

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.

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READY-MIXED

Tiling adhesives are available in two forms: powder and ready-mixed. Powder adhesives, which require the addition of water, are available for both floor and wall use but ready-mixed adhesives are generally only suitable for use on walls. This is due to the essential difference between their characteristics: powders set through a chemical reaction brought about by adding water, while ready mixed adhesives set by losing the water already contained within the mixture. In use, a ready-mixed adhesive takes at least 24 hours to set before grouting, while 16 hours would be normal for a powder — or as little as two hours for a rapid-setting adhesive. In addition, the typical floor tile would be too large for a ready-mixed adhesive to set properly.

BAL INSIGHT

Ideal when you have not got water close to hand on-site. Used with small ceramic tiles for internal wall tiling. No need to mix and the product can be used again by just placing the lid on the bucket when finished. Minimum 24 hours before grouting.

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REACTION RESIN

Any resin involving two or more components including a synthetic resin and mineral fillers or additives and which requires a chemical reaction to harden. Typical examples would include polyurethane and epoxy resins.

BAL INSIGHT

Reaction resins can be used as an adhesive or grout. Normally used when specified for a project.

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RECTIFIED

Although ceramic tiles exit an extruder or press with virtually identical dimensions, the drying and firing processes cause shrinkage which can vary from tile to tile. In order to assure users that tiles are consistently sized, they can be rectified after firing. This consists of machining each tile, with saws or grinders, to ensure that all tiles within a batch are the same size. The significance is that the use of rectified tiles is essential when, for aesthetic or other reasons, the use of narrow joints is required: the narrower the joint, the less room is available to allow for variation in tile size.

BAL INSIGHT

Whilst allowing for narrower tile joints, guidance on the minimum recommended joint widths required for internal or external wall and floor tiling can be found in BS 5385 Parts 1 to 4.

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REFERENCE LINES

Two lines marked accurately on a substrate, intersecting at a 90° angle, to establish a starting point for layout lines used in placing tiles. Typically marked in chalk or pencil, but almost anything else could be used as the lines will be hidden once covered by the tiling.

BAL INSIGHT

Used when gauging and setting out before laying the tiles.

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RENDERING

Although tiles can be fixed to a wide range of substrates, the preferred background for wall tiling is cement-and-sand rendering. Guidance is available from British Standard Code of Practice BS5385 Wall Tiling (BS5385-1, BS5385-2 and BS5385-4). An important point to note is that a cement-and-sand render will shrink as it dries. If it is not fully dry before subsequent plastering and tiling, the continuing shrinkage could weaken the adhesion between the substrate and the tiles.

BAL INSIGHT

It is recommended in BS 5385; Part :2018 that a Portland cement-based render should be applied ideally at a thickness of approximately 12 mm. If required, the maximum thickness of render should not exceed 20 mm in order to avoid higher shrinkage stresses and be applied in two coats. Render coats should be 8 mm to 12 mm thick.

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RESIN AGGLOMERATED TILES

A resin agglomerate stone tile is a composite material, based upon the use of recycled natural stone aggregates or stone pieces which are then bound together at the manufacturing stage using a synthetic resin.

The agglomerated stone to resin binder ratio has a direct affect upon the physical, mechanical and performance properties of the tiles. For example, use of quartz or granite agglomerates produce in general a harder wearing tile with increased resistance to acidic chemicals when compared with those based on marble agglomerates. Two main types of polymer resin binder are used in the tile manufacture and these are either epoxide or polyester. The ratio of resin binder to agglomerates varies from 5% to 7% (with 95% to 93% Agglomerate). The higher the percentage of resin present; then the greater the reduction in abrasion resistance. This is especially evident with increases in the Coefficient of Thermal Expansion of the tile.

BAL INSIGHT

British Standards code of practice BS 5385: Part 5: 2009 and floor tiling Design and installation of terrazzo, natural stone and agglomerated stone tile and slab flooring – Code of Practice offers the following recommendations in clause 11.2.1 of BS 5385: Part 3 2014;

“To avoid moisture from the adhesive bed distorting resin-based agglomerated stone, reaction resin adhesives, or quick drying low alkalinity cement-based adhesives should be used”.

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RUBBING BLOCK

A hard-abrasive block used to remove rough edges on ceramic wall and floor tiles. The typical rubbing block is made of silicone carbide and has different grits on opposing faces. It is also used for shaping and mitring of tiles.

BAL INSIGHT

It is always good practice to rub down all cut tiles before installing.