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(54) **Shower tray**

(57) A shower tray has a central basin (10) with an
upstanding wall surround (12), a ledge surround (11) and
a depending lip (14). The undersurface of the basin (10)
and the undersurface of the ledge surround (11) are both
provided with a board reinforcement (16, 18) incorporat-

ed thereto. The tray has a plurality of height-adjustable
feet (20) provided spaced around the ledge surround re-
inforcement (18) with at least one height-adjustable foot
(20) positioned substantially centrally of the basin rein-
forcement (16).

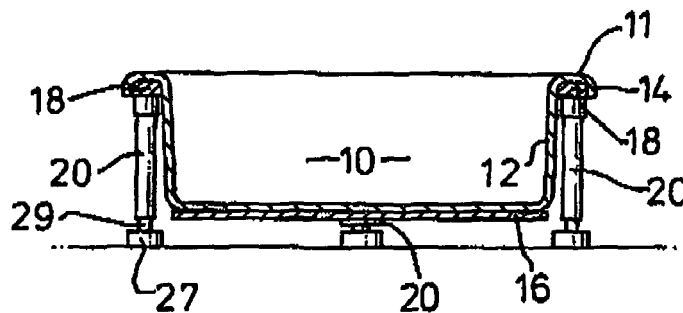


FIG. 2.

Description

[0001] This invention relates to a shower tray for use in shower cubicles. Shower trays have been provided heretofore each comprising a central wash basin whose bottom is at a lower position with an upstanding wall surround translated at its top into an outwardly directed ledge surround at an upper position, the ledge surround having a depending lip. A waste outlet is provided in the basin. The basin of the shower tray is supported off a floor surface to provide a space for accommodation of piping and waste outlet fittings. Such shower trays have been made of ceramic material in which the depending lip is extended downwardly to form an integral side wall surround of depth greater than the depth of the basin to create such a space.

[0002] Ceramic material is rigid and self-supporting when laid on a floor or surface. Such shower trays have also been made of plastics material which while it may be rigid is not generally self-supporting. Accordingly, the tray is not provided with an integral side wall surround and is supported off the floor or surface by a series of height-adjustable feet fixed to the bottom of the basin, and side wall panels are provided to close off the sides, or at least those sides requiring to be closed off. Normally, a shower cubicle is fitted into a corner of a bathroom/shower room and the shower tray requires only two sides to be closed off by side wall panels. There are some instances however where a shower cubicle is situated against one wall and the shower tray requires three sides to be closed off. Also, there are instances where a shower cubicle is erected on site with a tray fitted in an area defined by three walls and the shower tray only requires one wall to be closed off. Shower trays of plastics material have heretofore been constructed with a wooden board reinforcement incorporated into the undersurface of the basin to provide rigidity to the bottom of the basin and to provide anchorage for fasteners to hold the height-adjustable feet. A disadvantage of such shower tray is that while the basin is supported, the ledge surround is not. When a person steps into the shower tray, he/she sometimes steps onto the ledge surround first of all. With that part of the shower tray not supported by the height-adjustable feet and the side wall panels not imparting any support, the ledge surround gives slightly causing the person to feel the shower tray is unsafe.

[0003] An object of the present invention is to obviate or mitigate this disadvantage.

[0004] Accordingly, the present invention is a shower tray having a central basin with an upstanding wall surround, a ledge surround and a depending lip wherein the undersurface of the basin and the undersurface of the ledge surround are both provided with a board reinforcement incorporated therein, the tray having a plurality of height-adjustable feet provided spaced around the ledge surround reinforcement with at least one height-adjustable foot positioned substantially centrally of the basin reinforcement.

[0005] Preferably, each height-adjustable foot comprises an upper anchorage member to be secured to the tray, a shank and a lower member to be positioned on a floor or surface, the shank and lower member being in a screw-threaded relationship to provide for height-adjustment and for stabilising the tray in a level positioning on the floor or surface.

[0006] Preferably also, a wall surround panel is provided to enclose one, two or three sides of a tray depending on the number of sides to be closed off. Each wall surround panel is desirable of one piece construction. Each wall surround panel beneficially incorporates on its reverse side a series of upright reinforcements positioned to correspond with the positioning of the height-adjustable feet, one or more vertically spaced dips being desirably secured to each of said upright reinforcements and adapted, when the panel is fitted, to engage around the shank of a respective foot. The or each clip desirably has a mounting plate to be secured to the upright reinforcement. The back of the mounting plate of the clip, a side of the anchorage member and part of the circumference of the lower member of each foot are beneficially uprightly aligned whereby when the panel is fitted and the or each clip engaged around a corresponding shank, portions of the respective upright reinforcement abut against the uprightly aligned parts of the foot to impart support to the panel. A brace element may be provided between adjacent pairs of upright reinforcements.

