

# Tile Glossary

**Accelerator.** An admixture that speeds the rate of hydration of hydraulic cement, shortens the normal time of setting, or increases the rate of hardening, of strength development, or both, of Portland cement plaster.

**Adhesive tile.** Organic adhesive used for bonding tile to a surface. Rubber solvents and resin-based and rubber emulsions can be used as adhesives.

**Admixture.** A material, other than water, aggregates, and hydraulic cement, used as an ingredient of plaster and added to the batch immediately before or during mixing.

**Aggregate.** A granular material such as natural sand, manufactured sand, vermiculite, or perlite.

**Air-entraining capacity** The capability of a material or process to develop a system of minute bubbles of air in cement paste, mortar, or plaster during mixing.

**Balance cuts.** Cuts of tile at the perimeter of an area that will not take full tiles. The cuts on opposite sides of such an area shall be the same size. Also the same sized cuts on each side of a miter.

**Back buttering.** Apply on the back of a tile a coat of adhesive or plaster (mud). Usually for purposes of leveling an uneven tile or an irregular surface.

**Basis for acceptance.** The method of determining whether a lot of ceramic tile is acceptable under these specifications.

**Beating block.** A wooden block used to embed tiles in a flat plane. The method used is called beating in.

**Body.** Mixture of clays and minerals to produce a workable material for a ceramic manufacture.

**Bond.** The adherence of one material to another. Effective bonds must be achieved between the mortar and scratch coat, between the tile and mortar, and between the adhesive and backing.

**Brown Coat.** The second coat of two-coat plastering.

**Bullnose.** A trim tile with a convex radius on one edge. The tile is used for finishing the top of a wainscot or for turning an outside corner.

**Bullnose corner.** A type of bullnose trim with a convex radius on two adjacent edges.

**Buttering.** The spreading of a bond coat (followed by a mortar coat) to the backs of ceramic tile just before the tile is placed. See back buttering.

**Caulking Compound.** Waterproof caulking material usually sold in tubes. See also Sealant.

**Cement grout.** A cementitious mixture of Portland cement, sand or other ingredients and water which produces a water resistant, uniformly colored material used in fill joints between tile units.

**Cement mortar.** A cementitious mixture of Portland cement, sand or other ingredients and water which provides a setting base for tile.

**Ceramic tile.** A ceramic surfacing unit, usually relatively thin in relation to facial area, made from clay or a mixture of clay and other ceramic material, called the body of the tile, having either a "glazed" or "unglazed" face, and fired above red heat in the course of manufacture to a temperature sufficiently high to produce specific physical properties and characteristics.

**Chalk line.** Usually cotton cord coated with chalk. The cord is snapped to mark a straight line. The chalk line is used to align spots or screeds.

**Chemical bond.** Adhesion between dissimilar materials or between one plaster coat and another that is the result of a chemical reaction.

**Chicken wire.** Slang for stucco netting 20 gauge, 18 gauge, 17 or any approved netting wire, i.e. lathing.

**Clay memory.** The property which some clay forms demonstrate, in which they tend to distort towards the original form into which the clay was built or pressed before taking their final form.

**Conventional installation.** The method of installing ceramic tile with Portland cement mortar.

**Cove.** A trim tile unit having one edge with a concave radius. A cove is used to form a junction between the bottom wall course and the floor or to form an inside corner.

**Cove base. (Sanitary)** A trim tile having a concave radius on one edge and a convex radius with a flat landing on the opposite edge. This base often is used as the only course of tile above the floor tile.

**Crawling.** A parting and contraction of the glaze on the surface of ceramic ware during drying or firing, resulting in unglazed areas bordering by coalesced glaze.

**Craze cracks.** Fine, random cracks or fissures that may appear in a plaster surface, caused by shrinkage.

**Curb.** The step or dam at the base of a shower on the floor

**Cushion-edge Tile.** Tile on which the facial edges have a distinct curvature that results in a slightly recessed joint.

**Curing.** Keeping freshly applied plaster moist and at a favorable temperature for a suitable length of time following application to assure satisfactory hydration or carbonation of the cementitious materials and proper hardening of the plaster.

**Darby.** A flat wooden or magnesium-alloy tool with handles, approximately 45 inches (1140 mm) long, used to dress or float the second (brown) coat of plaster.

**Deck or floor mortar.** Mortar commonly used for decks or floors. It consists of sand and regular Portland cement mixed with water to a firm consistency.

