

Natural Stone



There are many different types of stone available. When stone is ordered, it is fabricated with a particular type of surface. There are six main type of surfaces that are selected:

Honed: Provides a flat to low sheen gloss. Different levels of gloss can be selected. This surface is very smooth, but often very porous. This texture is common in high traffic buildings. Honed floors should always be protected with Penetrating Sealer because it has wide-open pores. Honed stone colors are not as vibrant as polished stone.



Polished: A glossy surfaces that wears away with time due to heavy foot traffic and using improper maintenance procedure. This surface is very smooth and not porous. The reflectively of polished crystals brings out the brilliant colors and grains of natural stone. The shine comes from the natural reflection of the stone's crystals. The shine is due to polishing bricks and polishing powders used during fabrication. The Shine is not from a coating.



SURFACE TEXTURES

Flamed: A rough surface that is developed through heat. During fabrication, the stone is heated up and the crystals begin to pop, thus forming a rough surface. This surface is very porous and must be treated with an impregnator.

Sand Blasted: This surface is the result of a pressurized flow of sand water that provides a textured surface with a matte gloss.

Sawn: A Process performed by using a gang saw.

Bush Hammered: A pounding action that develops a textured surface. The degree of roughness can be selected.



TYPES OF STONE:

The familiar stone types that are used today are identified through four categories: Sedimentary, Metamorphic, Igneous and Man-made stone.



Sedimentary stone came from organic elements such as glaciers, rivers, wind, oceans, and plants. Tiny sedimentary pieces broke off from these elements and accumulated to form rock beds. They were bonded through millions of years of heat and pressure.

TYPE OF STONE:

Limestone: Mainly consists of calcite. It does not show such graining or crystalline structure. It has a smooth granular surface. Varies in hardness. Some dense limestone can be polished. Common colors are black, grey, white, yellow or brown. It is more likely to stain than marble. It also is known to contain lime from sea water.

Limestone is a sedimentary rock that is composed of at least 50 percent calcium carbonate, or calcite. It is a dense, fine-grained rock that is tough and durable. Some varieties, referred to as dimension stone, are cut into specific sizes for use as facing stone, stair treads, floor tiles and stepping stones



TYPE OF STONE

Sandstone is one of the most common types of sedimentary rock and is found in sedimentary basins throughout the world. It is often mined for use as a construction material or as a raw material used in manufacturing. In the subsurface, sandstone often serves as an aquifer for groundwater or as a reservoir for oil and natural gas.

It is a very durable formation of quartz grains (sand). Usually formed in light brown or red colors. Categorized by the most popular sandstone bonding agents such as silica, calcium, clay, and iron oxide. Sandstone is a sedimentary rock composed of sand-size grains of mineral, rock, or organic material. It also contains a cementing material that binds the sand grains together and may contain a matrix of silt- or clay-size particles that occupy the spaces between the sand grains.



TYPES OF STONE

Soapstone: A very soft stone made of a variety of talc. It is a dense mineral that wears well and is often resistant to oxide.



Fossilstone: Considered a limestone that contains natural fossils such as sea-shells and plants.



Travertine: Usually a cream or reddish color. It is formed through the accumulation of calcite from hot springs. It contains holes that were formed from water flowing through the stone. These holes are often filled with synthetic resins or cements. Requires a lot of maintenance if the holes are not filled. Classified as a limestone and a marble. Travertine is a natural stone made up of mostly calcium salts and it reacts easily with materials acidic in nature even the most innocuous foods items such as beverages and fruit juice can damage them and cause a permanent stain on the surface. Sealers prevent these substances from soaking into the surface



TYPES OF STONE

Metamorphic stones originate from a natural form of one type of stone to another type through the mixture of heat, pressure, and minerals. The change may be a development of a crystalline formation, a texture change, or a color change.

Marble: A recrystallized limestone that formed when the limestone softened from heat and pressure and recrystallized into marble where a mineral change occurred. The main consistency is calcium and dolomite. Ranges in many colors and is usually heavily veined and shows grains. Hardness rates from 2.5 to 5 on the MOH Scale. Marble is classified into three categories:

1. Dolomite: If it has more than 40% magnesium carbonates.
2. Magnesium: If it has between 5% and 40% magnesium
3. Calcite: If it has less than 5% magnesium carbonate.

Slate: Fine grained metamorphic stone that is formed from clay, sedimentary rock shale, and sometimes quartz. Very thin and can break easily. Usually in black, gray or green.



