

Natural Stone and Tile description

Terrazzo

Terrazzo is a floor or wall surface composed of matrix binder along with a mixture of selected aggregates of marble, granite, glass or plastic, to which colour pigment may be added. The most common matrix binders are portland cement, epoxy matrix, or polyacrylate terrazzo. Each system exhibits particular characteristics. Certain matrices and aggregates, that have little or no absorption, may not require any special treatment after polishing. The owner would be well advised to verify the maintenance procedures with the manufacturer of the specialized matrix or aggregate.

Terrazzo floors require a sealer to prevent absorption. It is important that new terrazzo installations be sealed with an acrylic water base penetrating sealer to a clean dry surface. This should be done as soon as possible after the final grinding in order to prevent staining. New terrazzo floors should be cleaned only with a neutral (7.0*) pH cleaner.

Proper care for the first year is very important and if properly treated, terrazzo will retain its beauty indefinitely. Special care in the cleaning of conductive terrazzo should be taken. Conductive floors must be kept free from harmful residues left by improper cleaners. Residues can create an insulating film that can destroy conductivity. Terrazzo floors containing abrasive aggregate should never be sealed and should be scrubbed regularly to keep the abrasive aggregates free of a build up of dirt and foreign matter. Electric scrubbing and buffing machines aid in terrazzo care. Periodic scrubbing with an electric machine, using a solution of neutral liquid cleaner, loosens dirt that is sometimes hard to get off with daily wet mop cleaning. Buffing the terrazzo with the electric machine after each cleaning restores the beauty of terrazzo and continued buffing builds a natural sheen that becomes a permanent part of the terrazzo floor.

Tiles

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 materials. Fired at a temperature sufficiently high enough to produce specific physical properties and characteristics.

Porcelain Tile

Porcelain tile is a ceramic tile that is generally made by the dust pressed method from a composition which results in a tile that is dense, impervious, fine grained, smooth and textured with a sharply formed face. Water absorption: ASTM C373. Manufactured in various thickness and sizes.

Quarry Tile

A glazed or unglazed tile made by the extrusion process from natural clay or shale. This tile is most common in the dark red shades; however, brown, tan and grey are also available.

Mexican Tile/Terracotta

This tile is generally hand-made and varies in colour, texture and appearance. The tile is available in various shapes and sizes. The tile may come pre-finished or require the application of various types of sealers or coatings on site to

provide a wearing surface.

Terrazzo Tile

Pre-manufactured consisting of marble, granite, glass or other chips in a portland cement or epoxy matrix, available in various colours, thickness and sizes.

Agglomerate Tile

Agglomerate tiles are manufactured by mixing marble or granite chips of various sizes with portland cement, polyester resin or epoxy. Thickness may vary from 6 mm to 20 mm and may be ordered in other thicknesses to meet specifications. Approximate water absorption, 24-hour immersion, 0.19% ASTM D570-81 modified but will vary from manufacturer to manufacturer.

Marble

Marble is a limestone that has crystallized naturally over a period of time. Marble is classified into four groups, Groups A, B, C, and D. These are broad classifications and relate only to soundness and working qualities. However, for the purpose of this Maintenance Guide, Marble is cut into blocks, slabs or tile in various thickness and sizes. It is available in the following finishes; polished, honed, split face, abrasive and rough sawn. Marble is very sensitive to acids and alkalis and can be stained if spillage or splashes are not wiped up immediately. If marble is installed in an area where staining may cause problems, then the marble should be sealed and a finish applied.

Travertine

Travertine is a variety of limestone regarded as a product of chemical precipitation from hot springs that has been formed over a long period of time. The product is porous with many visible holes. It is available in colours ranging from ivory to golden brown. The holes and cavities may be filled with a matching portland cement, coloured epoxy or polyester resins. Some travertine stone that take a polish are classified as marble according to ASTM C119.

Granite

Granite is a very hard crystalline, igneous rock that is available in a vast range of colour, texture and mineral composition. It is available in the following finishes; polished, honed, fine rubbed, thermal flame finished, and can take a sandblasted, coarse or fine stippled finish. ASTM C97- Absorption by weight 0.4 % max.

Slate

Slate is a split stone and is one of the world's oldest natural products. It is available in the following finishes; honed, sand rubbed, textured and natural cleft. Slate is available in various colours. Some shades will change colour on exterior use, therefore a non-fading shade be specified for exterior applications. Water absorption of slate requirements shall be in accordance with ASTM C121.

Limestone

Limestone is a sedimentary rock composed primarily of calcite or dolomite. It is available in the following finishes; polished, honed, rough textured, coarse, and stippled finish.

Reference : Terrazzo, Tile and Marble Association of Canada, *2000 Maintenance guide, Terrazzo, Tile and Stone - For a Lifetime of Beauty*, Ontario, 18 pages.