**Decorative tile.** Tile with a ceramic decoration on the surface.

**Dutchman.** A cut tile used as a filler in the run of a wall or floor area.

**Earthenware.** A type of porous ceramic.

**Efflorescence.** A deposit of salts, usually white, formed on a surface, the substance emerging in solution from within the plaster or the tile or the grout or the thinset, or lime or clay, and deposited by evaporation

Epoxy adhesive. A two-part adhesive system employing epoxy resin and epoxy hardener used for bonding of ceramic tile to back-up materials.

Epoxy grout. A two-part grout system consisting of epoxy resin and epoxy hardener, especially formulated to have impervious qualities, strain, and chemical resistance, used to fill joints between tile units.

Epoxy mortar. A two part mortar system consisting of epoxy resin and epoxy hardener used to bond tile to back-up material where chemical resistance of high bond strength is a consideration.

Epoxy resin. An epoxy composition used as a chemical-resistant setting adhesive or chemical-resistant grout.

Expansion joint. A joint through tile, mortar, and reinforcing wire down to the substrate.

Expanded metal lath. Sheets of metal that are slit and pulled out to form diamond-shaped opening; used as metal reinforcement for plaster.

Extruded tile. A tile or trim unit that is formed when plastic clay mixtures are forced through a pug mill opening (die) of suitable configuration, resulting in a continuous ribbon of formed clay. A wire cutter or similar cut-off device is then used to cut the ribbon into appropriate lengths and widths of tile. (TCA)

Featheredge. A wood or metal tool with a beveled edge and varying in length used to straighten, flatten, plumb or level a mortar base.

Feature strip (decorated liner). A narrow strip of tile that has a contrasting color, texture, or design.

Field tile. An area of tile covering a wall or floor. The field is bordered by trim tile.

Firing. The "Controlled" heat treatment of ceramic ware in a kiln or furnace, during the process of manufacture, to develop the desired properties.

Firing range. The range of firing temperature within which a ceramic composition develops properties which render it commercially useful.

Flat trowel. The flat trowel is used in conjunction with the hawk for the transferring of mortar from the mortarboard to the wall or to other vertical surfaces.

**Float.** A rectangular tool consisting of a handle attached to a base pad of molded rubber, foam plastic, cork, wood, or felt tacked to wood and used to impart a relatively even but still open texture to a plaster surface - generally second- and third-coat plasters.

**Float strip.** A strip of wood about  $\frac{1}{4}$  " thick to  $1 \frac{1}{4}$  " wide. It is used as a guide to align mortar surfaces.

**Floating.** A method of using a straightedge to align mortar with the float strips or screeds. This technique also is called dragging, pulling rodding, or rodding off.

**Flux.** An element or compound which acts upon others, causing them to melt when heated.

**Furring.** Striping used to build out a surface such as a studded wall where strips of suitable size are added to the studs to accommodate vent pipes or other fixtures.

**Glaze.** A glassy covering applied to a ceramic material.

**Bright glaze.** A high-gloss coating with or without color.

**Clear glaze.** A glaze that contains microscopic crystals.

**Crystalline glaze.** A glaze that contains microscopic crystals.

**Fritted glaze.** A glaze in which a part or all of the fluxing constituents are pre-fused.

**Opaque glaze.** A nontransparent glaze with or without color.

**Raw glaze.** A glaze compound primarily from raw constituents. It contains no pre-fused materials.

**Salt glaze.** A glaze produced by the reaction, at elevated temperature, between the ceramic body surface and salt fumes produced in the kiln atmosphere.

**Semimat glaze.** A medium-gloss ceramic glaze with or without color.

**Speckled glaze.** A glaze containing granules of oxides or ceramic stains that are of contrasting colors.

**Glaze fit.** The ability of glazes to expand and contract at the same rate as the clay during heating and cooling. The stress relationship between the glaze and body of a fired ceramic product.

**Glazed tile.** Tile with a fused impervious facial finish composed of ceramic materials, fused into the body of the tile, which may be a nonvitreous, semivitreous, vitreous, or impervious body. The glazed surface may be clear, white, or colored.

**Grog.** Clay which has been fired and ground so that it may be used as an ingredient in a clay body to reduce the shrinkage and increase the size of the capillaries.

