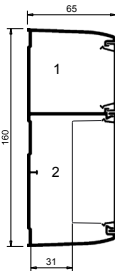
With box in comp 2
 2 = 1376mm² total area
 2 = 619mm² 45% space factor

Trunking sizes from 150mm to 200mm



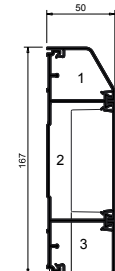
Mono Plus 30 no box
 1 = 1450mm² total area
 1 = 652mm² 45% space factor
 2 = 3829mm² total area
 2 = 1723mm² 45% space factor
 3 = 1646mm² total area
 3 = 741mm² 45% space factor

With box in comp 2
 2 = 1563mm² total area
 2 = 703mm² 45% space factor



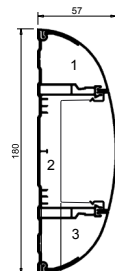
Twin165 no box
 1 = 3272mm² total area
 1 = 1472mm² 45% space factor
 2 = 5404mm² total area
 2 = 2431mm² 45% space factor

With box in comp 2
 2 = 3100mm² total area
 2 = 1395mm² 45% space factor



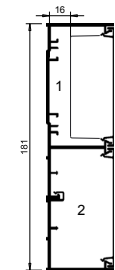
Sterling Profile 2 no box
 1 = 1266mm² total area
 1 = 570mm² 45% space factor
 2 = 3858mm² total area
 2 = 1736mm² 45% space factor
 3 = 1542mm² total area
 3 = 694mm² 45% space factor

With box in comp 2
 2 = 1376mm² total area
 2 = 619mm² 45% space factor



Odyssey no box
 1 & 3 = 1256mm² total area
 1 & 3 = 565mm² 45% space factor
 2 = 4022mm² 45% total area
 2 = 1810mm² 45% space factor

With box in comp 2
 2 = 1230mm² total area
 2 = 554mm² 45% space factor



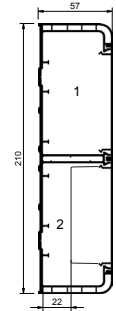
Compact 3 - no box
 1 = 3763mm² total area
 1 = 1693mm² 45% space factor
 2 = 3700mm² total area
 2 = 1665mm² 45% space factor

With box in comps 1 and 2
 1 = 1503mm² total area
 1 = 676mm² 45% space factor
 2 = 1440mm² total area
 2 = 648mm² 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

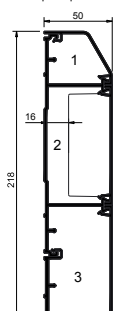
For Data cable information, please see page 246

Trunking sizes over 200mm



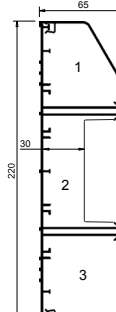
Twin Plus - no box
 1 & 2 = 4755mm² total area
 1 & 2 = 2140mm² 45% space factor

With box in comps 1 or 2
 1 & 2 = 2431mm² total area
 1 & 2 = 1094mm² 45% space factor



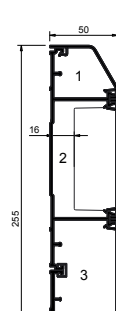
Sterling Profile 4 no box
 1 = 1266mm² total area
 1 = 570mm² 45% space factor
 2 = 3858mm² total area
 2 = 1736mm² 45% space factor
 3 = 3716mm² total area
 3 = 1672mm² 45% space factor

With box in comp 2 or 3
 2 = 1376mm² total area
 2 = 619mm² 45% space factor
 3 = 1234mm² total area
 3 = 555mm² 45% space factor



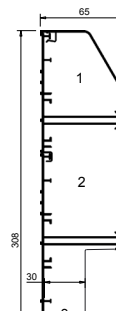
XL 202 - no box
 1 = 2824mm² total area
 1 = 1271mm² 45% space factor
 2 = 4771mm² total area
 2 = 2147mm² 45% space factor
 3 = 3531mm² total area
 3 = 1589mm² 45% space factor

With box in comp 2
 2 = 2504mm² total area
 2 = 1127mm² 45% space factor



Sterling Profile 12 no box
 1 = 1266mm² total area
 1 = 570mm² 45% space factor
 2 = 3858mm² total area
 2 = 1736mm² 45% space factor
 3 = 3566mm² total area
 3 = 1605mm² 45% space factor
 4 = 1430mm² total area
 4 = 644mm² 45% space factor

With box in comp 2 or 3
 2 = 1376mm² total area
 2 = 619mm² 45% space factor
 3 = 1084mm² total area
 3 = 488mm² 45% space factor



XL 212 - no box
 1 = 2824mm² total area
 1 = 1271mm² 45% space factor
 2 = 4771mm² total area
 2 = 2147mm² 45% space factor
 3 = 4732mm² total area
 3 = 2130mm² 45% space factor
 4 = 3531mm² total area
 4 = 1589mm² 45% space factor

With box in comps 2 or 3
 2 = 2511mm² total area
 2 = 1130mm² 45% space factor
 3 = 2466mm² total area
 3 = 1109mm² 45% space factor

TECHNICAL INFORMATION

Compact trunking

Material

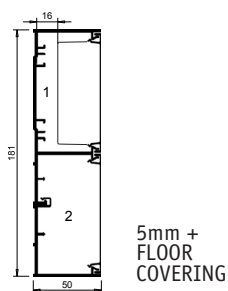
PVC-U is flame retardant and self-extinguishing. PVC-U is 100% recyclable.

Installation

Positioning

Compact 1, 2 & 3 suitable for dado. Should Compact 3 be used as skirting system, a clearance of 5mm is recommended above the floor covering to allow the profile fittings to clip over the cover.

If Compact 2 is installed close to desk/bench top – invert so small compartment is on bottom.



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 have a 10mm overlap on each side to allow for thermal movement of the covers.

Fitting

- The base is supplied with pre-cut elongated holes at 250mm centres.
- To fasten base, use No 8 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 moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45 degree mitres.

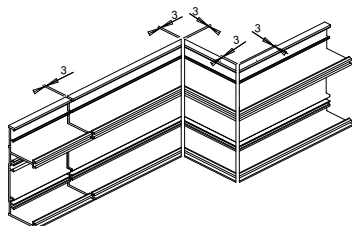
Single lengths

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, external bends and flat angles, the base must be mitred 45 degrees to ensure total enclosure of trunking, including any internal fitted segregator.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- Flat angles, tees and crossovers are also available pre-fabricated.