[0007] An embodiment of the present invention will now be described, by way of example, with reference to the accompanying schematic drawings, in which:-

Fig. 1 is a perspective view of a shower tray according to the present invention, shown in a corner between two adjoining walls;

Fig. 2 is a cross sectional view of the tray; and

Fig. 3 is an exploded perspective view.

[0008] Referring to the drawings, a shower tray is rectangular in plan and has a central rectangular basin 10 with an upstanding wall surround 12, a ledge surround 11 and a depending lip 14. The undersurface of the basin 10 and the undersurface of the ledge surround 11 are both provided with a board reinforcement 16, 18 incorporated therein. The board reinforcement 16 is rectangular although of lesser dimensions than the dimensions of the basin 10. The board reinforcement of the ledge surround 11 is annular and corresponds with the shape of the ledge surround 11. The tray has a plurality of five height-adjustable feet 20, four provided spaced around the ledge surround reinforcement 18, one near each corner, with one foot positioned substantially centrally of the basin reinforcement 16.

[0009] Each height-adjustable foot 20 comprises an upper anchorage member 22 to be secured to the tray by screws 23 through apertures 25, a shank 24 and a lower member 26 to be positioned on a floor or surface. The lower member 26 has a round shoe 27 with an ex-

ternally screw-threaded element 29 upstanding axially therefrom. The shank 24 is hollow and has an internal screw-thread at its lower end. The shank 24 and the lower member 26 are in a screw-threaded relationship to provide for height-adjustment and for stabilising the tray in a level positioning on the floor or surface.

[0010] A shower tray is normally located against one wall or in a corner with two walls. A wall surround panel 28 is provided to enclose one, two or three sides of a tray depending on the number of sides to be closed off. In this embodiment two sides with the other two sides closed off by fitment of the tray against two joining wells in a corner of a room (as shown in Fig. 1). Each wall surround panel 28 is of one piece construction and incorporates on its reverse side a series of upright reinforcements 30 positioned to correspond with the positioning of the height-adjustable feet 20. The upright reinforcement 30 is a top hat cross-section with its edges bonded to the inside of the surround panel 28. One clip 32 (although more than one clip 32 may be provided vertically spaced apart) is secured to each of said upright reinforcements 30 and adapted, when the panel 28 is fitted, to engage around the shank 24 of a respective foot 20. The clip 32 has a mounting plate 34 to be secured to the upright reinforcement 30. To allow for discrepancies in positioning of the foot and corresponding clip 32, the mounting plate 34 has a slide 36 on which the clip 32 is mounted and along which it can be moved. The back of the mounting plate 34 of the clip 32, a side 38 of the anchorage member 22 and part of the circumference of the lower member 26 of each foot 20 are uprightly aligned whereby when the panel 28 is fitted and the clip 32 engaged around a corresponding shank 24, portions of the respective upright reinforcement 30 abut against the uprightly aligned parts of the foot 20 to impart support to the panel 28.

[0011] In use, the shower tray of the present invention is fitted as described against two walls of a corner of a room, i.e. a bathroom or shower room, at a predetermined height, the feet being adjusted as required to level the tray 10. An angled panel 28 is then fitted around the open sides of the tray and secured with the respective clips 32 engaging with corresponding shanks 24. Prior to fitting the panel 28, access is given to fit the waste fittings and integrate the waste outlet into a waste water disposal system. Subsequently removal of the panel 28 gives access to make any repairs to the waste outlet and fittings of the tray as required.

[0012] The wall area above the shower tray is normally tiled or has a waterproof panel(s) fitted. Prior to the shower tray being fitted, a flexible strip membrane is adhered around the outside of the depending lip on those sides to be against a wall, a portion of the membrane without any adhesive capability extending upwardly and intended to be covered by the tiling or waterproof panelling.

[0013] In a first modification, a brace element 36 can be provided between the adjacent pairs of upright reinforcements 30. This element 36 may be positioned along the top of the panel 28 as shown in Fig. 3 of substantially

mid-way along the height of the panel 28.

[0014] The shower tray has been described in relation to a tray of rectangular shape in plan. The above described invention is also applicable to shower trays of other shapes such as quadrant or corner.

[0015] Variations and modifications can be made without departing from the scope of the invention described above and as claimed hereinafter.

