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CABLE TRUNKING SYSTEM

The present invention relates to a cable trunking system and associated components. In particular, the present invention relates to a cable trunking system, mounting boxes for a cable trunking system and a cover for a cable trunking system.

BACKGROUND OF THE INVENTION

Trunking systems generally comprise lengths of trunking which may be mounted to a mounting surface such as a wall. Such lengths of trunking generally have a base component and a cover component, the base having longitudinal dividing walls such that when the cover is fitted a plurality of ducts are formed through which services may pass.

Standards such as British Standards or IEC Standards place requirements on the separation of mains and low voltage services, such as data and telecommunications services. These requirements state that such services shall be separated either by a specified minimum distance or by a substantially continuous insulation member. In order to ensure the segregation of service cables, for example mains power cables from data cables, the lengths of trunking may be arranged to have a plurality of longitudinal ducts separated from each other by the longitudinal dividing walls.

Figure 1 is a transverse section of a typical length of trunking 10 mounted to a mounting surface 12. The trunking 10 comprises a base component 14 and a cover component 16, with the cover 16 shown in an exploded relationship relative to the base 14. The base 14 comprises two longitudinal dividing walls 18 and 20. The cover 16 comprises engagement

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members 22 and 24 adapted to engage with complementary
respective engagement members 26 and 28 provided on the base
14. When the cover 16 is fitted to the base 14 the trunking
10 is provided with three ducts comprising top and bottom
5 ducts 30 and 32 for containing mains and data cables
respectively (or vice versa) and a central duct 34 for
receiving mains/data cables and/or mounting boxes for
mounting electrical wiring accessories to the trunking 10.
Such electrical wiring accessories may comprise electric
10 sockets or data terminals, for example.

Figure 2 is a perspective view of the trunking 10
including a mounting box 40 located in the central duct 34;
the cover 16 is not shown. The mounting box comprises a
back face 42, a top face 44, a bottom face 46, side faces 48
15 and 50, and an open front face 52 for receiving an
electrical wiring accessory such as a plug socket. The
mounting box 40 may slide freely in a longitudinal direction
along the central duct 34 until it is located in a desired
position. An aperture 54 may be formed in the longitudinal
20 wall 18 and in the top face 44 of the mounting box 40 for
cables to be passed from the top duct 30 through the
aperture 54 into the mounting box 40. Alternatively, an
aperture may be formed in the longitudinal wall 20 and in
the bottom face 46 of the mounting box 40 for cables to be
25 passed from the bottom duct 32 through the aperture into the
mounting box 40. Such apertures are usually formed by
drilling. It will be appreciated that installation time is
an important factor when fitting a trunking system, and the
forming of holes in mounting boxes takes up valuable time
30 during the installation process. Furthermore, having formed
the aperture 54, the longitudinal position of the mounting
box 40 is limited such that the aperture in the longitudinal

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wall 18 is required to be aligned with the aperture in the mounting box 40. Thus, if the mounting box 40 is incorrectly positioned in a longitudinal direction when the aperture 54 is formed, it may be necessary to form a second aperture in order to correctly position the mounting box 40 within the trunking 10. Again, this may slow down the installation process.

A length of trunking is often oriented horizontally along a vertical wall of a room, as shown in Figure 1. In use, an installer will place cables along an open duct of the base 14. He will then make any necessary connections and complete the installation by fitting the cover 16. However, it can be difficult to place cables in the bottom duct 32 before the cover 16 is fitted because the cables will naturally fall out of the bottom duct 32. This can further increase the installation time for the trunking system.

A trunking system such as that shown in Figures 1 and 2 generally protrudes from the mounting surface. This protrusion from the mounting surface may restrict the positioning of articles such as furniture within a room. In addition, the protrusion of the trunking system from the mounting surface is aesthetically unappealing.

Therefore, there is a need for a shallow trunking system which is quick and easy to install. In particular, it would be desirable to provide a trunking system and related components which protrude from the mounting surface less than trunking systems which are currently available. In addition, it would be desirable to provide a trunking system and related components which do not restrict the longitudinal positioning of a mounting box by the forming of holes in the top or bottom face of the box. Finally, it

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would be desirable to provide a trunking system and related components which enable cables to be easily placed in the bottom duct prior to the final fitting of the trunking system cover. The present invention seeks to address these
5 desires.