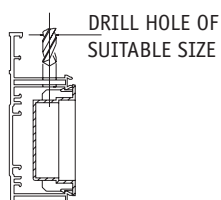


Bend radius control

The data internal and external bend radius control fittings for Compact Trunking provide a bend radius of 50mm.

Accessory boxes

- For mounting an accessory box in the alternative compartment to supply, drill the main web adjacent to the box position.
- Remove the appropriate knock out and clip the box into the trunking base.
- For boxes in the same compartment as the supply, remove the appropriate box knock-outs and clip the box into 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.
- If Compact 3 is used as a skirting system. All power accessories should be installed in the top compartment.



Covers

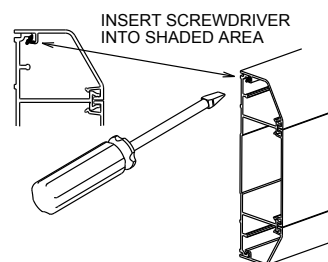
Covers are designed to limit unauthorised removal and to remain in position during normal conditions irrespective of impact and minor undulations of the mounting surface.

Covers – fitting

Covers are clipped into place from front. If accessory boxes are installed, the ETL1 cover is butt-joined to the edge of the box. Cut edges of the cover are subsequently concealed by the accessory. For 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 detach a coupler, internal or external bend component to gain access. The main cover can then be gently eased off the base. To remove the outer cover, firstly ease from the base by inserting the blade of a terminal screwdriver between the captive legs of the cover and the base and then peel off.



Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

For data/voice circuits only:

Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671:2008 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.

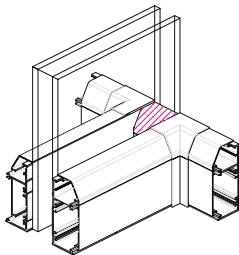
Antimicrobial

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

Compact trunking – continued

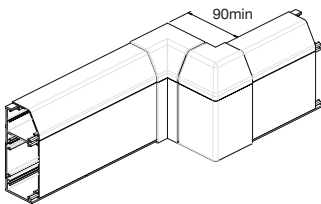
Method of continuation through a partition wall

Continue the main lateral run of base through the partition wall. Fit short lengths of cover where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an internal bend fitting.

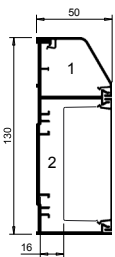


Offset dimensions

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

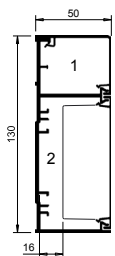


Dimensions



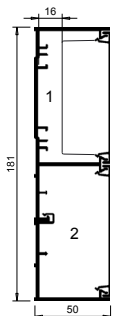
Compact 1 trunking – with box

Compartment 1 total area = 1280mm²
Compartment 2 total area = 1497mm²



Compact 2 trunking – no box

Compartment 1 total area = 1534mm²
Compartment 2 total area = 3763mm²



Compact 3 trunking – no box

Compartment 1 total area = 3763mm²
Compartment 2 total area = 3700mm²

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	
	No box	With box	No box	With box

PVC power cable 1.5mm² stranded copper

Compact 1	72	–	212	84
Compact 2	86	–	212	84
Compact 3	212	85	208	81

PVC power cable 2.5mm² stranded copper

Compact 1	48	–	142	57
Compact 2	58	–	142	57
Compact 3	142	57	140	54

PVC power cable 4.0mm² stranded copper

Compact 1	35	–	102	41
Compact 2	42	–	102	41
Compact 3	102	41	100	39

Data cable: Ø5.5mm

Compact 1	24	–	71	28
Compact 2	29	–	71	28
Compact 3	71	28	70	27

Data cable: Ø6.0mm

Compact 1	20	–	60	24
Compact 2	24	–	60	24
Compact 3	60	24	59	23

Data cable: Ø6.5mm

Compact 1	18	–	53	21
Compact 2	21	–	53	21
Compact 3	53	21	52	20

Data cable: Ø7.0mm

Compact 1	15	–	44	17
Compact 2	18	–	44	17
Compact 3	44	18	43	17

Data cable: Ø8.4mm

Compact 1	10	–	31	12
Compact 2	12	–	31	12
Compact 3	31	12	30	12

Mono and Mono Plus trunking – PVC-U

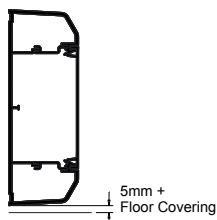
Material

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

Installation

Positioning

- Mono 10
For dado application only.
- Mono Plus 20 and 30
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. Adequate allowance is made within the fittings for thermal movement of the covers, which have a 7mm overlap on each side.

Fitting

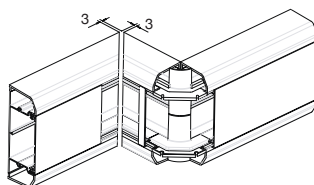
- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 round head screws and washers.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45 degree mitres.
- Mono Plus 20 and 30
Cut the compartment segregators (x 2 provided) to lengths to fit between accessory boxes and corners. Fit into position after wiring has been completed.

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.

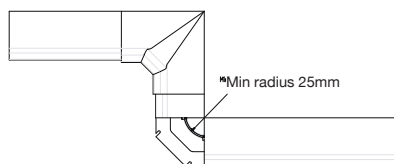
Joints and bends

- Base joints should have a 3mm gap to allow for expansion.
- External moulded fittings overlap the joints by up to 7mm to cover cutting inaccuracies.
- Mono 10
For external bends and flat angles, the base must be mitred 45 degrees to ensure total enclosure of trunking, including any internal fitted segregator. Tees are fabricated.
- Mono Plus 20 and 30
External bends should be cut square at the corner and in internal segregator inserted as shown below, to give additional retention to the clip-on fitting. Flat angles and tees are prefabricated.



Bend radius control

- Mono 10
Not applicable
- Mono Plus 20 and 30
The data bend radius control fittings for Mono Plus trunking provide a bend radius of 25mm.



Accessory boxes

- If the accessory box is to be fed from a supply in either of the outer compartments, remove the appropriate knock out (top or bottom) and clip the box into the trunking base.
- For boxes supplied from the main compartment, remove the appropriate box knock-outs and clip the box into 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

The cover has been 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

The cover is clipped into place from the front. If accessory boxes are installed, the cover is butt-joined to the edge of the box and the cut edges of the cover is subsequently concealed by the accessory. For fittings, a gap of 25mm is left between the two cover ends to permit the fitting to clip to the base.

