



Selecting A Natural Stone For Your Project

How to Choose the Right Stone for Your Project

You have many options when it comes to beautiful, long-lasting natural stones for your home's interior and exterior: Slate, granite, marble, quartz-based stone, and limestone, just to name a few. Choosing a natural stone for your home is a very personal decision, much like selecting wallpaper or artwork.

While there are literally thousands of natural stones to consider, some are better suited than others to particular uses in and around various projects. Amendola Marble & Stone Center, Inc., along with your architect, Designer, and or contractor, can help you explore your options and offer guidance on the right stone for the right project.

Factors to Consider in Selecting a Natural Stone:

Color

Natural stones are available in a beautiful spectrum of colors. Colors in granite and marble, for instance, can range from soft beiges and pinks and classic black-and-whites to rich corals, greens, and multi-colors. Marble traditionally features swirls and "veins" of colors, while granite has a flecked or pebbled appearance.

Unlike the repetitive sameness of materials produced by machine or assembly line, natural stone's naturally varied appearance has wonderful character and creates a one-of-a-kind effect everywhere it is used.

Finish

Natural stone can be polished, honed, or flamed for a distinct appearance:

- A polished finish has a glossy surface that reflects light and emphasizes the color and marking of the stone. This finish is typically used on walls, furniture tops, and floor tiles.
- A honed finish is a satin-smooth surface with relatively little light reflection. It is generally preferred for floors, stair treads, thresholds, and other areas where heavy traffic will wear off a polished finish.
- A flamed finish is a rough-textured surface used frequently on granite floor tiles.

Usage

The harder the stone, the more it resists abrasion. One measure of a natural stone's strength is its Measurement of Hardness (MOH) rating, on which 1 is the softest and 10 is the hardest. On the MOH scale, most marbles rate "3" and quartz-based granites rate "7." Using a softer stone simply requires the use of a gentler cleansers and more frequent dusting to prevent scratching.

Granite & Radon - The Truth

This information was prepared to distribute to our customers and others who have questions or concerns about the radon and granite issue. It is copyrighted by the Marble Institute of America, but may be reproduced, with credit given to the Marble Institute of America.

Solid Surface, The Journal of the Solid Surface Industry (Volume 1 Number 1) that has published an article entitled "Granite & Radon". The introduction to the article stated "Scientific research poses disturbing questions about the safety of granite countertops" and copies of this article have circulated around the stone industry raising questions about radon gas emissions from granite countertops. The key advertisers in this journal were Corian and Formica.

The MIA has called upon several of the country's leading scientists in geology and geochemistry to assist in preparing a response to the allegations in this article that radon gas emissions from granite countertops may be hazardous. On reading article, our consultants reacted with such comments as "ludicrous", "a fabulous collage of nonsense", "politically motivated", "unethical", and "bizarre". Donald Langmuir, PhD, Professor Emeritus of Chemistry and Geochemistry at the Colorado School of Mines and President of Hydrochemical Systems Corp., both in Golden, Colorado, has prepared a response on behalf of the Marble Institute of America that evaluates and refutes these allegations. His report appears in full in this Special Bulletin. Dr. Langmuir received his BA (with honors), and his MA and PhD degrees in geochemistry from Harvard University. He served as a geochemist with the Ground Water Branch of the U.S. Geological Survey's Water Resources Division and subsequently taught and conducted research for 11 years at Pennsylvania State University, with temporary appointments at Rutgers University, the Nevada Desert Research Institute, and the University of Sidney, Australia. Dr. Langmuir has been a full professor at the Colorado School of Mines since 1978.

In addition to working with Dr. Langmuir and other scientists, the MIA staff also talked with the major U.S. granite quarriers and producers about the issue of radon emissions from granite. These companies have certainly not ignored the issue and several have had radon testing performed on their granites. The research done for these companies have shown that actual levels of radon gas emissions from granites are so low as to be insignificant and generally represent no threat to the health and well-being of people who live or work in buildings with granite countertops, floor or wall tiles, furniture or any other furnishings made from granite.

Marbles, limestones and stones other than granites are of such mineral composition that they generally do not contain measurable quantities of radon-producing material. In terms of building materials, radon emissions from concrete, cement and gypsum could be of greater concern.

What is Radon?

Radon is a naturally occurring gas generated by the decay of trace amounts of uranium found in the earth's crust throughout the world. It is an unstable gas that quickly breaks down and dissipates in the air. Radon is measured in units called picocuries per liter (pCi/L). A picocurie is one trillionth (10⁻¹²) of a curie, which is the amount of radioactivity emitted by a gram of radium. The U.S. Environmental Protection Agency (EPA) has established 4 pCi/L as the standard for indoor air; 20 pCi/L represents the maximum amount of exposure to radium that is now allowed by U.S. regulations.