SUMMARY OF THE INVENTION

According to a first aspect of the present invention, there is provided a mounting device for use in a cable
10 trunking system, the mounting device comprising a frame having edges and an aperture that in use defines a front face of the mounting device and is adapted to receive a socket plate; and opposing side walls having edges and extending rearwardly of the frame; the edges of the frame
15 and side walls substantially defining a rectangular parallelepiped having a substantially open back face.

Advantageously, the rectangular parallelepiped has a substantially open top face.

Advantageously, the rectangular parallelepiped has a
20 substantially open bottom face.

According to a second aspect of the present invention, there is provided a mounting device for use in a cable trunking system, the mounting device comprising a frame having edges and an aperture that in use defines a front
25 face of the mounting device and is adapted to receive a socket plate; and opposing side walls having edges and extending rearwardly of the frame; the edges of the frame and side walls substantially defining a rectangular parallelepiped having at least one of a substantially open
30 top and bottom face.

Advantageously, at least one of the side walls is frangibly connected to the frame.

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Advantageously, the frame comprises at least one threaded aperture adapted to receive a screw to mount the socket plate to the mounting device.

Advantageously, the mounting device further comprises
5 engagement means for detachably engaging the cable trunking system. More advantageously, the engagement means permit the mounting device to slide longitudinally with respect to the cable trunking system.

Advantageously, the aperture is adapted to receive a
10 one-gang socket plate. Alternatively, the aperture is adapted to receive a two-gang socket plate. In a further alternative, the aperture is adapted to receive a three-gang socket plate.

Advantageously, the mounting device is made of an
15 insulating material, such as PVC.

Advantageously, the frame comprises opposing first edges and opposing second edges oriented substantially at right angles to the first edges, each side wall extending rearwardly from a respective second edge.

Advantageously, the engagement means comprises at least
20 one snap-on clip provided on at least one of the respective first edges.

Advantageously, the second edge comprises a threaded aperture adapted to receive a screw to mount the socket
25 plate to the mounting device.

Advantageously, the mounting device is combined with a base unit comprising a back wall and a plurality of longitudinal dividing walls defining at least one longitudinal duct. More advantageously, the combination
30 comprises a central longitudinal duct located between two marginal longitudinal ducts.

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Advantageously, the combination is combined with one or more covers to enclose one or more longitudinal ducts.

According to a third aspect of the present invention, there is provided a cable trunking system comprising a base unit and a detachable cover; the base unit comprising a base for positioning against a mounting surface, at least one wall projecting from the base, and a first interlocking formation spaced from the at least one wall, the wall being provided at an end remote from the base with a second interlocking formation; and the cover comprising mutually spaced third and fourth formations complementary to the first and second interlocking formations respectively; the first and third formations cooperating to permit the cover when attached to the base unit to occupy a closed position in which the second and fourth formations interlock and the base unit and cover define an enclosed volume and an open position in which the second and fourth formations are spaced apart allowing access to the enclosed volume.

Advantageously, the cover extends longitudinally in a direction parallel to the base. More advantageously, one or more of the first, second, third and fourth formations extend longitudinally in a direction parallel to the base.

Advantageously, the first and third formations comprise complementary hooks which interlock to attach the cover to the base unit in the open position.

Advantageously, the first formation comprises a surface angled with respect to the mounting surface, and the third formation comprises a surface adapted to abut the angled surface in the open position.

According to a fourth aspect of the present invention, there is provided a cable trunking system in combination with a mounting device, the cable trunking system comprising

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a back wall, and a plurality of longitudinal dividing walls; the mounting device comprising a frame having an aperture that in use defines a front face of the mounting device and is adapted to receive a socket plate, and opposing side
5 walls extending rearwardly of the frame; the mounting device and the cable trunking system together defining a substantially rectangular parallelepiped enclosure having a front face defined by the front face of the rectangular parallelepiped and a back face having a single skin.