Covers – removal

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

Screening

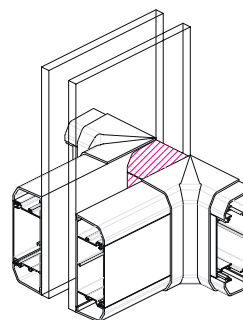
Refer to the Technical Team on +44 (0)1424 856688.

Antimicrobial

For technical details of antimicrobial Mono 10 and Mono Plus 20 Bio trunking, please refer to Laboratory and Healthcare section.

Method of continuation through a partition wall

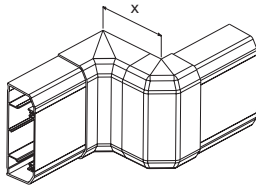
Continue the main lateral run of base through the partition wall with a short length of cover fitted where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an Internal bend. (as shown below)



Mono and Mono Plus trunking – PVC-U – continued

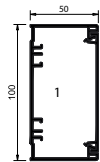
Offset dimensions

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

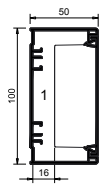


x =
 100mm min (Mono 10)
 105mm min (Mono Plus 20)
 110mm min (Mono Plus 30)

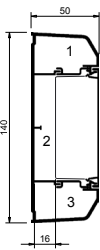
Dimensions



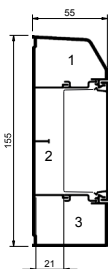
Mono 10 trunking – no box
 Compartment 1 total area = 4141mm²



Mono 10 trunking – with box
 Compartment 1 total area = 1874mm²



Mono Plus 20 trunking – with box
 Compartment 1 total area = 1024mm²
 Compartment 2 total area = 1185mm²
 Compartment 3 total area = 1024mm²



Mono Plus 30 trunking – with box
 Compartment 1 total area = 1450mm²
 Compartment 2 total area = 1563mm²
 Compartment 3 total area = 1646mm²

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	With box	No box	With box	No box	With box

PVC power cable 1.5mm² stranded copper

Mono 10	233	105	–	–	–	–
Mono Plus 20	58	–	194	67	58	–
Mono Plus 30	82	–	215	88	93	–

PVC power cable 2.5mm² stranded copper

Mono 10	157	71	–	–	–	–
Mono Plus 20	39	–	131	45	39	–
Mono Plus 30	55	–	145	59	62	–

PVC power cable 4.0mm² stranded copper

Mono 10	112	51	–	–	–	–
Mono Plus 20	28	–	94	32	28	–
Mono Plus 30	39	–	104	42	45	–

Data cable: Ø5.5mm

Mono 10	78	35	–	–	–	–
Mono Plus 20	19	–	65	22	19	–
Mono Plus 30	27	–	72	30	31	–

Data cable: Ø6.0mm

Mono 10	66	30	–	–	–	–
Mono Plus 20	16	–	55	19	16	–
Mono Plus 30	23	–	61	25	26	–

Data cable: Ø6.5mm

Mono 10	58	26	–	–	–	–
Mono Plus 20	14	–	48	17	14	–
Mono Plus 30	20	–	54	22	23	–

Data cable: Ø7.0mm

Mono 10	48	22	–	–	–	–
Mono Plus 20	12	–	40	14	12	–
Mono Plus 30	17	–	45	18	19	–

Data cable: Ø8.4mm

Mono 10	34	15	–	–	–	–
Mono Plus 20	8	–	28	10	8	–
Mono Plus 30	12	–	31	13	13	–

Odyssey trunking

Material

Odyssey accessory boxes and fittings are flame retardant ABS which is 100% recyclable.

Installation

Positioning

For dado, horizontal or vertical installation.

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.

Adequate allowance is made within the fittings for thermal movement of the covers, which have a 10mm overlap on each side.

Fitting

- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 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 moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45 degree mitres.

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 covers.

Joints and bends

All base joints should have a 3mm gap to allow for expansion.

- **Internal bends:** the two base sections should be cut square and butt joined at the corner. The internal end cap component should be fitted to the open end to maintain trunking integrity.
- **External bends:** the base must be cut square with the corner and the internal radius control segregator fitted into the two base sections. Adjustable bends: these allow 85° to 95° to accommodate building tolerances.
- **Flat bends and tees:** have moulded and segregated base units. These are fitted into position and the trunking base then cut to butt up to mouldings.

Cutting is not critical as the external moulded clip-on fittings cover the joints and overlap the trunking covers by 10mm each side, thus covering any inaccuracies.

Bend radius control

The bend radius control fittings for Odyssey provide a bend radius of 25mm, 50mm and 65mm.

Accessory boxes

Accessory boxes are mounted in the centre compartment. If supplied from either of the outer compartments, drill the main web adjacent to the box position. Remove the appropriate knock out and clip the box into the trunking base. For boxes in the same compartment as the supply, remove the appropriate box knock-outs and clip the box into trunking base.

- If boxes DD1510 and DD1520 are installed consecutively, a cut section of centre cover should be fitted between them.
- If DD1540 or DD1550 are installed, Adaptor DD1590 must be fitted either side to align with curved cover.
- If DD1540 or DD1550 are installed consecutively, use the spacer provided and at each end of a run use accessory adaptor DD1590 to align with curved cover.
- Part M coloured accessory boxes are available to meet the requirements of DDA regulations for Visual Impairment.

Covers

The covers have been designed to limit unauthorised removal and remain in position during normal conditions, irrespective of impact and minor undulations of the mounting surface.

Covers – fitting

Outer covers are fitted first. Locate front clip feature into the base and then roll the cover to the back of the trunking until the rear clip feature positively locates – it is possible to hear the click when this is located correctly. The centre cover is then clipped into place from the front. If accessory boxes are installed, the centre cover is butt joined beneath the moulded flange of the box (Odyssey box DD1510/DD1520) or adaptor (DD1590). The cut edges of lids are then concealed.

A gap of 15mm should be left between cover joints to permit fittings to clip to the base.

Covers – removal

To remove a cover, first detach a coupler, internal or external bend component to gain access. The main cover can then be gently eased off the base. To remove the outer cover, firstly ease from the base by inserting the blade of a terminal screwdriver between the captive legs of the cover and the base and then peel off.

Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

- **For data/voice circuits only:**
Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671:2008 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.

