

A-Z OF TILING

Every week as part of our “Stay Positive, Back Stronger” campaign we will be providing you with our A-Z of Tiling Terms. Get in-depth description of many of the common tiling terms, plus some expert insight or top tips from our team.

H

HARD WATER

Water with a high mineral content, typically comprising calcium (Ca²⁺) and magnesium (Mg²⁺) metal cations. May also contain other dissolved compounds including bicarbonates and calcium sulphates. The UK has mainly hard water which can be found in areas where ground water passes through porous rocks such as gypsum, limestone, and chalk.

BAL INSIGHT

Where the water supplied to a swimming pools is hard and can be maintained at a level over 250mg/litre expressed as CaCO₃, a polymer modified CG2 cementitious based grout is generally suitable. This still means though that the pool water has to be managed and maintained to ensure the water chemistry is in balance.

HEATING CABLE

Used for underfloor heating systems and can be either warm water or electrical. Heating electrical cable is available which can be installed directly underneath the floor tiles, including those using ceramic, porcelain and most natural stone.

BAL INSIGHT

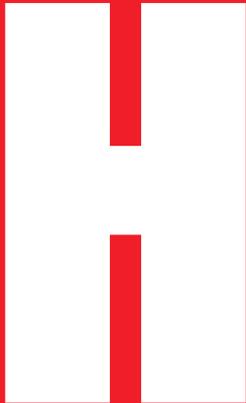
Although heating cables can be bedded directly into adhesives it is generally regarded as a best practice to encapsulate these systems into a levelling compound prior to tiling. This serves to both protect the cables during installation and to provide a flat surface.

HOT WATER PIPES

When tiling around pipes, an insulating gap needs to be left to allow for expansion. Hot water pipes will expand faster and to a greater extent than the surrounding tiles.

BAL INSIGHT

Typically, these are feeds for radiators. Whilst it may look neat to have a nice close cut because they can be seen, these need room to expand so should be treated as expansion gaps. A clear area should be left, and a colour matched silicone used.

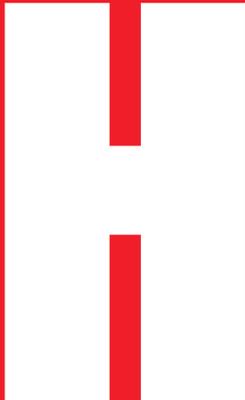


HUMIDITY

Humidity means the amount of water vapour present in the atmosphere. It varies according to location and weather, with such variations tending to happen slowly. In buildings, some areas are prone to fast and extreme humidity variation, with shower rooms, bathrooms and kitchens being obvious examples. It is essential to consider varying humidity levels when tiling in such areas.

BAL INSIGHT

The amount of humidity, in the air combined with the site temperature can impact upon the curing rates of cement based materials. For calcium sulfate based screeds, the ideal drying conditions are 20°C and 65% RH (RH = Relative Humidity) in well ventilated areas.

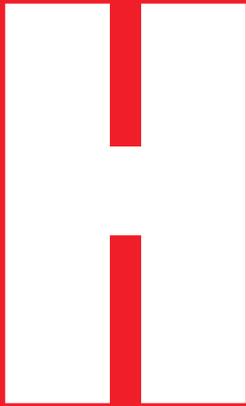


HYDRATION

Hydration means reaction with water. When Portland cement is mixed with sand and gravel, nothing happens. When water is added, a chemical reaction occurs to produce the material known as concrete.

BAL INSIGHT

It is important to fully hydrate cement based products which is why all cementitious based tile adhesives and grouts have mixing guidelines. Adding too much or too little water into the tile adhesives or grout mix on site can adversely affect product performance.



HYGROSCOPIC

Hygroscopic materials are those with the capability of absorbing water molecules from the surrounding atmosphere.

BAL INSIGHT

Salt is a common hygroscopic material and is often used to absorb moisture from the atmosphere in closed rooms used for storage. Small silica gel sachets are often used in packaging for electronic devices. Timber is a hygroscopic material which is why BS 5385 advises against the use of timber as a base for installing rigid floor tile finishes in wet, frequently damp or high humidity areas.