Claims

1. A shower tray having a central basin (10) with an upstanding wall surround (12), a ledge surround (11) and a depending lip (14) wherein the undersurface of the basin (10) is provided with a board reinforcement (16) incorporated therein, the tray having a plurality of height-adjustable supporting feet (20) with at least one height-adjustable foot (20) positioned substantially centrally of the basin reinforcement (16) **characterised in that** the undersurface of the ledge surround (11) is provided with a board reinforcement (18) incorporated therein and the remaining feet (20) are spaced around the ledge surround reinforcement.
2. A shower tray as claimed in Claim 1, **characterised in that** each height-adjustable foot comprises an upper anchorage member (22) to be secured to the tray, a shank (24) and a lower member (26) to be positioned on a floor or surface, the shank (24) and the lower member (26) being in a screw-threaded relationship to provide for height-adjustment and for stabilising the tray in a level positioning on the floor or surface.
3. A shower tray as claimed in Claim 1 or 2, **characterised in that** a wall surround panel (28) is provided to enclose one, two or three sides of a tray depending on the number of sides to be closed off.
4. A shower tray as claimed in Claim 3, **characterised in that** each wall surround panel (28) is desirably of one piece construction.
5. A shower tray as claimed in Claims 2, 3 or 4, **characterised in that** each wall surround panel (28) incorporates on its reverse side a series of upright reinforcements (30) positioned to correspond with the positioning of the height-adjustable feet (20), one or more vertically spaced clips (32) being secured to each of said upright reinforcements (30) and adapted, when the panel (28) is fitted, to engage around the shank (24) of a respective foot (20).
6. A shower tray as claimed in Claim 5, **characterised in that** the or each clip (32) has a mounting plate (34) to be secured to the upright reinforcement (30).

7. A shower tray as claimed in Claim 6, **characterised in that** the back of the mounting plate (34) of the of each clip (32), a side of the anchorage member (22) and part of the circumference of the lower member (26) of each foot (20) are uprightly aligned whereby when the panel (28) is fitted and the or each clip (32) engaged around a corresponding shank (24), portions of the respective upright reinforcement (22) abut against the uprightly aligned parts of the foot (20) to impart support to the panel (28).
8. A shower tray as claimed in Claims 5, 6 or 7, **characterised in that** a brace element (26) is provided between adjacent pairs of upright reinforcements (30).
9. A shower tray as claimed in any of the preceding claims, **characterised in that** a flexible strip membrane is adhered around the outside of the depending lip (14) on those sides of the tray to be against a wall, a portion without any adhesion capability extending upwardly and intended to be overlapped by a covering for the walls thereabove.

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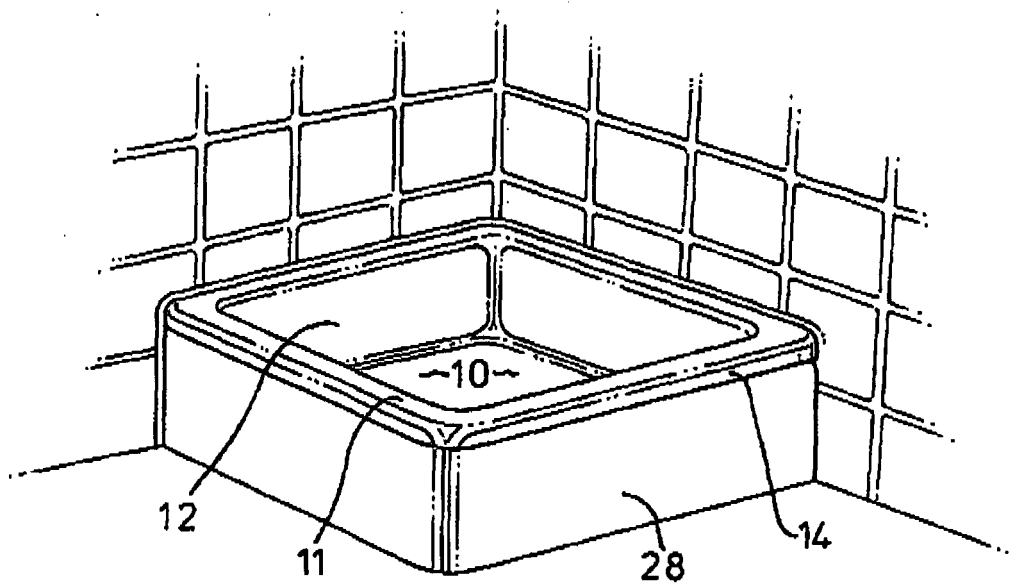


FIG. 1.

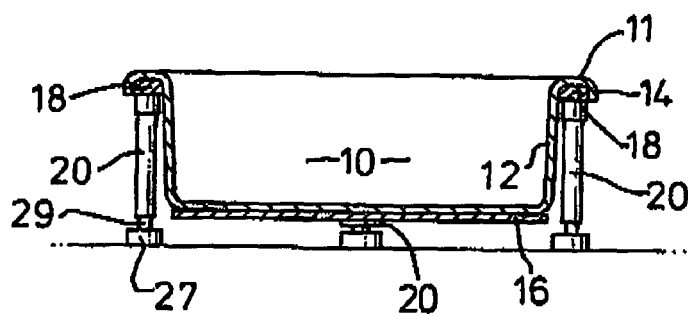


FIG. 2.