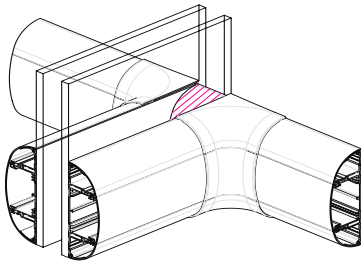
Antimicrobial

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

Odyssey trunking – continued

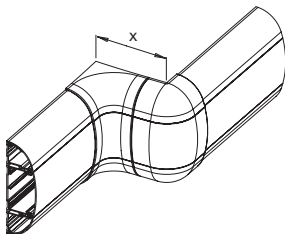
Method of continuation through a partition wall

Continue the main lateral run of base through the partition wall with short lengths of cover fitted where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an Internal bend. (as shown below)



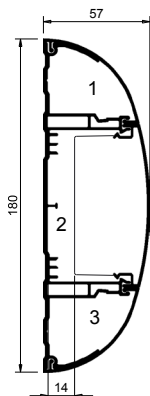
Offset dimensions

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



- x =
- Fixed bend offset 138mm
- Adjustable bend offset 165mm
- Adjustable external bend, fixed internal bend offset 163mm
- Adjustable internal bend, fixed external bend offset 140mm

Dimensions



Odyssey trunking – with box

Compartment 1 & 3 total area = 1278mm²
 Compartment 2 total area = 859mm²

Odyssey trunking – no box

Compartment 2 total area = 3972mm²

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	With box	No box	With box	No box	With box
PVC power cable 1.5mm ² stranded copper	71	–	226	69	71	–
PVC power cable 2.5mm ² stranded copper	47	–	152	47	47	–
PVC power cable 4.0mm ² stranded copper	34	–	109	33	34	–
Data cable: Ø5.5mm	24	–	76	23	24	–
Data cable: Ø6.0mm	20	–	64	20	20	–
Data cable: Ø6.5mm	18	–	56	17	18	–
Data cable: Ø7.0mm	15	–	47	14	15	–
Data cable: Ø8.4mm	10	–	33	10	10	–

Series R trunking

Material

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

Installation

Positioning

Series R is suitable for dado.

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.

Adequate allowance is made within the fittings for thermal movement of the covers, which have a 10mm overlap on each side.

Fitting

- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 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 moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45 degree mitres.

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

All base joints should have a 3mm gap to allow for expansion.

- **Internal bends and external bends:** trunking body must be mitred at 45° to ensure total enclosure of trunking, including any internal fitted segregator.
- **Flat angles and tees:** are prefabricated. Trunking bases should be cut to butt up to fittings.

Cutting is not critical as the external moulded clip-on fittings cover the joints and overlap the trunking covers by 10mm each side, thus covering any inaccuracies.

Bend radius control

Please contact the Technical Team on +44 (0)1424 856688

Accessory boxes

All accessory boxes are mounted in the main, centre compartment. The appropriate knockout removal depends whether supply is to be run in the centre compartment or either/both of the outer segregated compartments. When knockouts are removed, clip the box into the trunking body. When boxes are installed consecutively, a short cut length of centre cover (14mm min.) is required to cover the space between boxes.

Covers

The cover has been designed to remain in position irrespective of impact during normal conditions, minor undulations of the mounting surface, and to limit unauthorised removal.

Covers – fitting

The single cover is clipped into place from the front. If accessory boxes are installed, the covers are butt-joined to the edge of the box (RSSB1/2). The cut edges the cover are subsequently concealed by the accessory.

Covers – removal

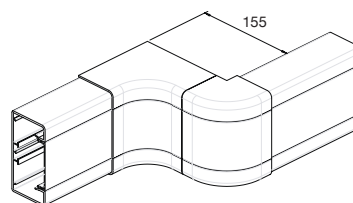
To remove the cover, first detach a coupler, internal or external bend component to gain access. The cover can then be gently eased off the base.

Method of continuation through a partition wall

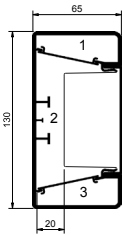
- Continue the main lateral run of base through the partition wall with short lengths of cover fitted where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an Internal bend.

Offset dimensions

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

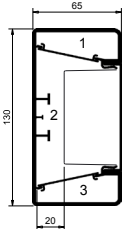


Series R – continued



Series R 130 – with box and segregators

Compartment 1 & 3 total area = 957mm²
 Compartment 2 total area = 2210mm²
 Compartment 2 (45% space factor) = 995mm²



Series R 130 – with box, no segregators

Compartment total area = 4272mm²
 Compartment (45% space factor) = 1992mm²

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	With box	No box	With box	No box	With box
PVC power cable 1.5mm² stranded copper						
Series R 130	89	–	–	40	89	–
PVC power cable 2.5mm² stranded copper						
Series R 130	60	–	–	27	60	–
PVC power cable 4.0mm² stranded copper						
Series R 130	43	–	–	19	43	–
Data cable: Ø5.5mm						
Series R 130	30	–	–	13	30	–
Data cable: Ø6.0mm						
Series R 130	25	–	–	11	25	–
Data cable: Ø6.5mm						
Series R 130	22	–	–	10	22	–
Data cable: Ø7.0mm						
Series R 130	19	–	–	8	19	–
Data cable: Ø8.4mm						
Series R 130	13	–	–	6	13	–

Sterling Profile trunking

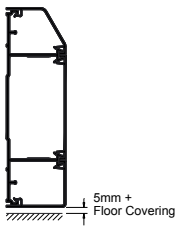
Material

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

Installation

Positioning

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 have a 10mm overlap on each side to allow for thermal movement of the covers.

Fitting

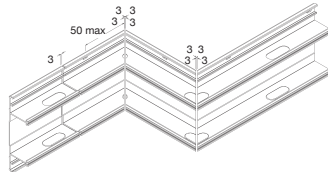
- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 round head screws and washers.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.
- To increase number of compartments to any number required, use base extension EBE1WH and extendable base EEB1.

Single lengths

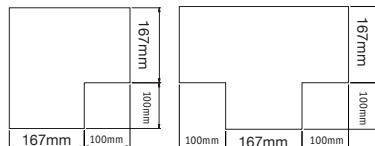
Where it is required to fit a single length of trunking (under 3 metres) between two inside walls and no accessory box is fitted, it is advisable to install a coupler in the centre of the run to facilitate the removal of the cover.

Joints and bends

- Base joints should have a 3mm gap to allow for expansion.
- Internal, external bends and flat angles, the base must be mitred 45° to ensure total enclosure of trunking, including any internal fitted segregator.
- Flat angles, tees and crossovers are available prefabricated.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.



Template dimensions for Flat angle and Tee

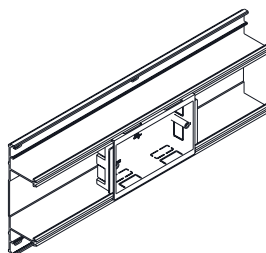


Bend radius control

The data internal and external bend radius control fittings for Sterling Profile trunking provide a bend radius of 50mm.