**Grout.** A rich or strong cementitious or chemically setting mix used for filling tile joints.

**Grouting.** The process of filling the tile joints with grout.

**Grout saw.** The grout saw is a saw-toothed carbide steel blade mounted on a wooden handle. It is used to remove old grout. It also is used in patching work. Care should be used as it can easily damage adjacent tiles. The carbide steel blade is brittle, and it will shatter if it is dropped or abused. On the front of the saw blade is a spring steel tip. This is used for scrapping grout out of corners where the saw blade cannot reach.

**Hairline cracks.** Very fine cracks in either random or essentially straight-line patterns that are just visible to the naked eye.

**Hawk.** A tool to hold and carry plaster. Generally a flat piece of metal approximately 10 to 14 " (250 to 350 mm) square, with a wooden handle fixed to the center of the underside.

**L cut.** A piece of tile cut or shaped to the letter L.

**Latex-Portland cement grout.** A Portland cement grout with a special latex additive which results in a less rigid, less permeable grout than regular Portland cement grout.

**Latex-Portland cement mortar.** A mixture of Portland cement, sand, and special latex additives which is used for bonding tile to back-up material. It is less rigid than Portland cement mortar.

Lath. A wood strip or metal mesh, which acts as a background or reinforcing agent for the scratch coat or mortar coat.

Layout stick. A long strip of wood marked at the appropriate joint intervals for the tile to be used. It is used to check the length, width, or height of the tile work. A common name for this is idiot stick.

Leg. A tile wall running alongside a bathtub or abutment. This term sometimes is used to describe a narrow strip of tile floor.

Marble tiles. Marble cut into tiles sizes 12 " square or less, usually  $\frac{1}{2}$  to  $\frac{3}{4}$  " thick. Several types of finishes are made, polished, honed, split faced, etc.

Mastic. Organic tile adhesive.

Metal Lath. Metal lath is slit and expanded or stamp-punched from plain or galvanized steel coils or sheets. It is of two types: diamond mesh, which may be flat or self-furred with impressed indentations, and rib lath. Metal lath is coated with a rust-inhibiting paint after fabrication or is galvanized.

Mexican paver tile. Terra cotta-like tile, used mainly for floors, and handmade. These tile vary in color, texture and appearance from tile to tile and within each tile. They are available in squares up to 12 ", hexagon, octagon, elongated hexagon, fleur de lis and other shapes. These tile are coated with various types of sealers because of their soft absorptive characteristics. The coatings provide a wearing surface on the pavers which would otherwise powder away under wear.

Mosaic tile. A tile formed by either the dust-pressed or plastic method, usually  $\frac{1}{4}$  to  $\frac{3}{8}$  " (6.4 to 9.5 mm) thick, and having a facial area of less than 6 " and which is usually mounted on sheets approximately 2 by 1 ' (0.3 by 0.6 m) to facilitate setting. Ceramic mosaic tile may be of either porcelain or natural clay composition and may be either plain or with an abrasive mixture throughout.

Moisture Movement. The migration of moisture through a porous medium, caused by an imbalance as surface moisture is lost through evaporation. Differences in moisture within plaster thickness are responsible for crazing, distortion, etc.

Mortar. A mixture of cement, water, fine aggregate and sometimes a plasticizer (lime and clay).

Mortarboard. The mortarboard is used as a table to hold mortar. It is usually 30 " square.

Mortar hoe. The mortar hoe is used for hand mixing mortar. The best type has a perforated blade and a handle about 66 " in length. The hoe should be kept clean and free of all mortar so it can be pushed and pulled easily through a box of mortar.

Nonvitreous (nonvitrified). That degree of vitrification evidenced by relatively high water absorption. The term nonvitreous generally signifies more than 10.0 per cent water absorption, except for floor and wall tile which are considered nonvitreous when water absorption exceeds seven per cent.

Paper and wire. Tar paper and wire mesh (or metal lath) that are used as a backing for the installation of tile.

Plasticity. A complex property of plaster involving a combination of qualities of mobility and magnitude of yield value' that properly of freshly mixed plaster that determines its resistance to deformation or its easy of molding.

Plasticizer. An added material that increases the plasticity of a Portland cement plaster. Plasticizing agents include hydrated lime and lime putty, air-entraining agents, and approved fatteners.

Plumb. Perpendicular to a true level.

Porosity. The relationship of the open pore space to the bulk volume, expressed in percent.

Pot life. The period of time during which a material maintains its workable properties after it has been mixed.

Prefloat. The term used to describe mortar that has been placed and allowed to harden prior to bonding tile to it with thin-set materials.

