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Shower recess and method of construction

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(56) Related Art

GB 2184942

US 1860968

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## **Abstract**

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An extrusion for forming a shower recess includes a base having grooves for retaining adhesive in order that the extrusion may be glued directly to a floor structure such as a concrete slab. The extrusion further includes securing means in the form of notches for retaining a water impermeable membrane and a visual guide to aid a tiler in forming a mortar bedding to the correct height. A shower recess includes the extrusion and a shower door located adjacent a lip of the extrusion and above a portion of a tiled shower recess floor in order to reduce leakage of the recess.

## SHOWER RECESS AND METHOD OF CONSTRUCTION

### FIELD OF THE INVENTION

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The present invention is concerned with a shower recess and with a component used in the construction of a shower recess and with a method for constructing a shower recess.

## **BACKGROUND TO THE INVENTION**

A common problem in the building industry is that prior art shower recess designs have often been found to be prone to leaking.

In the past it has been common for shower recess construction to involve the use of a hob, being a small wall located in a corner of the bathroom that acts to retain water in the recess. Typically the hob is formed from bricks covered with shower tiles. One problem with such a construction is that water is able to penetrate through the grout between the tiles to weaken the adhesive fixing the tiles to the hob so that they may detach. Once the integrity of the tiles is lost moisture may damage the area surrounding the shower recess so that moldings and floor coverings may have to be replaced.

A further problem is that a hob constitutes a fairly large and unsightly wall that has to be stepped over in order to enter the shower recess.

It is an object of the present invention to provide a shower recess and a component for making a shower recesses which overcomes or at least alleviates the above problems and which is an alternative to prior art systems.

## SUMMARY OF THE INVENTION

According to a first aspect of the present invention there is provided an extrusion for forming a shower recess, said extrusion including:

a base having means for retaining adhesive for adhering the member to a floor;

securing means for securing a waterproof membrane;

a feature visible on the member at a level above the base corresponding to a bedding level for the shower recess.

In a preferred embodiment the securing means are notches formed along one side of the extrusion.

Preferably the means for retaining adhesive comprises one or more grooves formed into the base of the member.

The feature for indicating the bedding level may be an inwardly protruding ridge formed along one side of the extrusion. Alternatively it could simply be a visible line or other marking formed along one side of the extrusion.

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According to a further aspect of the present invention there is provided a shower recess including:

an extrusion fixed to a flooring structure and defining one or more sides of the shower recess;

a tiled surface sloping down from under an inner lip of the extrusion to a drain; a shower door arranged to close adjacent the inner lip and directly above a portion of the tiled surface; and

a water impermeable layer located inside the extrusion and above the flooring structure.

Preferably the water impermeable layer is fixed to the extrusion by securing means. In a preferred embodiment the securing means comprises one or more notches formed along an inner side of the extrusion.

Preferably the shower door is arranged to close adjacent the inner lip and directly above a portion of the tiled surface by means of a door support which is located upon the tiles and adjacent the inner lip.

Preferably a water impermeable seal is located between the seal and the door support.

According to a further aspect of the present invention there is provided a method for constructing a shower recess including the steps of:

forming a wall of the shower recess by fixing an extrusion to a flooring structure:

locating a water impermeable membrane over the flooring structure and securing it to an inner wall of the extrusion;

forming a tiled floor over the membrane

installing a shower door support adjacent an inner lip of the extrusion and over a portion of the tiled floor.

Preferably the water impermeable membrane is secured to the inner wall of the extrusion by means of notches formed into the inner wall of the extrusion.

Preferably the step of fixing the extrusion to the flooring structure includes applying adhesive to grooves formed in a base of the extrusion.

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#### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a cross section of an extrusion according to a first embodiment of the present invention.

Figure 2 is an L-shaped member formed from two extrusions similar to the type illustrated in Figure 1.

Figure 3 is a cross section of a shower recess according to an embodiment of the present invention.

#### **DETAILED DESCRIPTION OF PREFERRED EMBODIMENT**

With reference to Figure 1, an aluminium extrusion includes means for retaining adhesive in the form of lipped grooves 4 and 6 which are intended to receive an adhesive for gluing the frame to a concrete slab or other flooring structure. The extrusion further includes securing means in the form of notches 3, 5 and 7 for securing water impermeable membrane, such as a fibreglass membrane, to the extrusion. Ledge 8 comprises a visible feature or marking that is useful as a height guide for a tiler when forming a mortar bed for shower tiles, as will be described.