Accessory boxes

- For mounting an accessory box in the alternative compartment to supply. Fit the box and remove the closest knockout in the main web.
- Remove the appropriate knock out and clip the box into the trunking base.
- For boxes in the same compartment as the supply, remove the appropriate box knock-outs and clip the box into 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

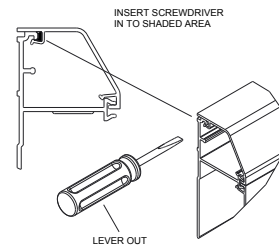
Covers are designed to limit unauthorised removal and to remain in position during normal conditions irrespective of impact and minor undulations of the mounting surface.

Covers – fitting

Covers are clipped into place from front. If accessory boxes are installed, the ETL1 cover is butt-joined to the edge of the box. Cut edges of the cover are subsequently concealed by the accessory. For 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 detach a coupler, internal or external bend component to gain access. The main cover can then be gently eased off the base. To remove the outer cover, firstly ease from the base by inserting the blade of a terminal screwdriver between the captive legs of the cover and the base and then ease away from the base.



Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

• For data/voice circuits only:

Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671:2008 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.

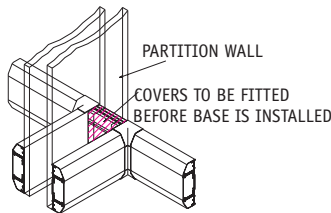
Antimicrobial

For technical details of antimicrobial Sterling Profile Bio trunking, please refer to Laboratory and Healthcare section on page 34.

Sterling Profile trunking – continued

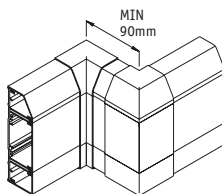
Method of continuation through a partition wall

- Continue the main lateral run of base through the partition wall.
- Fit short lengths of cover where the trunking passes through the partition.
- The partition wall trunking is then butted up to the main run and the joint covered by an internal bend fitting.

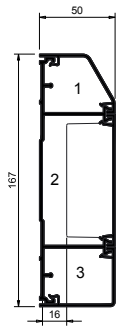


Offset dimensions

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



Dimensions

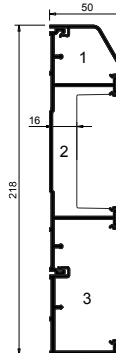


Sterling Profile 2 no box

- 1 = 1266mm² total area
- 1 = 570mm² 45% space factor
- 2 = 3858mm² total area
- 2 = 1736mm² 45% space factor
- 3 = 1542mm² total area
- 3 = 694mm² 45% space factor

With box in comp 2

- 2 = 1376mm² total area
- 2 = 619mm² 45% space factor

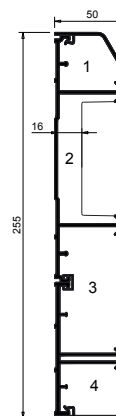


Sterling Profile 4 no box

- 1 = 1266mm² total area
- 1 = 570mm² 45% space factor
- 2 = 3858mm² total area
- 2 = 1736mm² 45% space factor
- 3 = 3716mm² total area
- 3 = 1672mm² 45% space factor

With box in comp 2 or 3

- 2 = 1376mm² total area
- 2 = 619mm² 45% space factor
- 3 = 1234mm² total area
- 3 = 555mm² 45% space factor

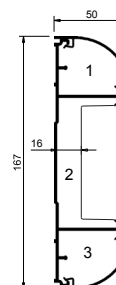


Sterling Profile 12 no box

- 1 = 1266mm² total area
- 1 = 570mm² 45% space factor
- 2 = 3858mm² total area
- 2 = 1736mm² 45% space factor
- 3 = 3566mm² total area
- 3 = 1605mm² 45% space factor
- 4 = 1430mm² total area
- 4 = 644mm² 45% space factor

With box in comp 2 or 3

- 2 = 1376mm² total area
- 2 = 619mm² 45% space factor
- 3 = 1084mm² total area
- 3 = 488mm² 45% space factor

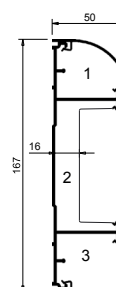


Sterling Curve Profile 1 – no box

- 1 & 3 = 1170mm² total area
- 1 & 3 = 527mm² 45% space factor
- 2 = 3858mm² total area
- 2 = 1736mm² 45% space factor

With box in comp 2

- 2 = 1376mm² total area
- 2 = 619mm² 45% total area



Sterling Curve Profile 2 – no box

- 1 = 1170mm² total area
- 1 = 527mm² 45% space factor
- 2 = 3858mm² total area
- 2 = 1736mm² 45% space factor
- 3 = 1542mm² total area
- 3 = 694mm² 45% space factor

With box in comp 2

- 2 = 1376mm² total area
- 2 = 619mm² 45% space factor

Other Sterling Profile dimensions

Other Sterling Profiles are a combination of the ones shown on this page and can be calculated using the compartment dimensions shown here.

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Product Information

Sterling Profile

Cable capacities

- All calculations allow for a 45% space factor.

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

Cable capacity chart	Compartment 1		Compartment 2		Compartment 3		Compartment 4
	No box	With box	No box	With box	No box	With box	No box
PVC power cable 1.5mm² stranded copper							
Sterling Profile 1	71	-	217	77	71	-	-
Sterling Profile 2	71	-	217	77	87	-	-
Sterling Profile 3	87	-	217	77	87	-	-
Sterling Curve Profile 1	66	-	217	77	66	-	-
Sterling Curve Profile 2	66	-	217	77	87	-	-
Sterling Profile 4	71	-	217	77	209	69	-
Sterling Profile 5	87	-	217	77	209	69	-
Sterling Profile 6	209	69	217	77	209	69	-
Sterling Profile 11	71	-	217	77	201	61	71
Sterling Profile 12	71	-	217	77	201	61	80
Sterling Profile 13	80	-	217	77	201	61	80
PVC power cable 2.5mm² stranded copper							
Sterling Profile 1	48	-	146	52	48	-	-
Sterling Profile 2	48	-	146	52	58	-	-
Sterling Profile 3	58	-	146	52	58	-	-
Sterling Curve Profile 1	44	-	146	52	44	-	-
Sterling Curve Profile 2	44	-	146	52	58	-	-
Sterling Profile 4	48	-	146	52	141	47	-
Sterling Profile 5	58	-	146	52	141	47	-
Sterling Profile 6	141	47	146	52	141	47	-
Sterling Profile 11	48	-	146	52	135	41	48
Sterling Profile 12	48	-	146	52	135	41	54
Sterling Profile 13	54	-	146	52	135	41	54
PVC power cable 4.0mm² stranded copper							
Sterling Profile 1	34	-	105	37	34	-	-
Sterling Profile 2	34	-	105	37	42	-	-
Sterling Profile 3	42	-	105	37	42	-	-
Sterling Curve Profile 1	32	-	105	37	32	-	-
Sterling Curve Profile 2	32	-	105	37	42	-	-
Sterling Profile 4	34	-	105	37	101	33	-
Sterling Profile 5	42	-	105	37	101	33	-
Sterling Profile 6	101	33	105	37	101	33	-
Sterling Profile 11	34	-	105	37	97	29	34
Sterling Profile 12	34	-	105	37	97	29	39
Sterling Profile 13	39	-	105	37	97	29	39
Data cable: Ø5.5mm²							
Sterling Profile 1	24	-	73	26	24	-	-
Sterling Profile 2	24	-	73	26	29	-	-
Sterling Profile 3	29	-	73	26	29	-	-
Sterling Curve Profile 1	22	-	73	26	22	-	-
Sterling Curve Profile 2	22	-	73	26	29	-	-
Sterling Profile 4	24	-	73	26	70	23	-
Sterling Profile 5	29	-	73	26	70	23	-
Sterling Profile 6	70	23	73	26	70	23	-
Sterling Profile 11	24	-	73	26	67	20	24
Sterling Profile 12	24	-	73	26	67	20	27
Sterling Profile 13	27	-	73	26	67	20	27

