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(21) Application No. 1257/76 (22) Filed 13 Jan. 1976

(23) Complete Specification filed 4 Jan. 1977

(44) Complete Specification published 10 Sept. 1980

(51) INT. CL.³ E04B 5/43(52) Index at acceptance
E1W 211 CPD

(54) IMPROVEMENTS IN OR RELATING TO
FLOOR UNITS FOR BATHROOMS

(71) I, CHARLES WYCLIFFE NOBLE, a British Subject, of The William and Mary House, French Street, Sunbury-on-Thames, Middlesex, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:

This invention relates to a pre-fabricated floor unit for use in the construction of a bathroom.

According to the present invention, there is provided a pre-fabricated floor unit for use in the construction of a bathroom, which comprises a basal portion including an outlet aperture around which at least a part of the upper surface of the basal portion is sloped so as to allow drainage into said outlet aperture; and a raised rim portion extending completely around the periphery of the basal portion, wherein (i) the unit includes an area intended for use as a shower, which area is delineated from the remainder of the basal portion by a raised wall or ridge structure, or by a sunken channel, formed in the basal portion, and (ii) the outlet is positioned so as to collect water from the shower area. Such a unit may conveniently be formed of a synthetic polymeric material, for example polystyrene, polypropylene or polyvinylchloride, or a fibre, e.g. a glass fibre-reinforced material and it may be produced by a vacuum forming or other appropriate moulding operation.

In order that the nature of the invention may be more fully understood further more detailed description will now be given.

It is proposed to provide a pre-fabricated floor unit which will cover the whole or the major part of the floor of a bathroom in which shower facilities are provided. The unit, which may be vacuum formed from polystyrene, polypropylene, P.V.C., fibre glass or other appropriate material, will

generally comprise a large tray like unit including a base and an integral upturned peripheral rim or side walls extending completely therearound. The base is formed so as to incorporate a shower tray portion of rectangular or other desired shape which portion is defined by upstanding walls, ridges or the like or by a sunken channel extending completely therearound. Such walls, ridges or the like or channel are preferably formed integrally with the base during formation of the floor unit. The outlet aperture may be in the form of a drain outlet, to which a drain pipe may be connected, and can be disposed within the shower tray portion, the base of which latter will be so formed as to ensure that water will flow or drain to said outlet. In an alternative construction where the base is formed so as to incorporate a plurality of interconnected open topped channels or grooves which form a sunken channel and delineate the shower tray portion, the outlet is provided in one of the channels or grooves so that water collected from the shower tray portion by the sunken channel passes to the outlet and thence to a drain pipe connected to the outlet.

It will be appreciated that by providing a complete floor unit such as is envisaged above the construction of bathrooms will be simplified and speeded up and moreover when an integrally formed unit is installed the bathroom floor will be completely watertight and there will be no possibility of seepage of water into other parts of the structure in which the bathroom is situated. Such a unit may readily be installed in either existing or new buildings it only being necessary to ensure that there is a satisfactory foundation or support for it.

It is envisaged that flooring units will be constructed in a range of standard sizes but of course it will be appreciated that units of any desired size and shape or con-

figuration may be produced to suit any particular requirements.

Several possible constructional embodiments are illustrated in the accompanying drawings, Figures 1 to 4 being cross-sectional views and Figure 5 being an isometric view.

Figure 1 illustrates an embodiment of the invention in which the pre-fabricated bathroom floor unit comprises a basal portion 1 surrounded by a raised rim 2. Within the area 3 delineated by a raised wall 4 which is generally rectangular in cross-section. The floor of shower tray portion 3 slopes downwardly towards a centrally located outlet 5 to which a drain-pipe 6 is attached. The shower tray portion 3 can be of any suitable shape, for example square or rectangular. The entire prefabricated floor unit is made as an integral unit.

Referring now to Figure 2, a second embodiment is illustrated in which the shower tray portion 3 is delineated by a sunken channel 7 in part of which the outlet 5 is located. The whole of the floor area of the unit can be sloped towards the outlet 5.

Figure 5 is an isometric view of part of the floor unit shown in Figure 2.

Figures 3 and 4 illustrate methods in which the pre-fabricated floor unit may be supported in a building. The arrangement shown in Figure 3 is particularly suited to the installation of the pre-fabricated floor unit in an existing dwelling, while that of Figure 4 is suitable for use when the floor unit is incorporated during the construction of a dwelling house.

In each of the embodiments illustrated, the floor unit can be moulded from a synthetic polymeric material which is reinforced with glass fibres.

WHAT I CLAIM IS:

1. A pre-fabricated floor unit for use in the construction of a bathroom, which comprises a basal portion including an outlet aperture around which at least a part of the upper surface of the basal portion is

sloped so as to allow drainage into said outlet aperture; and a raised rim portion extending completely around the periphery of the basal portion, wherein (i) the unit includes an area intended for use as a shower, which area is delineated from the remainder of the basal portion by a raised wall or ridge structure, or by a sunken channel, formed in the basal portion, and (ii) the outlet is positioned so as to collect water from the shower area.