With reference to Figure 2 a pair of sections 2 are joined to form an L-shaped member or "L-frame" 13 which is located in a corner of a bathroom in order to form a shower recess. Figure 3 shows in cross section a shower recess 19 incorporating frame 13. Frame 13 is glued directly to a floor structure in the form of concrete slab 21. Fiberglass membrane 23 is located over slab 21 and L-frame 13 being secured to the L-frame by means of notches 7, 3 and 5 (Figure 1). A mortar bed 25 is built up over the membrane to a height indicated by ledge 8 on the L-frame. Tiles 27 are then laid over the mortar bed and around drain grate 29. Opposite L-frame 13 the recess is closed by wall sheeting 31 which is fixed to stud-wall 33. Fibreglass membrane 23 runs up between wall sheeting 31 and tiles 27 in order to prevent penetration of water into the wall sheeting and underlying floor.

Shower screen 35 is installed and sealed to lip 9 (Figure 1), being the top inside edge of the L-section 13, by means of a silicone bead 37.

In use water falling on the inside of shower screen 35 drips onto tiles 27 and then down into drain grate 29. Any water that penetrates the grout between tiles 27 and then mortar bed 25 will be unable to penetrate fiberglass membrane 23 and so will divert down drain 39. Furthermore, membrane 23 is secured by means of notches 3, 5 and 7 so that the likelihood of a gap forming between membrane 23 and L-section 13, through which water might ingress, is reduced.

While the invention has been described in relation to a preferred embodiment it will be realized that variations and further embodiments are possible within the scope of the invention as defined by the following claims.

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### THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

An extrusion for forming a shower recess, said extrusion including:

 a base having means for retaining adhesive for adhering the member to a floor;

securing means for securing a waterproof membrane;

a feature visible on the member at a level above the base corresponding to a bedding level for the shower recess.

- 2. An extrusion according to claim 1, wherein the securing means comprise notches formed along one side of the extrusion.
- An extrusion according to any one of the preceding claims, wherein the means for retaining adhesive comprises one or more grooves formed into the base of the member.
- 4. An extrusion according to any one of the preceding claims, wherein the feature for indicating the bedding level comprises a protruding ridge formed along one side of the extrusion.
- 5. An extrusion according to any one of claims 1 to 3, wherein the feature for indicating the bed level comprises a marking formed along one side of the extrusion.
- 6. A shower recess including:

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an extrusion fixed to a flooring structure and defining one or more sides of the shower recess;

a tiled surface sloping down from under an inner lip of the extrusion to a drain;

a shower door arranged to close adjacent the inner lip and directly above a portion of the tiled surface; and

a water impermeable layer located inside the extrusion and above the flooring structure.

- 7. A shower recess according to claim 6, wherein the water impermeable layer is fixed to the extrusion by securing means.
- 8. A shower recess according to claim 7, wherein the securing means comprises one or more notches formed along an inner side of the extrusion.
- 9. A shower recess according to any one of claims 6 to 8, wherein the shower door is arranged to close adjacent the inner lip and directly above a portion of the tiled surface by means of a door support located upon the tiles and adjacent the inner lip.
- 10. A shower recess according to claim 9, wherein a seal is located between the inner lip and the door support.
- 11. A shower recess according to claim 10, wherein the door comprises a shower screen and the door support comprises a shower screen rail.
- 12. A method for constructing a shower recess including the steps of:

forming a wall of the shower recess by fixing an extrusion to a flooring structure;

locating a water impermeable membrane over the flooring structure and securing it to an inner wall of the extrusion;

forming a tiled floor over the membrane

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installing a shower door support adjacent an inner lip of the extrusion and over a portion of the tiled floor.

- 14. A method according to claim 13, wherein the water impermeable membrane is secured to the inner wall of the extrusion by means of notches formed into the inner wall of the extrusion.
- 15. A method according to claim 13 or claim 14, wherein the step of fixing the extrusion to the flooring structure includes applying adhesive to grooves formed in a base of the extrusion.

- 16. An extrusion for forming a shower recess substantially as described herein with reference to Figure 1.
- 17. A shower recess substantially as described herein with reference to Figure 3.

## **COOLAROO ORIGINALS PTY LTD**

By my attorneys

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