Cable capacity chart	Compartment 1		Compartment 2		Compartment 3		Compartment 4
	No box	With box	No box	With box	No box	With box	No box
Data cable: Ø6.0mm²							
Sterling Profile 1	20	-	61	22	20	-	-
Sterling Profile 2	20	-	61	22	25	-	-
Sterling Profile 3	25	-	61	22	25	-	-
Sterling Curve Profile 1	19	-	61	22	19	-	-
Sterling Curve Profile 2	19	-	61	22	25	-	-
Sterling Profile 4	20	-	61	22	59	20	-
Sterling Profile 5	25	-	61	22	59	20	-
Sterling Profile 6	59	20	61	22	59	20	-
Sterling Profile 11	20	-	61	22	57	17	20
Sterling Profile 12	20	-	61	22	57	17	23
Sterling Profile 13	23	-	61	22	57	17	23
Data cable: Ø6.5mm²							
Sterling Profile 1	18	-	54	19	18	-	-
Sterling Profile 2	18	-	54	19	22	-	-
Sterling Profile 3	22	-	54	19	22	-	-
Sterling Curve Profile 1	16	-	54	19	16	-	-
Sterling Curve Profile 2	16	-	54	19	22	-	-
Sterling Profile 4	18	-	54	19	52	17	-
Sterling Profile 5	22	-	54	19	52	17	-
Sterling Profile 6	52	17	54	19	52	17	-
Sterling Profile 11	18	-	54	19	50	15	18
Sterling Profile 12	18	-	54	19	50	15	20
Sterling Profile 13	20	-	54	19	50	15	20
Data cable: Ø7.0mm²							
Sterling Profile 1	15	-	45	16	15	-	-
Sterling Profile 2	15	-	45	16	18	-	-
Sterling Profile 3	18	-	45	16	18	-	-
Sterling Curve Profile 1	14	-	45	16	14	-	-
Sterling Curve Profile 2	14	-	45	16	18	-	-
Sterling Profile 4	15	-	45	16	43	14	-
Sterling Profile 5	18	-	45	16	43	14	-
Sterling Profile 6	43	14	45	16	43	14	-
Sterling Profile 11	15	-	45	16	42	13	15
Sterling Profile 12	15	-	45	16	42	13	17
Sterling Profile 13	17	-	45	16	42	13	17
Data cable: Ø8.4mm²							
Sterling Profile 1	10	-	31	11	10	-	-
Sterling Profile 2	10	-	31	11	13	-	-
Sterling Profile 3	13	-	31	11	13	-	-
Sterling Curve Profile 1	10	-	31	11	10	-	-
Sterling Curve Profile 2	10	-	31	11	13	-	-
Sterling Profile 4	10	-	31	11	30	10	-
Sterling Profile 5	13	-	31	11	30	10	-
Sterling Profile 6	30	10	31	11	30	10	-
Sterling Profile 11	10	-	31	11	29	9	10
Sterling Profile 12	10	-	31	11	29	9	12
Sterling Profile 13	12	-	31	11	29	9	12

Twin165 trunking

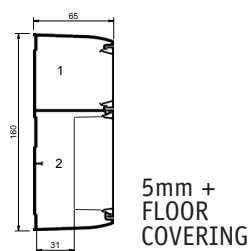
Material

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

Installation

Positioning

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.

Adequate allowance is made within the fittings for thermal movement of the covers, which have a 7mm overlap on each side.

Fitting

- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 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 moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.

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: Base should be cut square to bend base component.
- Flat angles and tees are pre-fabricated.
- External moulded fittings overlap the joints by up to 7mm to cover cutting inaccuracies.
- End caps to be screw fixed to base.

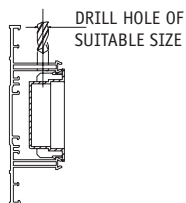
Bend radius control

The bend radius control fittings for Twin165 provide a bend radius of 50mm

Accessory boxes

The accessory box is mounted in the larger compartment (compartment 2). If supply is from the smaller compartment, drill the main web adjacent to the box position. Remove the appropriate knock out and clip the box into the trunking base. For boxes supplied from the main compartment, remove the appropriate box knock-outs and clip the box into 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

The covers have been designed to remain in position irrespective of impact during normal conditions, minor undulations of the mounting surface, and to limit unauthorised removal.

Covers – fitting

Covers are clipped into place from the front. If accessory boxes are installed, the covers are butt-joined to the edge of the box. For the fitting of couplers, a gap of 25mm is left between the two cover ends.

Covers – removal

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

Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

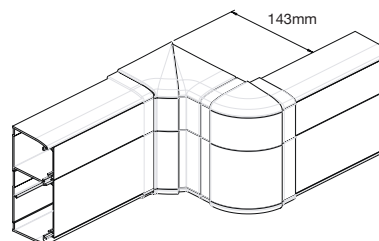
- **For data/voice circuits only:**
Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671 (2008) 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.
- Part M box assemblies with contrasting coloured faceplates are available to meet the requirements of DDA regulations for Visual Impairment.