10 According to a fifth aspect of the present invention, there is provided a cable trunking system in combination with a mounting device, the cable trunking system comprising a back wall, and a plurality of longitudinal dividing walls; the mounting device comprising a frame having an aperture
15 that in use defines a front face of the mounting device and is adapted to receive a socket plate, and opposing side walls extending rearwardly of the frame; the mounting device and the cable trunking system together defining a substantially rectangular parallelepiped enclosure having a
20 front face defined by the front face of the rectangular parallelepiped and at least one of a top face and bottom face having a single skin.

Advantageously, at least one of the longitudinal dividing walls comprises a single skin.

25 Advantageously, the longitudinal dividing walls comprise knockouts, the knockouts being longitudinally spaced areas which may be removed to form apertures in the longitudinal dividing walls.

Advantageously, a longitudinal spacing between centres
30 of adjacent knockouts is such that a two-gang mounting device may be placed at any position along a length of the trunking system and be adjacent at least one knockout. More

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advantageously, a longitudinal spacing between centres of adjacent knockouts is 150 mm.

BRIEF DESCRIPTION OF THE DRAWINGS

5 An embodiment of the present invention will now be described by way of example with reference to the accompanying drawings in which:

Figure 1 is a cross-section of a length of prior art trunking mounted to a mounting surface, a cover component is
10 shown in an exploded relationship relative to a base component;

Figure 2 is a perspective view of a length of prior art trunking including a mounting box;

Figure 3 is a perspective view of a length of trunking
15 for a trunking system according to one embodiment of the present invention;

Figure 4 is a perspective view of a two-gang mounting box for a trunking system according to one embodiment of the present invention;

20 Figure 5 is a perspective view of the mounting box received within a central duct of the length of trunking;

Figure 6 is a side view of the length of trunking of and the mounting box of Figure 5;

Figure 7 is a perspective view of the mounting box with
25 a frangibly connected side wall removed;

Figure 8 is a perspective view of the mounting box with both frangibly connected side walls removed;

Figure 9 is a perspective view of the length of trunking and the mounting box with covers also shown;

30 Figure 10 is a cross-section of the length of trunking and the covers;

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Figure 10a is an enlarged view of part of Figure 10 showing an engagement member of the length of trunking and an engagement member of a bottom cover;

Figure 11 is a cross-section of the length of trunking and the covers with the bottom cover open to act as a hinged tray;

Figure 12 is a perspective view of a one-gang mounting box for a trunking system according to an embodiment of the present invention; and

Figure 13 is a perspective view of an alternative embodiment of a one-gang mounting box for a trunking system according to the present invention.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

Figure 3 shows a length of trunking 110 for a cable trunking system. The length of trunking 110 comprises a base 112 and two longitudinal dividing walls 114 and 116 extending substantially perpendicularly from the base 112 to form three ducts 118, 120 and 122. The length of trunking is formed from an insulating material such as PVC.

The length of trunking 110 may be affixed to a wall by screwing screws into the wall through the apertures 124 in the base 112. Furthermore, the length of trunking may be positioned so as to extend horizontally along a vertical wall such that the three ducts may be referred to as a top duct 118, a bottom duct 120 and a central duct 122. The cable trunking system will here be described with reference to this orientation. Nonetheless it will be appreciated that the invention is not limited to this orientation. In an alternative arrangement, for example, the trunking may extend vertically along a vertical wall. Further alternative arrangements are also possible.

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In this embodiment, a width W and a depth D of the central duct 122 are 85 mm and 43.5 mm respectively, and widths of the top and bottom ducts 118 and 120 are 25 mm. The widths of the top and/or bottom ducts 118 and 120 may be
5 increased by 20 mm by fitting extension sections (not shown) to the base 112. Thus, the cable-carrying capacity of the top and/or bottom ducts 118 and 120 may be increased substantially.

Data cables may be placed along the top duct 118 or the
10 bottom duct 120, and power cables may be placed along the other. Thus services are segregated within the trunking system. Mounting boxes may be placed in the central duct 122.

