Natural Stone Guidelines

Natural Stone tiles should be installed by an experienced and qualified tile contractor or stone mason. Since these are natural products, it is essential that the client and the installer use appropriate setting materials that are specifically designed for use with stone. Mosaic is happy to assist in the choice of setting materials, however, we cannot be held responsible for their use for any particular purpose. We recommend TEC and Custom Building Products installation materials and can provide you with more specific instructions based on your particular application. Since each stone is unique with respect to color, veining, structure, etc., any samples that are submitted are intended to merely suggest the final outcome. Due to the inherent characteristics of the material, variations are guaranteed and part of the natural beauty of each stone.

Blending

Often the range and variation of patterns within one color and finish of stone is random – or it could be consistent. Since stone tiles are cut from large blocks, the patterning may be consistent within one carton but vary greatly from the next. Before starting an installation, it is imperative that all tiles be blended and sorted so the complete range can be seen. Mixing the tiles from all cartons will ensure a more uniform and well blended overall look.

Dry Layout

Most natural stones are one of the following:

- Directional – Grain running in one direction across the tile, like Onyx
- Figured – Veins and markings running in swirls or a number of directions, like Marble
- Multi-Colored – Sometimes subtle and sometimes dramatic color variations, like Slate

Directional tiles may be laid end-to-end, in a parquet pattern or random. Figured and multi-colored stones should be arranged like an abstract painting, with the owner, designer and installer rearranging the individual tiles in a sample area until the desired effect is obtained. Doing this dry run will eliminate any room for error.

Installation Method

Consult the TEC or Custom Building Products setting materials guide for appropriate information for your specific stone and job conditions. Always use a premium white thinset for light colored stones, as the mortar may bleed through and stain the surface of the tile. If installing over a wood subfloor, ensure that the area is properly prepared to accept stone. Be sure to use a new glass or porcelain cutting blade to ensure clean, smooth cuts and to avoid potential splintering.

Sealing, Care & Maintenance

All natural stone installations should be sealed both before and after grouting. Be sure that the surface is completely cleaned of any residual mortar prior to sealing. Grout the installation after the penetrating sealer has thoroughly dried. Choose a grout appropriate to your specific installation. Follow the manufacturer’s instructions carefully.

A regular maintenance routine should be established for sealing and cleaning the installation. Neutral pH cleaners can be used for day-to-day maintenance, with more powerful cleaners or poultices for specific stains. The stone should be resealed at 1 to 3 years in commercial applications and after 2 to 6 years for residential.

See the Mosaic Natural Stone Care & Maintenance guide for more details.

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Quartzite

- Golden Harvest
- Ledgers
- Pebbles
- Slate
- Chinese Multicolor
- Golden Florence
- Travertine
- Durango
- Efesus Stone
- Turkish

LOOK FOR THIS LOGO!

Products noted with this logo are stocked in our Central Service Center

(Orders placed before 2pm are available within 24 hours for MD and Northern VA locations, Southern VA and NC destinations may take up to 48 hours)
product notes & availability

Marble is a metamorphic stone (a rock altered by pressure and heat).
MOHS Rating 3 – 5.5
Porosity .4% to 2%

Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics.

It is recommended on Waterjet Mosaics to install with a light colored grout to best compliment the look.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center

(*) Noted items please allow a 1-2 week lead time pending availability
Marble is a metamorphic stone (a rock altered by pressure and heat).

- MOHS Rating: 3 – 5.5
- Porosity: 0.4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

Product is stocked in our Central Service Center

(*) Noted items please allow a 1-2 week lead time pending availability
Mosaics sold on 12x12 Sheets except where noted
Marble is a metamorphic stone (a rock altered by pressure and heat).

**MOHS Rating** 3 – 5.5

**Porosity** .4% to 2%

We recommend installing Athens Gray Marble with Super Flex™ or epoxy mortar since these are moisture sensitive stones.

**Very High Shade Variation:** Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

(*) Noted items please allow a 1-2 week lead time pending availability

(†) Noted items are discontinued and available only while stock inventory lasts

Mosaics sold on 12x12 Sheets except where noted
Marble is a metamorphic stone (a rock altered by pressure and heat).

MOHS Rating 3 – 5.5
Porosity .4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

Product is stocked in our Central Service Center

(*) Noted items are discontinued and available only while stock inventory lasts

Mosaics sold on 12x12 Sheets
Marble is a metamorphic stone (a rock altered by pressure and heat).

MOHS Rating: 3 – 5.5

Porosity: .4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

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Marble is a metamorphic stone (a rock altered by pressure and heat).

MOHS Rating 3 – 5.5

Porosity .4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

Product is stocked in our Central Service Center

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ITALIAN CARRARA

field tile available

| 3x6 Honed, Polished |
| 3x12 Honed, Polished |
| 6x12 Honed, Polished |
| 12x12 Honed, Polished |

product notes & availability

Marble is a metamorphic stone (a rock altered by pressure and heat).

- MOHS Rating: 3 – 5.5
- Porosity: .4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets except where noted.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

(*) Noted items please allow a 1-2 week lead time pending availability

Product is stocked in our Central Service Center

3x6 Honed, Polished
6x12 Honed, Polished
12x24 Honed, Polished

12x12 Polished
12x24 Polished
3x12 Polished

12x24 Honed
12x12 Honed
3x12 Honed

3x6 Honed
12x24 Honed
3x12 Honed
Carrara Marble has been used since the days of Ancient Rome. Known for its timeless beauty, Carrara Marble has been used in some of the world’s most notable structures. The Pantheon and Trajan’s Column are entirely constructed of Carrara Marble. Micheangelo’s David, built in 1504 during the Renaissance, is a true testament to the stone’s inherent beauty.

