

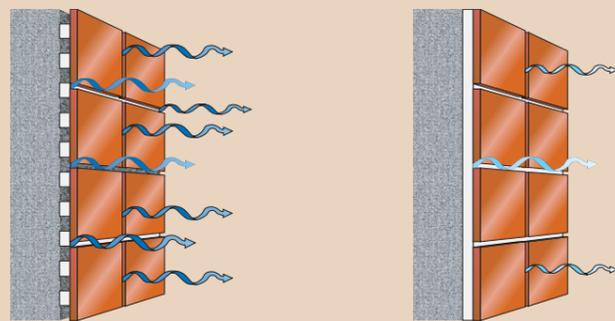
## Wall tiling in adverse drying conditions

Consideration needs to be given to the time required for tile adhesives, particularly ready-mixed ones, to dry

out before grouting. This can be a problem when tiles are large or ambient conditions inhibit

evaporation, e.g. high humidity or low temperature.

### 1 Ready-mixed adhesives set by drying

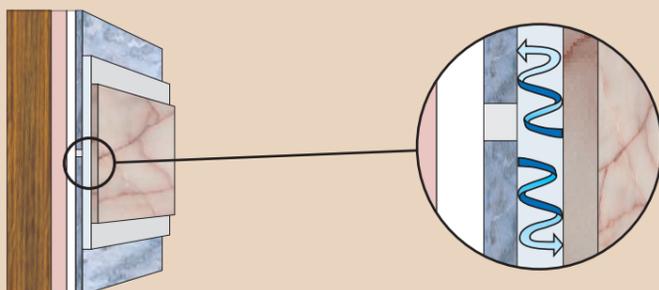


Ready-mixed adhesives are dispersions of polymers and inert fillers in water and do not gain strength until the majority of the water has dried out.

A solid bed of adhesive, as required for walls in wet areas, dries much more slowly since there are no air spaces and 'breathing' is inhibited.

If the area is cold or poorly ventilated, then the overall drying rate will also be slow.

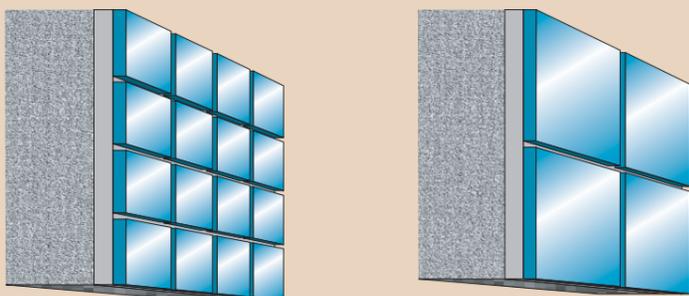
### 2 Non-porous substrates or tiles reduce water absorption



Some of the water from the adhesive will initially be absorbed into the substrate and tile body.

If the tile is impervious, for example porcelain, or if the substrate is impervious, such as a layer of existing tiles, this cannot happen and it is necessary for all of the water to leave the system via the grout joints.

### 3 Large tiles and narrow joints both reduce grout area for drying

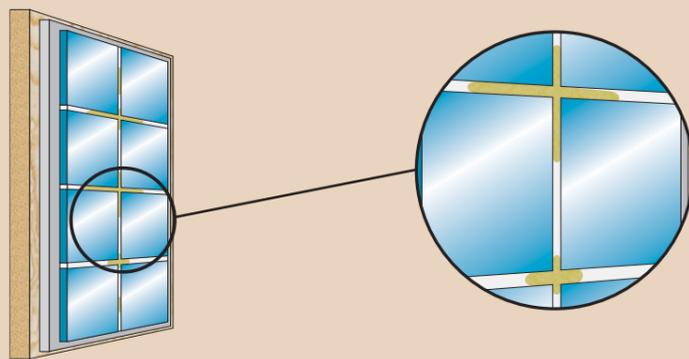


Water will leave the whole system by evaporating through the grout joints.

For a given tile 6 mm wide joints will have twice the surface area of 3 mm wide joints.

For a given joint width 150 mm square tiles will have twice the grout area of 300 mm square tiles.

### 4 Trapped water can affect the surface appearance of grout



If the joints are grouted before the drying is complete, water will be trapped. As it then dries through the grout the water will carry dissolved salts and cause a white deposit on the surface of the grout, known as *efflorescence*. This can sometimes happen anyway but the chances are increased if more water is trapped. It is also possible for water to carry other colours, such as a yellow stain from plaster substrates, to the surface of the grout.

## Use appropriate adhesive to allow for evaporation

Paste adhesives offer superior ease of use but only gain strength by evaporation/water loss. In situations where the tiles are very large or the

conditions are not conducive to evaporation, a cement-based adhesive is recommended.

### Products required

**weber.fix plus, weber.fix WR or weber.fix WR plus**  
**weber.set plus or weber.set rapid plus**

### For fixing when both the tile back and the substrate have low porosity

A cement-based product such as **weber.set plus** or **weber.set rapid plus** is preferred as it offers superior drying performance compared to a paste adhesive.

### For fixing when the substrate and tile are porous

For tiles up to 900 cm<sup>2</sup> (30 x 30 cm) use **weber.fix plus** or **weber.fix WR** but allow several days for the adhesive to dry and gain strength before grouting or alternatively use **weber.set plus**.

For tiles of area over 900 cm<sup>2</sup> (30 x 30 cm) or if temperature is less than 10°C and/or ventilation poor, use a cement-based product such as **weber.set plus** or **weber.set rapid plus**.



### For fixing when either the tile back or the substrate has low porosity

For tiles of area up to 900 cm<sup>2</sup> (30 x 30 cm) use **weber.fix WR**. If there is limited flexibility in the substrate, such as boxed-in sections, use **weber.fix WR plus**.

For tiles of area over 900 cm<sup>2</sup> (30 x 30 cm) or if temperature is less than 10°C and/or ventilation poor, use a cement-based product such as **weber.set plus** or **weber.set rapid plus**.