The longitudinal dividing walls comprise knockouts 126
15 which are areas of the longitudinal dividing walls 114 and 116 surrounded by lines of weakness 128. Each line of weakness 128 forms a substantially rectangular shape with curved corners. A length X and a height Y of each knockout 126 are 50 mm and 21 mm respectively. The longitudinal
20 spacing Z between the centres of two adjacent knockouts 126 is 150 mm.

In use, a knockout 126 may be easily removed by an installer pushing out the knockout 126 by hand or with a blunt tool such as a screwdriver, for example. Thus, an
25 aperture is formed within the area defined by the respective line of weakness 128, and cables may be passed from the top duct 118 or the bottom duct 120 through the aperture into the central duct 122.

In an alternative embodiment, the knockouts 126 are not
30 surrounded by lines of weakness 128. Instead, the knockouts 126 are removed from the longitudinal side walls when the length of trunking is manufactured and are then replaced so

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as to close off the resulting apertures. By careful control of this process, the knockout is preferably a tight fit in the hole such that it is not dislodged in normal handling or installation, however, it is preferably such
5 that it may be pushed out of the aperture by hand or with a blunt tool as described above.

The base 112 further comprises top and bottom longitudinal engagement members 130 and 132 respectively. The top longitudinal side wall 114 comprises engagement
10 members 134 and 136. Similarly, the bottom longitudinal side wall 116 comprises engagement members 138 and 140. The engagement members 130 to 140 are adapted to engage cover components (not shown), for example, as described later.

Figure 4 shows a mounting box 150. The mounting box
15 150 is adapted to be received in the central duct 122 of the length of trunking 110, as shown in Figure 5.

The mounting box 150 comprises a frame 152 having an aperture 154 that in use defines a front face of the mounting box 150. The mounting box 150 further comprises
20 opposing side walls 156 and 158 extending rearwardly of the frame 152. The back face of the mounting box 150 is substantially open.

When the mounting box 150 has been inserted into the central duct 122 of the length of trunking 110, as shown in
25 Figure 5, a boxlike enclosure is formed. The boxlike enclosure has a front face defined by frame 152, side faces defined by opposing side walls 156 and 158, top and bottom faces defined by the longitudinal walls 114 and 116 respectively, and a back face defined by the base 112.
30 Thus, the boxlike enclosure satisfies standards such as British Standards or IEC Standards by isolating those cables within the mounting box 50 from other types of cables.

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Furthermore, since the back face of the mounting box 150 is substantially open, the frame 152 is positioned closer to the base 112 and to the wall than in prior art trunking systems whilst maintaining a constant volume within a box of similar front dimensions. Therefore, a trunking system comprising the length of trunking 110 and the mounting box 150 protrudes less from the mounting surface than prior art trunking systems and mounting boxes. Additionally, the substantially open back face of the mounting box 150 enables cables to be passed from the wall directly into the mounting box 150 in the central duct 122 without the need to drill through the back of the mounting box 150. Thus, only the base 112 of the length of trunking 110 and the wall require drilling, and the mounting box 150 may be positioned subsequent to the drilling.

Referring back to the perspective view of the mounting box 150 in Figure 4, the frame 152 and the aperture 154 are substantially rectangular in shape. The aperture is adapted to receive a two-gang socket plate (not shown). The socket plate is attached to the mounting box 150 by means of screws which pass through apertures in the socket plate and threadingly engage with respective lugs 159 on the frame 152. In an alternative embodiment, the lug need not be threaded, but may instead receive and hold captive a threaded insert. The frame 152 further comprises opposing first sides 160 and 162 and opposing second sides 164 and 166 which are oriented substantially at right angles to the opposing first sides 160 and 162.

Three edges of a substantially open top face of the mounting box 150 are defined by the first side 160, an edge 168 of the side wall 156, and an edge 170 of the side wall 158. Similarly, three edges of a substantially open bottom

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face of the mounting box 150 are defined by the first side 162, an edge 172 of the side wall 156, and an edge 174 of the side wall 158.