Choices In Natural Stone

There are many different types of natural stones. Each have common uses. Amendola Marble & Stone Center, Inc. show here several resources to help you understand the differences so you may make the right choice. Please review the resource below.

Amendola Marble & Stone Center, Inc.

Industry Term Definitions & Common Uses

- Granite - Granite is an igneous rock, which means it was once molten and formed as it cooled deep within the earth. Minerals within granite typically appear as small flecks throughout the stone, once creating a "salt and pepper" look. Other types have veining similar to marble. Granite is a dense-grained, hard stone. It can be highly polished or finished in a variety of other ways. A broad spectrum of color is available.

Most common uses:

Interior and exterior wall cladding, Interior and exterior paving, Residential & Commercial counter tops, Monuments, Curbing, Statuary, Balance Tables, Novelty items

- Marble - Marble has both a scientific and commercial definition. Scientific marble was once limestone that achieved metamorphosis from intense pressures and high temperatures within the earth. This altered its crystalline structure and introduced other minerals that produced the valuable colors and veining. Commercially, any stone capable of taking a polish (with the exception of granite) is known as marble. This includes travertine, onyx, serpentine and limestone. Most common uses:

Interior and exterior wall cladding, Interior and exterior paving, Fireplace facing and hearth, Lavatory tops, Residential & Commercial counter tops, Table Tops, Statuary, Novelty items, Many non-architectural uses, such as tooth paste, paint whitening, agricultural lime, etc.

- Travertine - Travertine marble is a variety of limestone formed in pools by the slow precipitation of hot, mineral-rich spring water. The “holes” characteristic of travertine were created when carbon dioxide bubbles were trapped as the stone was being formed. Although the classic travertine’s are recognizable by their homogenous ecru to dark colors, dark reds are available to dark brown veining.

Most common uses:

Interior and exterior wall cladding, Interior and exterior paving, Statuary, curbing

- Limestone - Limestone is widely used as a building stone because it is readily available and easy to work with. It is a sedimentary stone, layered and formed from the skeletons and shells of sea creatures that lived in vast, warm seas millions of years ago. Much domestic limestone is gray to buff in color, while some pastel shades of yellow to pink are available. Imported limestone’s are available in colors ranging from light beige to dark brown, red and black. When the mineral dolomite is present, it makes the limestone harder and capable of being polished in the same manner as metamorphic marble.

Most common uses:

Interior and exterior wall cladding, Interior and exterior paving, Limited counter top use

- Quartz-Based - Quartz-Based stones vary widely in color because of different materials and clays contained within the stone. These stones can be found in varying hues of light gray, yellow, green and red. (The dark, reddish-brown “brownstone” was widely used in building construction in the northeastern United States and Canada in the early 1900’s.) They may be either sedimentary in formation (such as the sandstone’s, bluestones and brownstones) or metamorphic (as in quartzite that is formed in exceedingly hard layers)

Most common uses:

Interior and exterior wall cladding, Interior and exterior paving

- Slate - Slate is a fine-grained, metamorphic stone derived from sedimentary rock shale. It is uniform in color, available in shades such as dark to light green, mottled purple, black, gray or dark red. Veined patterns from overseas have also recently been introduced. Unless its surface has been honed smooth, slate can be recognized by its distinct cleft pattern.

Most common uses:

Residential and Commercial counter tops, Fireplace facing, Roofing, Interior & Exterior wall cladding, Interior & Exterior paving, Fireplace facings & table tops, Many non architectural uses

- Soapstone - Soapstone is a metamorphosed, easily worked igneous stone characterized by a “soapy” feeling when touched. Colors range from dark gray to bluish or greenish gray. Its heat retention qualities make it an ideal cladding for free-standing coal or wood-fired room heaters. Soapstone is also chemical, stain and weather-resistant, and is useful for sinks and laboratory tops as well as general building purposes.

Most common uses:

Chemistry and fire resistant work surfaces, Fireplace facings & inner hearths, Where heat is an issue

- Onyx - Onyx marble is a translucent, layered calcitic stone in pastel shades. It is typically formed in caves as stalactites and stalagmites by the slow precipitation of cold, mineral-rich water.

Most common uses:

Interior wall covering. Can be used exterior in warm environments, Table Tops, Very light duty residential flooring, Novelty items

Stone Identification

Natural stone is classified into two general categories: siliceous stone and calcareous stone.

- Siliceous Stones - Siliceous stones are granite, quartz-based stone, serpentine, slate and soapstone. they are durable and easy to maintain under normal conditions of use.

Calcareous Stones - Calcareous stones are limestone's, marble, onyx and travertine. Neutral cleansers (ph7) are recommended. These stones are also durable, but more sensitive to acids and strong alkaline compounds.

**PLEASE CONTACT A REPRESENTATIVE AT
AMENDOLA MARBLE & STONE CENTER
WITH ANY QUESTIONS REGARDING YOUR
CHOICES OF STONE FOR YOUR NEXT PROJECT.**