

# Aqua Flat - wet room shower trays

A range of low profile wet room shower bases specifically designed to create level entry showers in properties with suspended timber floors



Assembly and installation instructions



## Aqua Flat - wet room shower trays

Our **Jackoboard** Aqua Flat shower base system consists of a shower base and a drain unit. Both components are designed for each other and no other drain unit is compatible with the Aqua Flat base. Drain units are available for both horizontal and vertical applications.



- Aqua Base
- 2 Drain as ordered:2a Horizontal Drain2b Vertical Drain
- 3 Clamping Collar
- 4 Clamping Collar Tool
- Grate Height Extension Insert

- 6 Odour Trap
  - Backflow Seal
    (optional and not usually needed, but if
    there is danger of backflow can be inserted
    in the upper groove of the flange)
- 8 Grate Support Frame
- 9 Solid Stainless Steel Grate

## Before you begin

### The product

The **Jackoboard** Aqua Flat range of low profile shower bases (20 and 25mm thick) has been specifically designed to create wet rooms and walk-in showers in properties with suspended timber floors. However, you can also install the system in a solid floor if desired.

The shower base is made from extruded polystyrene which has been machined to create a fall from the perimeter edges to the drain position. The base has then been covered on both sides with a polymer modified



cement coating into which has been bonded a reinforcing fibre glass mesh. This coating provides both excellent point-loading resistance and a superb bond for cement based tile adhesives. Crucially, the whole unit is completely waterproof and dimensionally stable - it is not affected by moisture, humidity or movement in the substrate.

It is important to understand that **Jackoboard** Aqua shower bases, in common with other extruded polystyrene products, are not self-supporting. In order to support the base firmly when creating a level-entry design on a suspended timber floor a sub-floor must be constructed between the joists using, for example, 18mm plywood.

### **Planning and preparation**

Prior to purchasing your Aqua Flat shower base you should have thought carefully about your desired room layout, checked out the direction and position of the supporting floor joists and decided on the best route to your waste pipe from the Aqua drain. If you haven't, then now is the time to do so!

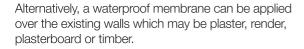
We recommend that you choose a shower base from the Aqua range which both maximises the potential showering area and also allows you to fit the drain in the space between the joists.

To fit the drain body under the floor the centre point of the drain must be at least 90mm from any floor joists.

## Before you begin (continued)

### Waterproofing the walls

The joints between the shower base and surrounding walls will be protected with **Jackoboard** Waterproof Sealing Tape but for a totally professional peace-of-mind solution the walls within the wet area should be lined with **Jackoboard** Construction Boards. These are made from the same waterproof material as the shower base but are, of course, in flat form. All the joints between the boards should be protected with **Jackoboard** Waterproof Sealing Tape.

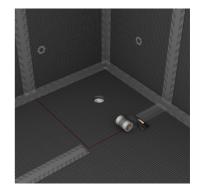




### Waterproofing the rest of the floor

You'll also need to think about how you are going to strengthen and protect the rest of the floor from water intrusion prior to tiling. In the past, this often used to be done by adding a plywood overlay but now the technical advice from the tiling industry is that tiling should never be direct to any timber substrate.

By using **Jackoboard** Construction Boards as an overlay you can achieve a degree of extra rigidity (if required) as well as providing a waterproof and thermally insulating barrier. Stress on the tiles and grout lines is greatly reduced because any movement in the timber floor is not transferred to the tiling. All joints in the vicinity of the wet area should be sealed with **Jackoboard** Waterproof Sealing Tape.



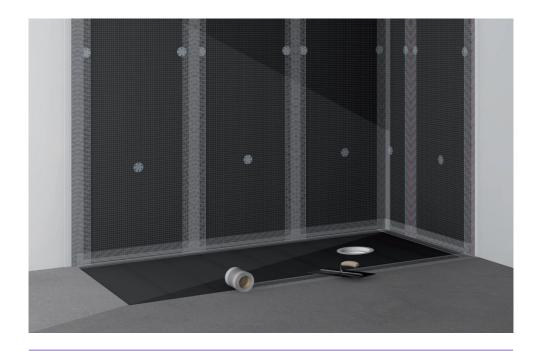
### **Undertile Heating**

Because it is made from extruded polystyrene, **Jackoboard** has excellent thermal insulation properties. This makes it ideal for maximising the efficiency of electrical undertile heating systems. Instead of the heat going down into the floor, it is reflected back up through the tiles. So these systems warm up more quickly and the tiles retain their heat for longer. You could even install the electrical undertile heating elements over the shower base itself.