5 The first sides 160 and 162 of the frame 150 comprise flanges 176 and flexible catches 178 adapted to engage the engagement members 136 and 140 of the length of trunking 110. Nonetheless, the mounting box 150 is free to slide longitudinally with respect to the length of trunking 110.

10 In use, an installer may slide the mounting box 150 to a longitudinal position of his choice within the length of trunking 110. The size and spacing of the knockouts 126 is such that a pair of knockouts 126 will be located at least partially above and below a standard sized two-gang mounting box 150 for any longitudinal position of the mounting box 150. In Figure 5, the mounting box 150 is positioned directly between a pair of knockouts 126. Thus, once a mounting box has been located in the required longitudinal position, the installer may remove either the top knockout 126 in the longitudinal wall 114 above the mounting box 150 or the bottom knockout 126 in the longitudinal wall 116 below the mounting box 150. If the installer removes the top knockout 126 to form an aperture, he may then easily pass power cables, for example, from the top duct 118 through the aperture and into the mounting box 150 in the central duct 122 without the need for drilling. This is possible because the mounting box 150 comprises a substantially open top face. In this configuration, the power cables are still isolated from any data cables in the bottom duct 120 by virtue of the longitudinal wall 116 and the bottom knockout 126 which has not been removed. Thus, a trunking system comprising the length of trunking 110 and the mounting box 150 does not restrict the longitudinal

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positioning of a mounting box by the forming of holes in the top or bottom face of the box.

Figure 6 is a side view of the mounting box 150 and length of trunking 110 shown in Figure 5. Inward and outward directions are defined relative to the vertical centre of the length of trunking on the wall and are illustrated by arrows I and O respectively.

The engagement members 136 and 140 are substantially L-shaped, having a first portion 182 which extends inwardly from the end of the respective side wall 114 or 116 and merges with a second portion 184 which extends away from the base in a direction substantially parallel to the respective side wall 114 or 116. The flanges 176 are also substantially L-shaped, having a first portion 186 which extends outwardly from the edge of the respective first side 160 or 162 and merges with a second portion 184 which in use extends towards the base 112 in a direction substantially parallel to the respective side wall 114 or 116. The backward and inward facing surfaces of the flanges 176 engage with the forward and outward facing surfaces of the engagement members 136 and 140. The flexible catches 178 are shown in an unflexed position in Figures 4 to 6. In this position, forward surfaces 190 of the catches 178 engage with backward surfaces 192 of the first portion 182 of the engagement members 136 and 140. This prevents the mounting box 150 from falling out of the central duct 122. In use, as the mounting box 150 is inserted into the central duct 122, the flexible catches 178 flex inwards to enable the flexible catches 178 to move past the engagement members 136 and 140.

Referring back to the perspective view of the mounting box 150 in Figure 4, the second sides 164 and 166 of the

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frame 152 comprise flanges 180. In use, the flanges 180 underlie cover components of the cable trunking system such that there is no gap between the cover components and the mounting box 150.

5 The side walls 156 and 158 extend rearwardly from the second sides 164 and 166 respectively. The side walls 156 and 158 are frangibly connected to the frame by lines of weakness 179 extending parallel to the second sides 164 and 166. The lines of weakness 179 may comprise narrow areas in
10 which the thickness of the side walls 156 and 158 is reduced. In use, an installer may easily flex the side wall 158 to remove it from the mounting box 150. Figure 7 shows the mounting box 150 with the side wall 158 removed. Similarly, the other side wall 156 may also be removed by an
15 installer. Figure 8 shows the mounting box 150 with the side wall 158 additionally removed. The lugs 159 are formed on the frame 152 rather than on the side walls 156 and 158 so that the lugs 159 are not removed when a side wall 156 or 158 is removed. The removal of one or more side walls 156
20 and/or 158 enables a plurality of mounting boxes 150 to be placed adjacent to one another spaced by socket spacers in the central duct 122. In this way, a bigger mounting box is effectively formed since cables may be passed from one mounting box to an adjacent mounting box via the aperture
25 formed by removing the inner side walls without compromising cable separation.

