

## USE OF CEMENT BASED PRODUCTS IN WARM WEATHER

### FACTS

The mixing of water with a cement-based powder adhesive creates a complex 'chemical' reaction (cement hydration).

As with any chemical reaction, the speed at which it takes place will very much depend upon the site conditions and the temperatures involved at the time of mixing and applying.

The hydration of cement is also an 'exothermic' reaction i.e. gives out heat.

Both standard setting and rapid setting adhesives can be affected.

In simple terms the working time and the setting time will vary with temperature:

- Higher temperatures = shorter working and setting times.
- Lower temperatures = longer working and setting times.

The ideal working temperature quoted for most cement-based tile adhesives is often based on an average room temperature of 20°C.

### TIPS

The following simple tips and general advice will help you to increase the working and setting of BAL products during warm weather resulting in higher room/site temperatures.

Before use:

- 1) Make sure the powder is stored in a cool/dry place before use.
- 2) Keep the water used "chilled" to cool temperatures.
- 3) Work in well ventilated areas.
- 4) Mix smaller quantities of adhesive, typically, i.e. about 3-4 kg at a time. The more adhesive you mix the hotter the mix will become and the faster it will set.
- 5) If using a drill mixer, turn the setting to slow speed and gently blend in the powdered adhesive to the water. The faster you mix the materials; the more friction heat is created and the quicker the adhesive will 'set'.
- 6) Always add the cement based adhesive powder to the water. This makes mixing much easier and avoids lumps forming thus preventing over mixing.

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- 7) Do not mix the adhesive in direct sunlight and if practicable, mix in an adjacent area, if cooler than the area in which you are tiling.
- 8) Tiling should not be carried out if the temperature of the room is more than 35°C.
- 9) Ideal temperature range for fixing ceramic tiles are recommended to be between 5°C and 25°C.

### **TECHNICAL ADVISORY SERVICE**

For free expert guidance on the use of BAL products, or any aspect of ceramic tiling with BAL products, contact the BAL TECHNICAL ADVISORY SERVICE on 01782 591120.

### **THE BAL 25 YEAR GUARANTEE**

BAL products are supplied with a 25 year product guarantee. For further details and/or copies please contact the Company's marketing department.

### **NOTE**

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