### **Heights and levels**

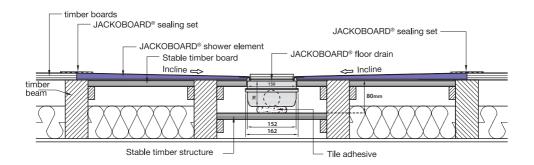
If you decide to overboard the rest of the floor with **Jackoboard** Construction Boards you'll need to allow for the resulting slight increase in finished height of the floor area surrounding the shower base.

Simply adjust the height of the sub-floor which supports the base so that the shower base is 6mm or 10mm above the surrounding floor when bonded down. Then you can lay 6mm or 10mm **Jackoboard** Construction Board on the rest of the floor to bring everything level.

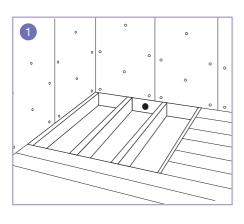


# Installing the Aqua Flat Base and drain in a suspended timber floor.

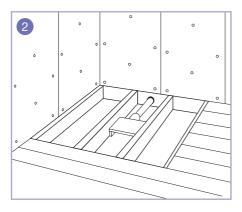
### JACKOBOARD Aqua/Aqua Flat on a suspended timber floor



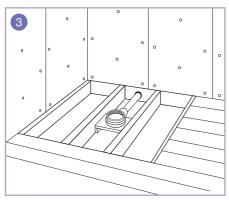
### Installation



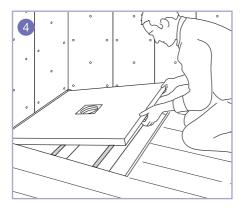
 First of all remove the floor boarding in the area where the shower base is to be fitted back to the nearest floor joist.



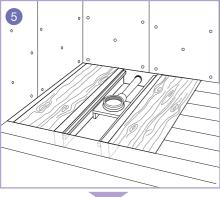
2. Construct a small sub-floor between the joists to support the drain body. As a guide, this sub-floor should be 80mm below the top of the joists.

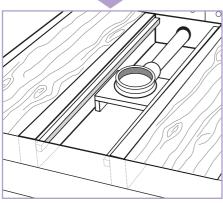


3. Connect the waste to the drain. The Aqua Flat drain spigot takes a DN50mm compression fitting but the kit includes adaptors to connect to a 2" waste pipe using a solvent weld connection. Place a dab of mortar or tile adhesive under the body of the drain to bring it level with the top of the joists.

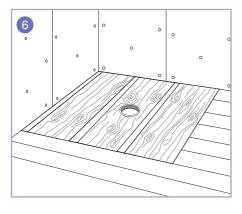


4. Position the shower base over the drain to check they are correctly aligned. Make sure that any connections created are waterproof at this stage because it will not be possible to return to them once the unit is tiled. (You can do this by pouring water down the drain to check the seal).

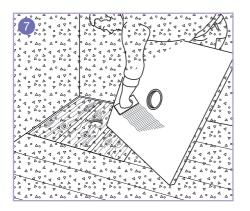




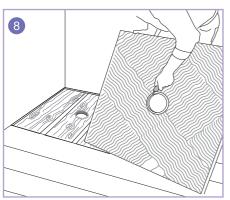
5. Then construct a sub-floor between the joists by screw fixing battens to the sides of the floor joists (see diagram) and filling the spaces between the joists with, for example, 18mm plywood. If you are not overlaying the rest of the floor with Jackoboard Construction Board, the top of this floor should be level with the top of the floor joists. However, if you are adding an overlay to the rest of the floor raise the sub-floor so that the edges of the shower base are level with the thickness of the proposed overlay. You will also need to raise the sub-floor for the drain appropriately, of course.



