

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.

T

TANKING (WATERPROOF)

A waterproof tanking system is designed to be applied directly to wall and floor surfaces in order to create a barrier to prevent water ingress and thus protect backgrounds from water damage,. Proprietary waterproof tanking for use beneath tile adhesives can be either liquid applied i.e. one part waterproof coatings or two part i.e. powder and liquid additive or flexible sheet applied systems.

BAL INSIGHT

When in a wet environment, such as wet rooms, shower or if required bathrooms, the underlying substrates will need to be waterproofed before the tiling commences. This is normally affected by placing a barrier between wet and the wall or floor surface.. For domestic applications, a product such as the BAL WP1 Tanking Kit is highly convenient, as a single box contains everything necessary: a light grey, flexible, seamless tanking system comprising an acrylic-based primer, an acrylic-based coating, polyester tape and matting. Whichever tanking system is used, the manufacturer’s instructions should be followed explicitly.

T TENSILE ADHESION STRENGTH

Testing for the tensile adhesion strength of tiling adhesives is defined in the standard BS EN 1348 Adhesives for Tiles - Determination of Tensile Adhesion Strength for Cementitious Adhesives. In simple terms, it measures of the force required to de-bond a standard tile from a standard concrete substrate when fixed with the adhesive under test.

BAL INSIGHT

When tested under various test conditions as described in BS EN 12004, a cementitious C1 (normal setting) tile adhesive should have a minimum tensile adhesion strength of $\geq 0.5\text{Nmm}^2$ and for C2 (improved cementitious based adhesives), the tensile adhesion strength should be $\geq 1.0\text{Nmm}^2$. A fast setting cementitious tile adhesive, C1F or improved fast setting cementitious tile adhesive C2F should have an early tensile adhesion strength of $\geq 0.5\text{Nmm}^2$ after not more than 6 hours.

T

TERRACOTTA

A natural tile made from clay, typically used for interior flooring. Terracotta is seen in a variety of colours, ranging across reds, browns and oranges. Such tiles are highly absorbent and should normally be sealed for protection from soiling and staining. usually in a red-brown-orange colour. Terracotta tiles are typically unglazed and, being highly absorbent, should be sealed to protect them from dirt and stains.

BAL INSIGHT

Traditionally terracotta tiles were sealed using Boiled linseed Oil and an application a wax polish prior to the commencement of grouting.

There are now a number of synthetic sealers available on the market.

T

THROUGH - BODIED

There are two types of porcelain tile: glazed and through-bodied. A through-bodied tile comprises a mixture of clay, sand and other natural materials, pressed and fired at a high temperature. The term refers to consistency of composition throughout the body of the tile, with the colour and texture running through a tile's full dimensional thickness.

BAL INSIGHT

Such tiles are highly resistant to chips and scratches and extremely dense, with water absorption less than 0.5%, and strong enough for extreme surface traffic. Through-bodied porcelain tiles are suitable for applications ranging from domestic to heavy commercial installations.

T

TILE NIPPER

Purpose-designed pliers which 'nip' away small little bites of ceramic tile to create small, irregular or curved cuts.

BAL INSIGHT

Hand tool used for shaping tiles for ceramic tiles/ porcelain and mosaics. Different nippers are available for the different tiles/mosaics used.

T

TILES

Anything fixed to a wall or floor by a tiler. More formally, a tile is a natural stone or ceramic surfacing unit, usually relatively thin in relation to its surface area,. It can be glazed or unglazed and, if ceramic, is fired at a high temperature to create specific characteristics and properties.

BAL INSIGHT

Tile is a term used for most materials, when materials of 3m in size the term is called a panel and not a tile.

T

TIMBER

Tiling onto timber requires that the boards are dry and conditioned to the environment in which they are situated. They must be fixed rigidly in place with ventilation behind the boards and without barriers to adhesion. Plywood and chipboard should have backs and edges sealed against moisture and atmospheric humidity and the tiling surface primed. Such boards should be at least 18 mm thick and screwed or nailed to joists at intervals of no more than 300 mm. If necessary, as defined in BS5385-3:2014, extra noggins should be used to between the joists for stiffening.

BAL INSIGHT

Timber is used in many locations before tiling, check the correct timber is used and follow adhesive manufacture on products/ systems used. Note: Within the last 18 months, timber is not recommended to be used has a background for tiling to internal walls (BS 5385: Part 1: 2018).