Figure 9 shows the mounting box 150 and length of trunking 110 of Figure 5 with covers also shown. There is provided a top cover 194, a bottom cover 196, and central
30 covers 198. Figure 10 shows a cross-section of the length of trunking 110 and the covers 194, 196 and 198 of Figure 9.

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The central cover 198 comprises a substantially rectangular and planar portion 200 with engagement members 202 disposed on opposing longitudinal edges. The engagement members 202 are adapted to engage with the engagement members 136 and 140 of the longitudinal side walls 114 and 116 respectively. Thus, since the flanges 176 and the flexible catches 178 are also adapted to engage the engagement members 136 and 140, the engagement members 202 comprise corresponding flanges 204 and flexible catches 206. However, in contrast to the flexible catches 178, the flexible catches 206 extend the full length of the central cover 198.

The top cover 194 is identical to the bottom cover 196, but is oriented differently with respect to the length of trunking 110. Therefore, for brevity, only the bottom cover 196 will be described in detail here.

The bottom cover 196 comprises a substantially planar portion 208 having a longitudinal edge 210 which merges with a curved portion 210 to form an approximate L-shape. The curved portion 212 comprises an engagement member 214 adapted to engage the engagement member 138 of the longitudinal wall 116. The engagement members 138 and 214 are mirror images of the engagement members 140 and 202 respectively in a plane of the longitudinal wall 116, so engagement members 138 and 214 will not be described further here.

The planar portion 208 comprises an engagement member 216 adapted to engage the engagement member 132 of the base 112. The engagement members 132 and 216 may move relative to one another between a closed position, as shown in Figure 10, and a tray position, as shown in Figure 11.

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Figure 10a is an enlarged view of the engagement member 216 and the engagement member 132 in the closed position of Figure 10. The engagement member 216 comprises a longitudinal ridge 118 and a flange 220 of L-shaped cross-section having a free end comprising an outward hook 222. In use, the longitudinal ridge 118 is located on the inside of the cover 196, close to the base 112. The L-shaped flange 220 is also located on the inside of the cover 196 in use. The flange 220 has a first portion 224 which extends inwardly from the planar portion 208 and merges with a second portion 226 which extends towards the base 112 in a direction substantially parallel to the side walls 114 and 116 when the cover 196 is in the closed position. The second portion 226 comprises a longitudinal ridge 228 which is located on the inward side of the second portion 226.

The engagement member 132 comprises a first flange 230 and a second stepped flange 232. The first flange 230 extends away from the base 112 in a direction substantially parallel to the side walls 114 and 116. A free end of the first flange 230 comprises an outward hook 234. The stepped flange 232 is located on a free bottom end of the base 112 and extends at an angle from the base 112. A free end of the stepped flange 232 forms an inward hook 236.

In use, an installer may attach the bottom tray 196 to the base 112 of the length of trunking 110 by engaging engagement member 132 of the base 112 with engagement member 216 of the bottom cover 196 in the tray position shown in Figure 11. In the tray position, the cover 196 is held in place by the inward hook 236 engaging with the outward hook 222. Furthermore, an inward surface 238 at the free end of the planar surface 208 abuts against an outward angled surface 240 of the stepped flange 232. Thus, the cover 196

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forms an approximately V-shaped tray 242, with the two sides of the V being formed by the planar portion 208 and the curved portion 212. The installer may therefore place cables in the V-shaped tray 242 for ease of installation.

5 Once the installer has positioned all the cables intended for the bottom duct 120 in the tray 242, the installer may close the cover 196 by engaging engagement member 214 with engagement member 138 in the closed position shown in Figure 10. In the closed position, the cover 196 is held in place
10 by the engagement member 214 engaging with the engagement member 138. The engagement member 214 comprises a flange 213 and a flexible catch 215 and is similar in form to the engagement member 202 of the central cover 198. Furthermore, a free end 244 of the planar portion 208 abuts
15 against the wall, and the outward hook 234 engages with the longitudinal ridge 228.