2. A floor unit as claimed in claim 1, wherein the outlet is located within the delineated area.

3. A floor unit as claimed in claim 1, wherein the delineated area is bounded by a sunken channel which includes the outlet aperture.

4. A floor unit as claimed in any preceding claim, wherein the floor unit is formed from a synthetic polymeric material.

5. A floor unit as claimed in claim 4, which is formed from a polystyrene, polypropylene or polyvinylchloride.

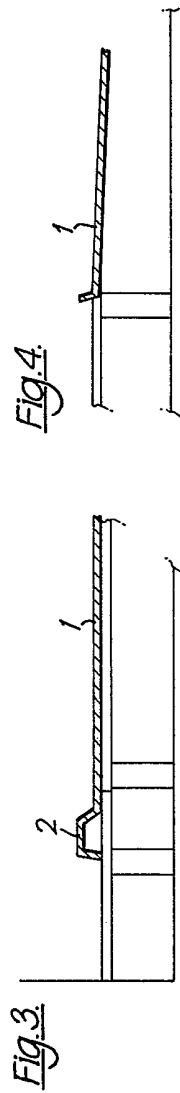
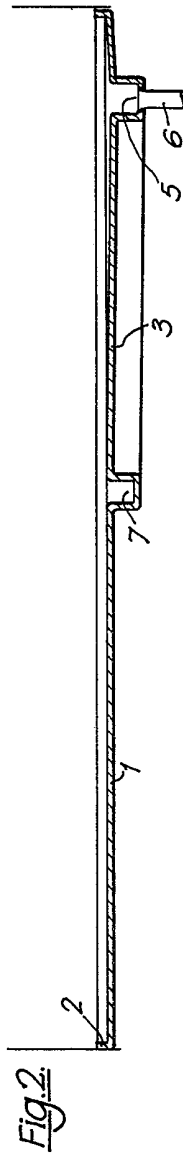
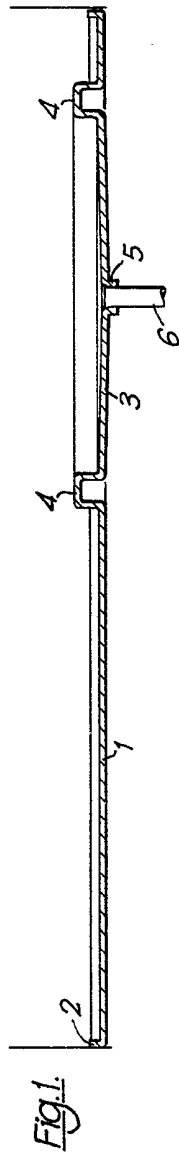
6. A floor unit as claimed in any preceding claim, wherein the floor unit is formed from a fibre-reinforced material.

7. A floor unit as claimed in claim 6, wherein said material is reinforced with glass fibres.

8. A pre-fabricated floor unit substantially as hereinbefore described.

9. A pre-fabricated floor unit substantially as hereinbefore described with reference to, and as illustrated in, the accompanying drawing.

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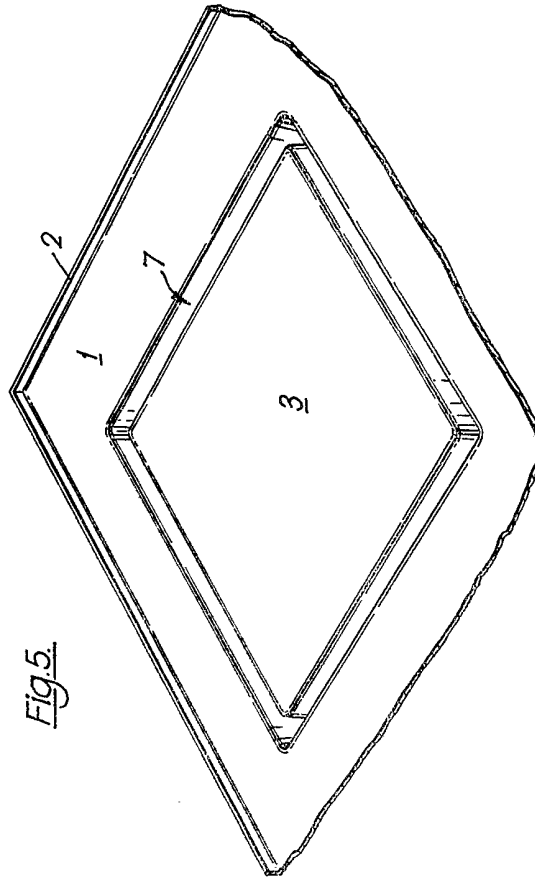


Fig. 5.