T

TOLERANCES

The differences in manufacturing processes and materials for different types of tiles mean that allowances have to be made for dimensional accuracy, particularly with regard to vitrified tiles.

The tolerances for tile fixing are set down within British Standard e.g. BS5385 Part 3, for example, regarding tolerances on finished floor level.

BAL INSIGHT

It's always a good idea to mix all boxes of tiles before you start to help with tolerances of tiles and including colour shade.

In terms of surface tolerance, for floor tiling using a tile adhesive the accuracy of the sub-floor should be such that any gap under a 2 m straightedge does not exceed 3mm, defined as SR1. If this is not the case, consideration should be given to the use of a suitable smoothing and levelling compound in order to achieve SR1.

T

TRAFFICKING

Where floors are likely to experience heavy trafficking, as in commercial installations, with high density pedestrian traffic and heavy dynamic or static loading a heavy duty, unglazed porcelain tiles are ideal. The suitability of any tile for use in heavily trafficked areas should always be first checked with the tile manufacturer or supplier.

BAL INSIGHT

Always install a solid bed of adhesive and products used are recommended for the type of installation. Use of a thicker floor tile with increased impact resistance will have better resistance to loading.

T

TRAINING

With commercial and domestic customers increasingly demanding value, tilers need to show their expertise both through references and qualifications. In addition, by next year, a fixer wanting to work on a construction site will need to hold a Construction Skills Certification Scheme (CSCS) card, which will require the achievement of NVQ Level 2 in Wall and Floor Tiling. This almost certainly means undergoing training and will definitely mean being assessed.

The fastest route to a Level 2 tiling NVQ is through Experienced Worker Practical Assessment (EWPA), in which fixers with at least five years of checkable experience can be assessed on-site during two to three days. Others could qualify through the On-Site Assessment and Training (OSAT) route, probably involving either refresher training or short courses in particular areas. Even the most experienced of fixers could be in need of training to meet NVQ standards if they have specialised in a particular area. A fixer who has mainly or entirely worked on floors, for example, would probably benefit from reviewing wall fixing skills.

BAL INSIGHT

Less experienced fixers will certainly need some degree of training before reaching NVQ levels of ability. Before undertaking any tiling training, a fixer should check the credentials of the prospective trainer. The best training centres will be those which are also accredited to carry out NVQ assessments.

T TRANSVERSE DEFORMATION

The degree of flexibility in an adhesive matters when there is likely to be lateral movement from pulling, pushing, bending or twisting during the tiling's lifetime. This can happen to some degree almost anywhere, with many possible causes including vibrations, drying shrinkage, ambient humidity or temperature fluctuations, the amount of static and dynamic loading on the floor and deflection stresses. The most common substrate providing movement in tiling are timber floors. BS EN 12004: defines optional, additional classifications for cementitious adhesives including how an adhesive will deform in order to accommodate a limited amount of movement after tile fixing – known as transverse deformation and measures the deformation at which failure occurs.

BAL INSIGHT

Polymer modification of cementitious based tile adhesives is used to achieve S1 or S2 transverse deformation. A tile adhesive allowing transverse deformation of less than 2.5 mm in the specified test is not regarded as deformable. Those permitting deformation above 2.5mm, but less than 5mm are classified as S1. Adhesives that are highly deformable and allow transverse deformation of 5mm or more are classified as S2. It is possible to modify cementitious adhesives that are not S1 classified with a suitable liquid or powder polymer additive to improve the formulation to that of an S1 adhesive, but achieving S2 typically requires a higher level of polymer addition.

T

TRAVERTINE

A form of marble that is characterised by the small cavities within it. These cavities may be pre-filled with a suitable resin to improve durability and surface or left open, to be filled with a grout finish. It can be effectively polished to a smooth, shiny finish and comes in a variety of colours from grey to coral-red.

BAL INSIGHT

Check with the manufacture of the stone, it may be required to seal the tiles before grouting, including what environments is can be used in (example wet areas and trafficking). Always cover the whole tile to ensure the holes are filled with grout. Certain travertine can be pre-filled with an epoxy resin material.

T

TROWEL

A flat-bladed tool with a handle used to apply, level or shape cement; sand mortars. Trowels can also be designed with 'notched' in order to apply tile adhesive and are available in a variety of sizes and with square and curved notches in a range of sizes.

BAL INSIGHT

Providing a even bed of adhesive, the notched size will depend on the thickness of adhesive used. Ensure the trowel is the required depth for the installation and not to exceed the bed thickness of the adhesive used.