TYPES OF STONE

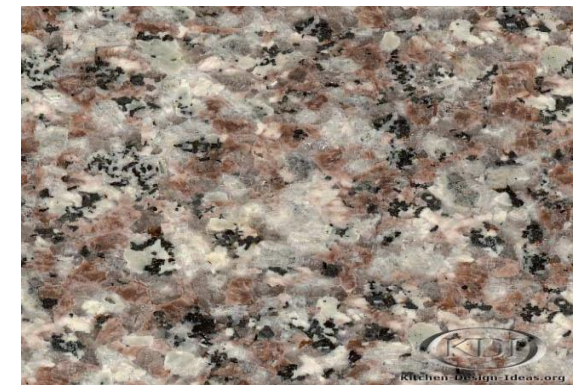
Serpentine: Identified by its marks, which look like the skin of a serpent. Most popular colors are green and brown. Hardness rates from 2.5 to 4 on the MOH scale. Contains serpentine minerals and magnesium, and has an igneous origin. Does not always react well to recrystallization or diamond polishing.



Igneous stones are mainly formed through volcanic material such as magma. Underneath the Earth's surface, liquid magma cooled and solidified. Mineral gases and liquids penetrated into the stone and created new crystalline formations with various colors.



Granite: Primarily made of Quartz (35%), Feldspar (45%) and Potassium. Usually comes in dark colors and contains very little calcite, if any. Provides a heavy crystalline and granular appearance with mineral grains. It is a very hard material and easier to maintain than marble. Yet, it is still porous and will stain. There are different types of granite depending on the percentage mix of quartz, mica and feldspar. Black granite is known as an Anorthosite. It contains very little quartz and feldspar and has a different composition than true granite.



TYPES OF STONE

Man Made Stones are derived of unnatural mixtures such as resin or cement with the additive of stone chips.



Terrazzo: Marble and granite chips embedded in a cement composition.



Agglomerate or conglomerate: Marble chips embedded in a colored resin composition.



Cultured or Faux Marble: A mix of resins that are painted or mixed with a paint.





Q & A on Natural Stone

Q: Do we have any sealer that we recommend for Porcelain? Granite? Marble?

A: None of our products can/should be used on Porcelain, Granite, and Marble.

Q: What penetrating sealer would be best to recommend that would provide a sheen as well as enhance the color? (Enhancing sealers deepen and enhance the natural colors and veining of natural stone, making the stone more vibrant without producing a gloss)

A: SB-6400 penetrating wet look

Q: What type of sealer is best for sealing Natural Stone? Penetrating or Film forming?

A: Topical coatings do just as the name implies: They sit on top of the surface, producing either a low-sheen or high-gloss appearance they eventually wear off with pedestrian foot traffic and will require reapplication more frequently than a penetrating sealer.



Q & A on Natural Stone

- Q: Does the longevity of the sealer increase or decrease with Natural Stone vs. Concrete pavers?

A: No, Paver, natural stone and concrete hardscapes are a BIG investment that can provide years of beauty and enjoyment if well maintained. This required routine maintenance is made SIMPLE and EASY with a maintenance schedule to protect the investment for maximum performance and remains beautiful today and through the years.

Q: Can our Solvent based sealers be used on Natural Stone in-doors near a fireplace?

A: SB-6400, SB-5000 penetrating sealer for stain protection and enhancement would be recommended.



Q & A on Natural Stone

Q: I have been asked if solvent based sealers are ok for outdoor kitchen counter tops where food may come in contact.

A: SB-6400, SB-5000 is widely used for concrete counter tops. Sb-4000/4400 would help prevent water penetration but would do little to prevent organic stains. Any of the film forming products (1300, 7000, 77000, 8700, and 9000) wouldn't be recommended because of potential damage to the film by hot objects.

Q: When contractors use sealers on natural stone why do they have problems.

A: It's possibly the sealer was over applied and never backed rolled or could have been wet.



Q & A on Natural Stone

- Q: Will SB 8700 make it slippery

A: If you follow the installation methods NO problems should arise. Also if the stone is slippery when it rains it could continue to be slippery after SB-8700 is applied. You can over apply sealer which could make it slippery when layered in access.

Q:How long will the sealer last on natural stone

A: It possible 3-5 years when its maintained properly

Q:What are the top sealers for us to promote

A: SB-8700, SB-6400, SB-5000, SB-4400, SB-4000

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