Antimicrobial

For technical details of antimicrobial Twin165 Bio trunking, please refer to Laboratory and Healthcare section

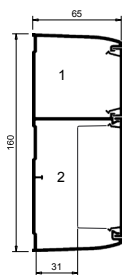
Offset dimensions

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



Twin165 – continued

Dimensions



Twin165 trunking – no accessory box

Compartment 1 = 3272mm² total area
 Compartment 1 = 1472mm² 45% space factor
 Compartment 2 = 5404mm² total area
 Compartment 2 = 2431mm² 45% space factor

Twin165 trunking – with accessory box

Compartment 1 = 3272mm² total area
 Compartment 1 = 1472mm² 45% space factor
 Compartment 2 = 3100mm² total area
 Compartment 2 = 1395mm² 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	
	No box	With box	No box	With box
PVC power cable 1.5mm ² stranded copper	184	–	304	174
PVC power cable 2.5mm ² stranded copper	124	–	204	117
PVC power cable 4.0mm ² stranded copper	89	–	146	84
Data cable: Ø5.5mm	62	–	102	59
Data cable: Ø6.0mm	52	–	86	49
Data cable: Ø6.5mm	46	–	76	43
Data cable: Ø7.0mm	38	–	63	36
Data cable: Ø8.4mm	27	–	44	25

Twin Plus trunking

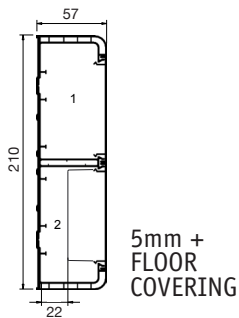
Material

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

Installation

Positioning

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.

Adequate allowance is made within the fittings for thermal movement of the covers, which have a 10mm overlap on each side.

Fitting

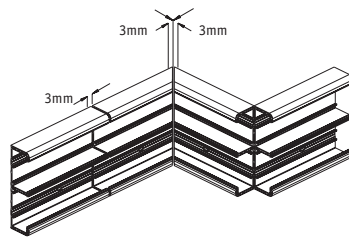
- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 round head screws and washers.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.

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.
- External bends: base should be cut square.
- Internal bends and flat angles, the base must be mitred 45° to ensure total enclosure of trunking, including any internal fitted segregator.
- Tees and crossovers are available prefabricated.
- External moulded fittings overlap the joints by up to 7mm to cover cutting inaccuracies.



Bend radius control

The bend radius control fittings for Twin Plus provide a bend radius of 50mm

Accessory boxes

If the accessory box is to be mounted in the alternative compartment to the supply, drill the main web adjacent to the box position. Remove the appropriate knock out and clip the box into the trunking base. For boxes in the same compartment as the supply, remove the appropriate box knock-outs and clip the box into 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

The covers have been designed to remain in position irrespective of impact during normal conditions, minor undulations of the mounting surface, and to limit unauthorised removal.

Covers – fitting

Covers are clipped into place from the front. If accessory boxes are installed, the covers are butt-joined to the edge of the box. For the fitting of couplers to conceal the cover joint, a gap of 30mm is left between the two cover ends.

Covers – removal

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

Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

• For data/voice circuits only:

Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671:2008 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.

Antimicrobial

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

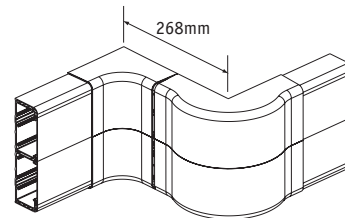
Method of continuation through a partition wall

Continue the main lateral run of base through the partition wall with short lengths of cover fitted where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an internal bend.

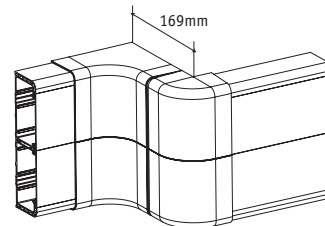
Offset dimensions

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

Large data capacity bend

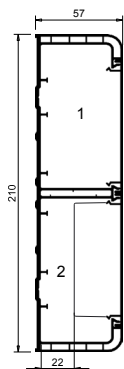


Standard bend



Twin Plus trunking – continued

Dimensions



Twin Plus trunking – with accessory box

- 1 = 2431mm² total area
- 1 = 1094mm² 45% space factor
- 2 = 2431mm² total area
- 2 = 1094mm² 45% space factor

Twin Plus trunking – no accessory box

- 1 = 4755mm² total area
- 1 = 2139mm² 45% space factor
- 2 = 4755mm² total area
- 2 = 2139mm² 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	
	No box	With box	No box	With box
PVC power cable 1.5mm ² stranded copper	267	137	267	137
PVC power cable 2.5mm ² stranded copper	180	92	180	92
PVC power cable 4.0mm ² stranded copper	129	66	129	66
Data cable: Ø5.5mm	90	46	90	46
Data cable: Ø6.0mm	76	39	76	39
Data cable: Ø6.5mm	66	34	66	34
Data cable: Ø7.0mm	56	28	56	28
Data cable: Ø8.4mm	39	20	39	20

XL trunking

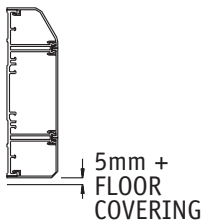
Material

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

Installation

Positioning

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.

Adequate allowance is made within the fittings for thermal movement of the covers, which have a 10mm overlap on each side.

Fitting

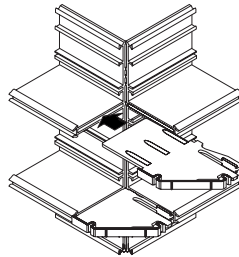
- The base is supplied with pre-cut elongated holes at 250mm centres.
- Internal couplers on base units are not required.
- To fasten base, use No 8 round head screws and washers.
- Avoid over-tightening to permit thermal movement.
- The use of plastic caps over screw heads is recommended to protect installed cables.
- To cut the trunking, use a fine-toothed panel or power jig-saw.
- External moulded fittings overlap the joints by up to 10mm to cover cutting inaccuracies.
- A variable angle jig-saw or chop saw is recommended for cutting 45° mitres.

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 bend

- Base joints should have a 3mm gap to allow for expansion.
- External bends: base should be cut square and segregators inserted as shown in drawing below.



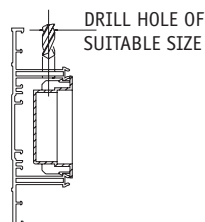
- Internal bends and flat angles, the base must be mitred 45° to ensure total enclosure of trunking, including any internal fitted segregator.
- Tees and crossovers are available prefabricated.
- External moulded fittings overlap the joints by up to 7mm to cover cutting inaccuracies.

Bend radius control

For data bend radius control fittings for XL, please contact the Technical Team on +44 (0)1424 856688.

