

# Technical Bulletin

## Tile Fixing to Anhydrite Screeds

Anhydrite (calcium sulphate) screeds are based on gypsum as a binder, and need to be treated slightly differently than ordinary sand/cement screeds. They are not resistant to significant exposure to water and there is a potential reaction at the gypsum/cement interface, which can cause destructive expansion. Adequate priming is therefore required and is also advised, as a precaution, if the type of screed is not known.

### Preparation

It is important that an anhydrite screed has fully dried before it is covered, since gypsum is sensitive to water. Fully dry is defined as a moisture content of less than 0.5%. BS8204-7:2003 recommends 1 day drying per mm thickness, up to 40mm and then a further 2 days for each mm above 40. For example, a 50mm screed will take approximately 60 days in normal conditions (20°, <65% RH).

BS8204-7:2003 also suggests that accelerated drying of anhydrite screeds is possible after an initial drying period of at least 7 days - contact the screed manufacturer for advice.

The surface should be free from any loose or friable material (anhydrite screeds normally require surface laitance to be sanded off within a week after laying – if this is not done the bond could be weak).

In our experience these screeds can have a tendency to generate dust when trafficked. Any surface dust needs to be vacuumed away from the screed surface.

### Priming

If the anhydrite screed is in an area that is likely to get wet, the surface of the screed needs to be covered with a fully waterproof membrane prior to tiling. In all other cases the surface needs to be sealed by the application of ibotac acrylic primer, in order to isolate the cement in the adhesive from the gypsum in the screed:

Un-diluted ibotac should be applied to the surface with a roller. Complete coverage of the surface is essential. Allow the primer to dry (between 1 and 4 hours) before covering. For very porous surfaces, or to ensure complete coverage, apply a second coat of ibotac after the first is dry, working the roller across the direction of the first coat (i.e. at 90°).

Allow the surface to fully dry again before tiling (the primed surface will still allow water vapour to escape). Protect the surface from traffic/damage until the finish covering is applied.

### Tile Fixing

On the surface is suitably prepared, the specification for levelling compounds, adhesives and grouts is dependant on the size and type of tiles, the joint width, the presence of other factors, such as under-floor heating systems, and the function of the area to be tiled.

Rapid drying levellers and primers may be preferred since these will chemically combine more of the gauging water, so there is less chance of any effect on the screed.

Any construction or movement joints in the screed should be carried through the tiling layer and movement joints should be allowed for as described in BS5385-3:1989.

For further information regarding **weber** tiling products, please refer to the **weber tiling solutions** specifiers handbook or contact:

We trust that this is of assistance.

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