Process, dry (dry mix). The method of preparation of a ceramic body where in the constituents are blended dry, following which liquid may be added as required for subsequent processing.

Process, wet (slip process). The method of preparation of a ceramic body wherein the constituents are blended in sufficient liquid to produce a fluid suspension for use as such or for subsequent processing.

Quarry tile. Unglazed tile, usually 6 " or more in surface area and  $\frac{1}{2}$  " to  $\frac{3}{4}$  " (13 to 19 mm) in thickness, made by the extrusion process from natural clay or shales.

Reduction. The technique of producing an oxygen-depleted atmosphere within the firing chamber of a kiln in order to modify the metal oxides present in or upon the clay so that they may produce different colors and textures from those that would result with an oxygen-rich atmosphere.

Rod. Name used by the trade for a straightedge used to straighten the face of walls and ceilings by cutting off excess plaster to the plane established by forms, ground wires, and screeds.

Rubber spacers. Cross and tee-shaped objects used to space tile on floors or walls. They are manufactured in thicknesses of  $\frac{1}{16}$  ",  $\frac{1}{8}$  ",  $\frac{1}{4}$  ",  $\frac{3}{8}$  ", and  $\frac{1}{2}$  ".

Rubber trowel. The rubber trowel used for grouting is non-porous synthetic rubber-faced float that is mounted on an aluminum back with a wood handle. This trowel is used to force material deep into tile joints and to remove excess material for a perfect finish.

Scratch coat. First coat of plaster applied to a surface in two-coat plastering work.

Sintering. Initial surface bonding of clay particles during firing.

Slate. After mixing thinset or grout the time needed between one remix.

Spit-out. The shelling of the surface of a ceramic form caused by pressure generated within it either by the hydration of calcium (Plaster spit-out) or iron pyrites or by moisture trapped in glazed earthenware forcing its way through a transfer applied over the glaze.

Stoneware. Impervious ceramic with much of the material undissolved but bound by a glassy matrix

**Steel square.** The steel square is one of the most important tile setting tools. The large arm of the square is 2 " wide and 24 " long and is called the body or blade. The smaller arm is at a 90 degree angle to the blade and is 1 ½ " wide and 16 " long; it is called the tongue. The point where the outside edges of the blade and the tongue join is called the heel. The surface with the manufacture's name is called the face; the opposite surface is called the back.

**Stoneware.** A vitreous or semivitreous ceramic ware of fine texture, made primarily from nonrefractory fire clay.

**Story pole.** See layout stick.

**Straight joint.** The usual style of laying tile where all the joints are in alignment.

**Straightedge.** A straight piece of lumber that is used to rod mortar and to align tile.

**Terrazzo tile.** A terrazzo surface, on a Portland cement and sand body, made by a mixture of marble chips and Portland cement and usually ground smooth.

**Thin-set.** A term used to describe the bonding of tile with suitable materials applied approximately 1/8 " thick.

**Tile.** A ceramic surfacing unit, usually relatively thin in relation to facial area, made from clay or a mixture of clay and other ceramic materials, called the body of the tile, having either a glazed or unglazed face and fired above red heat in the course of manufacture to a temperature sufficiently high to produce specific physical properties and characteristics.

**Trim.** Units of various shapes of tile (basis, caps, corners, moldings, angles, surface, bullnose, etc.) or any other material necessary or desirable to make a complete installation by being used to complete the transition from one plane to another, or the tile to another material or stop the tile.

**Vitrification.** The process of heating a material until it melts into a glasslike substance. In ceramics this process is arrested before the material loses its shape.

Waterproof membrane. A membrane, usually made of built-up roofing, to provide a positive waterproof floor over the substrate, which is to receive a tile installation using a wire reinforced mortar bed.

Wet areas. Interior or exterior tiled areas subject to periodic or constant wetting. Examples: Showers, sunken tubs, pools, exterior walls, roofs, exterior paving and interior floors.

Wet areas. Interior or exterior tiled areas subject to periodic or constant wetting. Examples: Showers, sunken tubs, pools, exterior walls, roofs, exterior paving and decks, roman tubs, sometimes interior floors areas around hot tubs, steam beds and saunas (when wet.)

Wood flat. The wood flat is sometimes used in place of the flat trowel for floating mortar. It is good for smoothing small irregularities left on the mortar bed, working the surface of the mortar before troweling on the pure coat, or compacting floor and deck mortar.