Accessory boxes

- If accessory box main compartment is supplied from an outer compartment, drill the main web adjacent to the box position.
- Remove the appropriate knock out and clip the box into the trunking base.
- For boxes in the same compartment as the supply, remove the appropriate box knock-outs and clip the box into 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

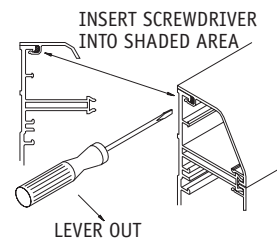
The covers have been designed to remain in position irrespective of impact during normal conditions, minor undulations of the mounting surface, and to limit unauthorised removal.

Covers – fitting

Covers are clipped into place from the front. If accessory boxes are installed, the covers are butt-joined to the edge of the box (ESSB1 and 2 only) and the cut edges of lids are subsequently concealed by the accessory. For fittings, a gap of 30mm is left between the two cover ends to permit the fitting to clip to the base.

Covers – removal

To remove a cover, first detach a coupler, internal or external bend component to gain access. The main cover can then be gently eased off the base. To remove the outer cover, firstly ease from the base by inserting the blade of a terminal screwdriver between the captive legs of the cover and the base and then peel off.



Screening

Special conductive spray coating can be applied to one compartment, the cover, accessory boxes and fittings, to screen data cables against EMI interference.

• For data/voice circuits only:

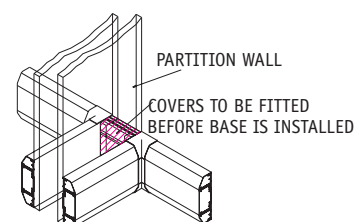
Warning: Owing to its relatively high surface resistance, CS coating SHOULD NOT be in contact with low voltage circuits BS 7671:2008 50 V.A.C. – 1000 V.A.C. unless additional measures are undertaken.

Antimicrobial

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

Method of continuation through a partition wall

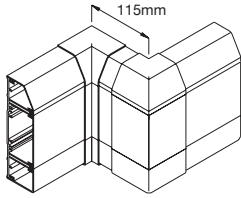
Continue the main lateral run of base through the partition wall with short lengths of cover fitted where the trunking passes through the partition. The partition wall trunking is then butted up to the main run and the joint covered by an Internal bend. (as shown below)



XL trunking – continued

Offset dimensions

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



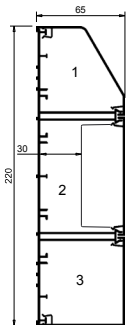
Dimensions

XL 202 Trunking - with box

- 1 = 2824mm² total area
- 1 = 1270mm² 45% space factor
- 2 = 2504mm² total area
- 2 = 1126mm² 45% space factor
- 3 = 3531mm² total area
- 3 = 1589mm² 45% space factor

XL 202 Trunking - no box

- 2 = 4771mm² total area
- 2 = 2147mm² 45% space factor

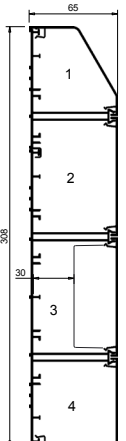


XL 212 Trunking - no box

- 1 = 2824mm² total area
- 1 = 1270mm² 45% space factor
- 2 = 4771mm² total area
- 2 = 2147mm² 45% space factor
- 3 = 4732mm² total area
- 3 = 2129mm² 45% space factor
- 4 = 3531mm² total area
- 4 = 1589mm² 45% space factor

XL 212 Trunking - with box in comp 2 or 3

- 2 = 2511mm² total area
- 2 = 1130mm² 45% space factor
- 3 = 2466mm² total area
- 3 = 1109mm² 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.

Other Sterling Profile dimensions

Other XL trunking profiles are a combination of the ones shown on this page and can be calculated using the compartment dimensions shown here.

Cable capacity chart	Compartment 1		Compartment 2		Compartment 3		Compartment 4
	No box	With box	No box	With box	No box	With box	No box
PVC power cable 1.5mm² stranded copper							
XL 201	159	-	268	141	159	-	-
XL 202	159	-	268	141	199	-	-
XL 203	199	-	268	141	199	-	-
XL 211	159	-	268	141	266	139	159
XL 212	159	-	268	141	266	139	199
XL 213	199	-	268	141	266	139	199
PVC power cable 2.5mm² stranded copper							
XL 201	107	-	180	95	107	-	-
XL 202	107	-	180	95	134	-	-
XL 203	134	-	180	95	134	-	-
XL 211	107	-	180	95	179	93	107
XL 212	107	-	180	95	179	93	134
XL 213	134	-	180	95	179	93	134
PVC power cable 4.0mm² stranded copper							
XL 201	77	-	129	68	77	-	-
XL 202	77	-	129	68	96	-	-
XL 203	96	-	129	68	96	-	-
XL 211	77	-	129	68	128	67	77
XL 212	77	-	129	68	128	67	96
XL 213	96	-	129	68	128	67	96
Data cable: Ø5.5mm UTP & STP							
XL 201	53	-	90	47	53	-	-
XL 202	53	-	90	47	67	-	-
XL 203	67	-	90	47	67	-	-
XL 211	53	-	90	47	89	47	53
XL 212	53	-	90	47	89	47	67
XL 213	67	-	90	47	89	47	67
Data cable: Ø6.0mm UTP & STP							
XL 201	45	-	76	40	45	-	-
XL 202	45	-	76	40	56	-	-
XL 203	56	-	76	40	56	-	-
XL 211	45	-	76	40	75	39	45
XL 212	45	-	76	40	75	39	56
XL 213	56	-	76	40	75	39	56
Data cable: Ø6.5mm UTP & STP							
XL 201	39	-	67	35	39	-	-
XL 202	39	-	67	35	49	-	-
XL 203	49	-	67	35	49	-	-
XL 211	39	-	67	35	66	34	39
XL 212	39	-	67	35	66	34	49
XL 213	49	-	67	35	66	34	49
Data cable: Ø7.0mm UTP & STP							
XL 201	33	-	56	29	33	-	-
XL 202	33	-	56	29	41	-	-
XL 203	41	-	56	29	41	-	-
XL 211	33	-	56	29	55	29	33
XL 212	33	-	56	29	55	29	41
XL 213	41	-	56	29	55	29	41
Data cable: Ø8.4mm UTP & STP							
XL 201	23	-	39	20	23	-	-
XL 202	23	-	39	20	29	-	-
XL 203	29	-	39	20	29	-	-
XL 211	23	-	39	20	38	20	23
XL 212	23	-	39	20	38	20	29
XL 213	29	-	39	20	38	20	29