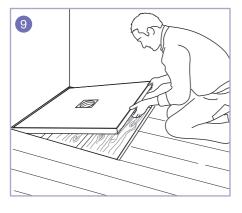
6. This sub-floor requires a 160mm diameter hole cut out for the waste. Again, check to make sure that the drain, hole and shower base are correctly aligned.



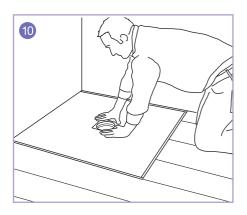
7. Prime the timber floor with a suitable primer (this helps create a better bond for the cement based tile adhesive). Comb out a layer of cement-based single part flexible tile adhesive to the underside of the shower base using a 5mm notched spreader. Keep the adhesive clear of the flange area.



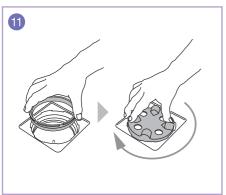
8. Grease the flange on the underside of the base with plumbers grease. Make sure the factory- supplied sealing ring is positioned in the drain.



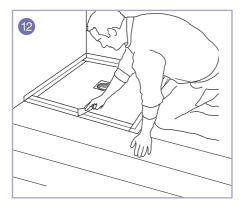
**9.** Carefully place the Aqua Flat shower base over the drain position and push firmly into place.



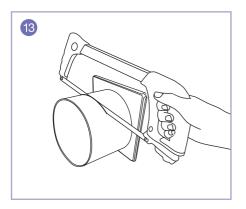
**10.** Be careful to press on the flange area, and not on the perimeter edges of the base.



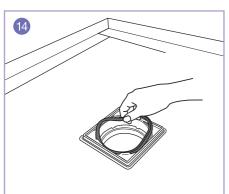
11. Insert the clamping collar (3) and screw tight using the clamping tool provided. The drain is now firmly connected to the shower base. Check all the edges of the base are level with a spirit level.



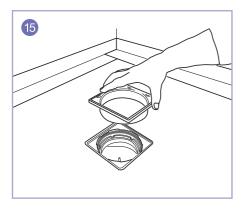
12. Once the adhesive has cured, seal all the joints with an appropriate sealing system. This could be the Jackoboard Waterproofing and Sealing Set, for example.



13. The Grate Support Frame (8) needs to be trimmed to the correct height depending on the thickness of your tiles, the depth of adhesive and whether any electrical underfloor heating cables have been fitted on the tray. Insert the Grate Support Frame into the tray and determine how much of the frame needs to be trimmed off. Cut off the excess plastic material with an appropriate saw.

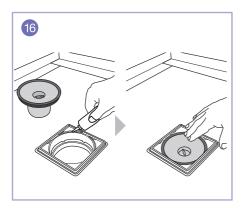


14. If required insert the Backflow Seal (7) beneath the six lugs on the shower base fitting. (If used, this seal will need to be greased to allow the Grate Support Frame (8) to pass over it).

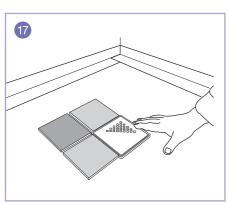


**15.** Position the Grate Support Frame in the tray. Tiling can now commence.

## **Tiling the Aqua Base**



- **16.** Grease the top edge of the Grate Support Frame with plumbers grease and then insert the Odour Trap.
- 17. Position the Grate (9) in place.



- Jackoboard Aqua shower bases are in principle suitable for all types and sizes of ceramic and stone tiles. However, for mosaic tiles less than 25mm square we strongly recommend the application of an epoxy resin grout for the tile joints.
- Tiles must be fixed using cement-based single part flexible tile adhesive. Pre-mixed 'tub' adhesives must not be used.
- The grout line around the grate frame should be sealed with a flexible sanitary sealant (silicone) and not a cement based grout.
- If showers are to be wheelchair accessible tiles must be a minimum of 50mm square.
- Tiles larger than 150mm square must be cut to follow the valleys of the falls, which always run from the drain position to the corners of each shower base.

Please note: The information provided in this leaflet is based on our knowledge and experience to date. It does not constitute a guarantee in any legal sense. When using this product, please bear in mind the circumstances of the particular intended application especially in regard to physical, technical and legal construction issues.

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