

## AN IMPORTANT REMINDER FROM OUR TECHNICAL OFFICE:

### THE EFFECTS OF COLD AMBIENT TEMPERATURES ON YOUR CHOICE OF THE BEST IN CLASS TILING AND FLOORING PRODUCTS.

Cement based mortars and products react and set slowly in cold temperatures, and very fast in hot temperatures. Generally, temperatures below 10°C are deemed cold and above 30°C, hot. The preferred working temperature range is typically between 15°C and 25°C (not considering humidity and wind effects).

Cold ambient conditions will not only impact on the temperatures of the cement based materials (adhesives, grout, levelling screeds, waterproofing compounds, etc), but also on the temperature of the mixing liquid (water or additive used in the mix) and substrate.

Cement-based materials mixed and applied in cold conditions might never cure properly, remaining "wet" for extended periods. Some materials may never harden even if heat is externally introduced later on their setting/curing life, whilst others may achieve their designed maximum strength and cure after the introduction of an external heat source.

To prevent installation failures, longer setting and curing times should thus be anticipated and catered for during cold winter months. Provision for this needs to be made, ie foot traffic onto newly installed tiles and the installation of floor coverings onto newly installed underlayment compounds may need to be postponed slightly.

#### Recommendations when applying cement based materials in cooler weather:

1. The correct product choice and working conditions are a prerequisite to achieving the desired outcome.
2. Always ensure ambient conditions are above 15°C before mixing and application. If lower temperatures prevail, use warm (to hot) water for mixing, or heat the environment with industrial space heaters.
3. Storage of the materials, including primers and additives, in the same warm conditions prior to mixing and application is advocated.
4. When tiling under strict time constraints, consider using products with shorter curing times (rapid-setting products) to avoid time delays, or ensure that stringent quality controls are enforced to ensure too-early disturbance of the tile or flooring installation.

#### Always follow the instructions on the product data sheet or method statement.

**Important:** Cold ambient conditions will also impact on the curing and performance of resin based products, such as epoxy grout and flooring systems. Resin based products will not cure in temperatures below 10°C.

If in doubt, contact our friendly and experienced Technical Department for clarity.

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### Impact of temperature on the setting properties of your choice of quality TAL products.



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