

## 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.

# A

### ABSORPTION

A tile's porosity indicates the degree of water absorption of the tile body and, in turn, this will determine its frost resistance; hence its suitability for external use. It also gives an indication of its resistance to staining and cleanability. The higher the water absorption, the greater will be its expansion in wet/damp conditions. Ceramic tiles are classified according to their level of water absorption. This is the ratio of the weight of water absorbed to the weight of the dry tile, expressed as a percentage.

**Porous bodied glaze** — more than 10%. Suitable only for use indoors.

**Medium water absorption** — from 6-10% water absorption. Suitable only for use indoors.

**Semi-vitrified** — from 3-6% water absorption. Suitable only for use indoors.

**Vitrified** — from 0.5-3% water absorption. Frost-resistant and suitable for external use, but may benefit from sealing.

**Fully vitrified (Porcelain)** — less than 0.5% water absorption. Frost-proof and suitable for external use.

### BAL INSIGHT

Highly porous tiles can draw the moisture from adhesives and grouts more rapidly before they have fully cured and could reduce the bond strength.

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## ACIDIC CLEANER

A speciality cleaning product designed to remove cement or grout haze, soot, lime or light mineral deposits. May also be used for the removal of salts or efflorescence from brickwork, cement based grouts etc. It can be used with glazed, unglazed or porcelain ceramic tiles and some natural stone, but not with polished marble, travertine or limestone. It has a typical pH of 3.5 and needs to be neutralised chemically before subsequent sealers or coatings are applied.

### BAL INSIGHT

In some cases a final wash with a diluted solution (as per manufacturers recommendations) can remove any remaining grout residues after the grouts have fully cured. Alternative proprietary alkaline cleaners are available for limestone, marble, travertine or other natural stone prone to acid attack.

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## ACRYLIC

A synthetic polymer based on resins made by the polymerisation of acrylic monomers, such as ethyl acrylate and methacrylate and used for making baths, shower trays, tiles, adhesives, grouts, tanking membranes and sealants.

### BAL INSIGHT

Most modern adhesives and grouts contain polymers to improve their physical characteristics. It is important that a second mixing of adhesives is carried a short wait of 2-3 minutes after the initial mix (without adding extra water). This gives the polymers chance to “wet out” and do their job fully.

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## ADHESIVE

Any substance which uses surface attachment to hold materials together, including cements, glues and pastes. In tiling, typically an organic substance used to bond tiles to a wall, floor or other surface. Rubber solutions, reaction resin-based and rubber emulsions are also sometimes used. Tiles had always been fixed with simple sand-and-cement mixtures of varying qualities until the early 1960s, when the British Ceramic Research Association and the British Ceramic Tile Council began to research specialist tile adhesives. This research led to the formation of Building Adhesives Limited, still the industry's leading name, which has manufactured tile adhesives in Stoke-on-Trent for more than 50 years.

## BAL INSIGHT

Ready-mixed tile adhesives are usually referred to as Dispersions and dry by loss of moisture. Cementitious based tile adhesives set via a chemical (Cement hydration) reaction when mixed with water. The drying time of ready mixed tile adhesives will be extended when they are used over impervious backgrounds i.e. existing glazed wall tiles or a waterproof tanking system.

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## ADJUSTABILITY

The degree to which a tile adhesive allows a tile to be moved and manipulated after fixing, normally measured in minutes.

## BAL INSIGHT

Rapid setting cementitious tile adhesives will have reduced adjustability time compared to standard setting tile adhesives.

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## ADMIXTURE

A material other than water added to an adhesive or grout before or during mixing as a means of modifying its properties, such as increasing its flexibility. The availability of admixtures can increase the versatility of an individual adhesive or grout. Some commercial products are supplied with built-in admixtures.

## BAL INSIGHT

Always pre-dilute any admixtures by adding into the mixing water to ensure a consistent mix, never put admixtures directly into the powders.

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## ANTIMICROBIAL

The property of a substance of preventing or retarding the spread of infection or growth of fungus, typically through the use of specialist ingredients. BAL is the only manufacturer in the tiling sector with licence to incorporate Microban® antimicrobial protection within its grouts and sealants, a defence against 99 percent of all known microbes

## BAL INSIGHT

Microban® can be found in many different industries and products, everything from kitchen chopping boards to sports socks can be protected using Microban® technology.

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## ANHYDRITE / ANHYDRATE

Anhydrite is a mineral consisting of anhydrous Calcium Sulfate i.e. contains no water (Chemical formula  $\text{CaSO}_4$ ). When water is added, the Calcium Sulfate can form either an alpha hemi-hydrate (a stronger and harder crystalline form) or a di hydrated Calcium Sulfate, commonly known as gypsum.

### BAL INSIGHT

A moisture test is often recommended for anhydrite/calcium sulphate based screeds as their drying times will be affected by on site conditions. Some screeds are described as low laitance or laitance free. However, when considering priming and bonding tiles directly to the screed, any laitance or barriers to adhesion should be removed. An additional advantage is that this also helps the screed to dry out. Recent innovations in uncoupling system technologies also mean there are products available to use directly onto Anhydrite Screeds, without the need to prepare traditionally with laitance removal and priming to save both time and money, as well as allowing the screed to dry out underneath, meaning tiling can also commence sooner from 1.5% CM. Always check with the matting manufacturer for this suitability.