Figure 12 shows a one-gang mounting box 250 according to an embodiment of the present invention. The mounting box 250 is adapted to be received in the central duct 122 of the
20 length of trunking 110 shown in Figure 3. Thus, the one-gang mounting box 250 is an alternative to the two-gang mounting box 150.

The one-gang mounting box 250 is largely similar to the two-gang mounting box 150. The main difference is that
25 opposing first sides 260 and 262 of a frame 252 are shorter than opposing first sides 160 and 162 since an aperture 254 of the frame 252 is adapted to receive a one-gang socket plate. In addition, the one-gang mounting box 250 comprises four lugs 259 for engagement with the socket plate. The
30 lugs 259 are located on the first sides 260 and 262 and the second sides 264 and 266 of the frame 252. Side walls 268 and 270 of the mounting box 250 are frangibly connected to

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the frame 252 and may be removed from the mounting box 250 as described above with reference to Figures 7 and 8 showing the two-gang mounting box 150.

Figure 13 shows a further alternative embodiment of a mounting box 350 according to the present invention. As for the mounting box 250 shown in Figure 12, the mounting box 350 comprises a frame 352 having an aperture 354 that in use defines a front face of the mounting box 350. The frame 352 further comprises opposing first sides 360 and 362 and opposing second sides 364 and 366 which are oriented substantially at right angles to the opposing first sides 360 and 362. Opposing side walls 356 and 358 extend rearwardly of the frame 352 from the second sides 364 and 366. The back face of the mounting box 350 is substantially open. In contrast to the mounting box 250 shown in Figure 12, the mounting box 350 further comprises a side wall 357 extending rearwardly of the frame 352 from the first side 360. All three side walls 356, 357 and 358 are frangibly connected to the frame 352. In use, the mounting box may be oriented so that the side wall 357 abuts the top longitudinal wall 114 or the bottom longitudinal wall 116. An advantage of this embodiment is that the side wall 357 further insulates and strengthens the mounting box 350.

In a further alternative embodiment, there is provided a three-gang mounting box.

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CLAIMS:

1. A mounting device for use in a cable trunking system, the mounting device comprising:

5 a frame having edges and an aperture that in use defines a front face of the mounting device and is adapted to receive a socket plate; and

opposing side walls having edges and extending rearwardly of the frame;

10 the edges of the frame and side walls substantially defining a rectangular parallelepiped having a substantially open back face.

2. A mounting device for use in a cable trunking system, the mounting device comprising:

15 a frame having edges and an aperture that in use defines a front face of the mounting device and is adapted to receive a socket plate; and

opposing side walls having edges and extending rearwardly of the frame;

20 the edges of the frame and side walls substantially defining a rectangular parallelepiped having at least one of a substantially open top and bottom face.

25 3. The mounting device of any preceding claim wherein at least one of said side walls is frangibly connected to the frame.

4. The mounting device of any preceding claim wherein
30 said frame comprises at least one threaded aperture adapted to receive a screw to mount the socket plate to the mounting device.

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5. The mounting device of any preceding claim wherein said mounting device further comprises engagement means for detachably engaging said cable trunking system.

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6. The mounting device of claim 5 wherein said engagement means permit said mounting device to slide longitudinally with respect to the cable trunking system.

10 7. The mounting device of any preceding claim wherein said aperture is adapted to receive a one-gang socket plate.

8. The mounting device of any of claims 1 to 6 wherein said aperture is adapted to receive a two-gang
15 socket plate.

9. The mounting device of any of claims 1 to 6 wherein said aperture is adapted to receive a three-gang
20 socket plate.

10. The mounting device of any preceding claim wherein said mounting device is made of an insulating material.

11. The mounting device of any preceding claim wherein
25 said frame comprises opposing first edges and opposing second edges oriented substantially at right angles to said first edges, each side wall extending rearwardly from a respective second edge.

30 12. The mounting device of claim 11 when dependent upon claim 5 wherein said engagement means comprises at

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least one snap-on clip provided on at least one of said respective first edges.

13. The mounting device of claim 11 or claim 12
5 wherein each said second edge comprises a threaded aperture adapted to receive a screw to mount the socket plate to the mounting device.