Authentic Carrara Marble can only be quarried from Carrara, Italy. Other white and gray stones may look similar to Carrara, but true Italian Carrara Marble is rare. Within the quarries of Carrara, there can be slabs and tiles that show wide gray veining or narrow veining, and some may show no veining at all. This is the characteristic beauty and uniqueness of natural stone.

It is critical that an experienced installer handles the application of Carrara Marble. The installer must review all the material and blend tiles from multiple boxes within all the different crates on hand so that the veining and coloring are put together to create a harmonious overall effect of the entire color range.

Please Note: It is recommended on Waterjet Mosaics to install with a light colored grout to best compliment the look.
Marble is a metamorphic stone (a rock altered by pressure and heat).

- MOHS Rating: 3 – 5.5
- Porosity: .4% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEG’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

- Marble is unavailable in the product notes & availability section.
- Product is stocked in our Central Service Center.

(*) Noted items are discontinued and available only while stock inventory lasts.
Marble is a metamorphic stone (a rock altered by pressure and heat). MOHS Rating 3 – 5.5
Porosity .4% to 2%

We recommend installing Wooden White Marble with Super Flex™ or epoxy mortar since these are moisture sensitive stones.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade, veining and texture. To ensure an even variation, blend stones from multiple cartons prior to installation.

(*) Noted items please allow a 1-2 week lead time pending availability
(†) Noted items are discontinued and available only while stock inventory lasts

Product is stocked in our Central Service Center

Mosaics sold on 12x12 Sheets except where noted
Onyx is a metamorphic stone (a rock altered by pressure and heat).

**MOHS Rating** 3
**Porosity** .5% to 2%

Due to the natural characteristics of this particular stone, it is imperative that a porcelain or glass cutting blade is used to minimize splintering on edges while cutting. This onyx can range in color from the lightest alabaster white to the deepest gold. We guarantee material ordered will vary from samples used during the selection process. All material must be inspected prior to installation as no concessions will be made once the stone is installed.

**Mosaics:** Due to the addition of a resin mesh for added stability, TEC’s Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets.

Product is stocked in our Central Service Center.
Onyx is a metamorphic stone (a rock altered by pressure and heat).

MOHS Rating: 3
Porosity: .5% to 2%

Mosaics: Due to the addition of a resin mesh for added stability, TEC's Super Flex™ or 100% Solids Epoxy Mortar is required for proper installation of all mosaics. Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center

(*) Noted items are discontinued and available only while stock inventory lasts.
Quartzite is a metamorphic stone (a rock altered by pressure and heat).

MOHS Rating 4 – 7
Porosity .4% to 3.9%

Quartzites are Gauged – the backs of the stones have been machined while the surface will maintain its natural clefting and thickness variation.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center

(*) Noted items are discontinued and available only while stock inventory lasts

Mosaics sold on 12x12 Sheets
River Rock is stone harvested from actual river beds. It will vary tremendously from piece to piece.

**MOHS Rating**: 3 – 5.5

**Porosity**: .4% to 2%

Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons prior to installation.

Product is stocked in our Central Service Center.
Quartzite is a metamorphic stone (a rock altered by pressure and heat).

- MOHS Rating: 4 – 7
- Porosity: .4% to 3.9%

Slates are Gauged – the backs of the stones have been machined while the surface will maintain its natural clefting and thickness variation.

Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center

(*) Noted items are discontinued and available only while stock inventory lasts.
Travertine is a sedimentary stone (a rock formed from consolidated clay sediments).

- **MOHs Rating**: 3
- **Porosity**: 5% to 12%

Special Order cut-to-size tiles are available for patterned installations if required, as all straight cut tiles are exact dimensions.

**Very High Shade Variation**: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center.
Due to the irregular nature of the split face mosaic, minimal gaps may appear between the interlocking sheets (see below). We recommend that a matching grout is used to fill these voids to eliminate potential shadowing.

Mosaics sold by 12x12 Sheets

The tumbling process results in size variation from stone to stone which is reflected in the mounting of tumbled mosaics.
Travertine is a sedimentary stone (a rock formed from consolidated clay sediments).

MOHs Rating 3  
Porosity 5% to 12%

It is recommended that this stone be installed with a 3/16” grout joint in order to achieve optimum results. It is also recommended that the grout be kept to a minimal depth to best highlight the stone’s chiseled edge.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product notes & availability

Discontinued series – Available only while stock inventory lasts

EFESUS STONE
Travertine is a sedimentary stone (a rock formed from consolidated clay sediments).

**MOHS Rating**: 3

**Porosity**: 5% to 12%

Mosaics sold on 12x12 Sheets.

Very High Shade Variation: Natural stone products have an extreme variation in color, shade and texture. To ensure an even variation of color and surface texture, blend stones from multiple cartons. Review all material prior to installation.

Product is stocked in our Central Service Center

Discontinued series – Available only while stock inventory lasts
For samples, fax request to 866-480-TILE (8453) or email samples@mosaictileco.com