

## 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.

# C

### CALCIUM HARDNESS (OF WATER)

Calcium hardness is a measure of the amount of calcium salts in water, particularly important in controlling swimming pool water. The ideal level for pools is 250 ppm to 350 ppm. Too low a measure means that pool fittings can corrode, staining the tiles. Too high a measure can lead to scaling on all pool surfaces.

#### BAL INSIGHT

Did you know soft water (with a low calcium hardness) is aggressive to cement based materials. In the case of swimming pools, where the mains water supply is soft, it is recommended to use a reaction resin grout such as an epoxide. This is because cementitious grouts can be subject to gradual erosion over a period of time, particularly if the pool water chemistry is not maintained in a balanced condition .

Further information on anything concerning tiling is freely available from BAL on 03330 030160.

# C

## CEMENT & SAND

Since the birth of Portland cement in 1824, the most commonly used basic ingredients for a variety of building mortars and tiling adhesives.

### BAL INSIGHT

Although traditionally used as a material for fixing porous bodied tiles, this has been largely replaced with cementitious based proprietary tile adhesive which have many advantages over cement; sand fixing and are suitable for a wider variety of tile types.

# C

## CEMENTITIOUS

Made from, or having the characteristics of, cement.

### BAL INSIGHT

Always add any cementitious based tile adhesive to water (not the other way around) and this can lead to poor dispersion of the powder and the creation of powder lumps. Always discard any adhesive which has begun to set. Do not add further water and attempt to re-mix.

**C**

## CERAMIC TILE

A wall or floor surfacing unit made from clay, or a mixture of clay and other ceramic material, which has been fired at a high temperature. The resulting tile, which can be glazed or unglazed, will offer varying degrees of durability and resistance to stains.

### BAL INSIGHT

Always seek further advice from the tile manufacturer or supplier on the suitability of the ceramic tile for its intended application. Ceramic tiles should carry a suitable CE mark.

**C**

## COEFFICIENT OF RESTITUTION

The degree of impact resistance of a tile measured by methods defined in BS EN ISO 10545 Part 5.

### BAL INSIGHT

For a tiling installation in a light duty area such as domestic bathrooms and hallways, a coefficient of restitution of 0.55 is considered as being sufficient. For medium and heavy duty traffic areas, the higher the coefficient of restitution with the highest being for heavy duty areas

The long-term success of the installation will also depend upon several factors including the tiles being of a suitable type and thickness, the type of floor substrate, selection of a suitable tile adhesive and ensuring that, when installed, the tiles are solidly bedded i.e. voids are eliminated beneath the tiles.

## COEFFICIENT OF THERMAL EXPANSION

An indication of the extent to which a rise in temperature will cause a tile to expand, or contract dependent upon changes in temperature.

### BAL INSIGHT

For larger tiles or panels, thermal expansion and contraction is cumulative across the area of the tile/thin panel. Joints between thin ceramic panels should increase in width “*pro-rata*” as described in BS 5385; Parts 1-4 to panel size. As with any tiling installation consideration should be given to the use of movement joints perimeter joints, structural and intermediate joints.

## COLOURED GROUT

A commercially prepared cementitious mix used for filling joints between tiles. Colourfast pigments are added to Portland cement, aggregate, plasticisers and water-dispersing agents. When set, the grout offers an attractive coloured finish to complement or contrast with the tiles.

### BAL INSIGHT

Coloured grouts and those with fine grained pigments could potentially stain certain tiles. BAL always advises to check the potential risk of staining by applying the grout to a few tiles in an inconspicuous place as a trial area. If staining occurs apply a suitable proprietary tile sealer (as recommended by the manufacturer and repeat the test until staining is eliminated).