14. The mounting device of claim 1 or any of claims 3
10 to 13 when dependent upon claim 1 wherein said rectangular parallelepiped has a substantially open top face.

15. The mounting device of claim 1 or any of claims 3
15 to 13 when dependent upon claim 1 wherein said rectangular parallelepiped has a substantially open bottom face.

16. The mounting device of any preceding claim in combination with a base unit comprising a back wall and a plurality of longitudinal dividing walls defining at least
20 one longitudinal duct.

17. The combination of claim 16 comprising a central longitudinal duct located between two marginal longitudinal ducts.
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18. The combination of claim 16 or claim 17 in combination with one or more covers to enclose one or more longitudinal ducts.

30 19. A cable trunking system comprising a base unit and a detachable cover,

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the base unit comprising a base for positioning against a mounting surface, at least one wall projecting from the base, and a first interlocking formation spaced from said at least one wall, the wall being provided at an end remote

5 from the base with a second interlocking formation, and

the cover comprising mutually spaced third and fourth formations complementary to said first and second interlocking formations respectively,

the first and third formations cooperating to permit
10 the cover when attached to the base unit to occupy a closed position in which the second and fourth formations interlock and the base unit and cover define an enclosed volume and an open position in which the second and fourth formations are spaced apart allowing access to said enclosed volume.

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20. The cable trunking system of claim 19 wherein the cover extends longitudinally in a direction parallel to the base.

20 21. The cable trunking system of claim 20 wherein one or more of the first, second, third and fourth formations extend longitudinally in a direction parallel to the base.

22. The cable trunking system of any of claims 19 to
25 21 wherein the first and third formations comprise complementary hooks which interlock to attach the cover to the base unit in the open position.

23. The cable trunking system of any of claims 19 to
30 22 wherein the first formation comprises a surface angled with respect to the mounting surface, and the third

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formation comprises a surface adapted to abut the angled surface in the open position.

24. A cable trunking system in combination with a
5 mounting device,

said cable trunking system comprising:

a back wall; and

a plurality of longitudinal dividing walls;

said mounting device comprising:

10 a frame having an aperture that in use
defines a front face of the mounting device and is
adapted to receive a socket plate; and
opposing side walls extending rearwardly of
the frame;

15 the mounting device and the cable trunking system
together defining a substantially rectangular parallelepiped
enclosure having a front face defined by the front face of
the rectangular parallelepiped and a back face having a
single skin.

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25. A cable trunking system in combination with a
mounting device,

said cable trunking system comprising:

a back wall; and

25 a plurality of longitudinal dividing walls;

said mounting device comprising:

30 a frame having an aperture that in use
defines a front face of the mounting device and is
adapted to receive a socket plate; and
opposing side walls extending rearwardly of
the frame;

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the mounting device and the cable trunking system together defining a substantially rectangular parallelepiped enclosure having a front face defined by the front face of the rectangular parallelepiped and at least one of a top
5 face and bottom face having a single skin.

26. The combination of claim 24 or claim 25 wherein at least one of said longitudinal dividing walls comprises a single skin.

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27. The combination of any of claims 24 to 26 wherein said longitudinal dividing walls comprise knockouts, the knockouts being longitudinally spaced areas which may be removed to form apertures in the longitudinal dividing
15 walls.

28. The combination of claim 27 wherein a longitudinal spacing between centres of adjacent knockouts is such that a two-gang mounting device may be placed at any position along
20 a length of the trunking system and be adjacent at least one knockout.

29. The combination of claim 27 wherein a longitudinal spacing between centres of adjacent knockouts is 150 mm.

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30. A cable trunking system substantially as herein described with reference to Figures 3 to 13 of the accompanying drawings.

30 31. A mounting device for use in a cable trunking system, the mounting device being substantially as herein

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described with reference to Figures 4 to 9 or Figure 12 or Figure 13 of the accompanying drawings.

32. A cable trunking system comprising a base unit and
5 a detachable cover being substantially as herein described
with reference to Figures 9 to 11 of the accompanying
drawings.