

 **GREENSTONE SLATE**[®]
Vermont Architectural Roofing Slate





Discover the Elegance of a Genuine Vermont Slate Roof

Welcome to Greenstone Slate!

For more than 100 years, our Vermont quarries have produced exceptionally fine quality stone for roofing slate. All Greenstone Slate® comes from our own **58 quarries**—enabling us to provide quality control second to none. However, high quality stone is just the beginning. Our stone is worked only by Greenstone trained craftsmen. Our production facilities are constantly updated and expanded. This has led Greenstone Slate to become a principal producer of colored slate roofing. We deliver consistently high quality product, with excellence in service and installation support, and competitive, direct pricing—for the highest value possible in a slate roof.

Beautiful yet practical

Slate roofing can be applied to any permanent structure. The intrinsic beauty of slate will enhance any building from schools to homes, as well as commercial and government

structures. Slate's extended life expectancy and durability creates a low cost of ownership.

Slate offers unmatched benefits:

- **It's a natural material**
- **Fireproof**
- **Waterproof**
- **Permanent**
- **Insulating factor saves energy**
- **Resists climatic change**
- **Impervious to fungi and mold**

Slate will complement any structure design due to its wide range of:

- **Colors**
- **Thicknesses**
- **Surface textures**
- **Overall roof textures**

Guaranteed to last one hundred years!

Regardless of grade, all Greenstone roofing slate comes with a **100 year guarantee** (ask to see our warranty statement for details).

Installation

In the laying of any roofing material quality workmanship is as essential as the proper selection of the material. The more enduring the material the more important this factor becomes. Slate, the most lasting roofing material known, should be laid by roofers of experience and training. We assist by always being ready to answer questions prior to delivery and during installation. We also provide a comprehensive manual of essential installation practices to architects and contractors. It's available at no charge. Call **800.619.4333** or send an e-mail to **info@greenstoneslate.com**. Ask for our *Product & Services Guide*.

Slate Grades

Slate is "graded" according to the uniformity in thickness that each piece exhibits. Since slate is a natural product, the more demanding the physical specification, the more the demanding production requirements. Therefore, a slate's grade has great bearing on the availability and overall cost of the material.

The background: An example of Heavy Grade slate with snow guards. This particular roof is a mix of colors: 60% Vermont Gray/Black, 20% Semi-Weathering Gray/Green and 20% Royal Purple.

To the right: Slate is the roofing material of choice for many institutions and exquisite private residences.



Standard grade: Selects

These premium slates are a very uniform 1/4" in thickness with little texture. *Select Grade* roofing slate is strongly recommended for use in repair projects. It weighs from 680 to 780 lbs per square.

Standard grade: Rough Texture

Since natural slate is hand split from blocks of stone, some pieces may be thicker than 1/4" or have natural characteristics that produce uneven surfaces. *Rough Texture Grade* slate surfaces should not be confused with slate that has imperfections in the stone that would jeopardize its structural integrity and waterproofing

capabilities. *Rough Texture* slate is free of weakening imperfections, but exhibits a more enhanced grain and variations in thickness. It is split at thicknesses between 1/4" and 3/8". Each square weighs between 800 and 1000 lbs.

Architectural Grade

Slates designated as *Architectural Grade* are similar to *Rough Texture Grade*. However, these slates measure between 3/8" and 1/2" thick and will weigh between 1200 and 1600 lbs per square.

Heavy Grade

Slates designated as *Heavy Grade* are also similar to the *Rough Texture Grade* in appearance. They measure

1/2" to 3/4" in thickness and will weigh between 1800 and 2200 lbs per square.

Estate Grade

Slates designated as *Estate Grade* will have *Rough Texture Grade* characteristics and measure at least 3/4" thick. Weight falls between 2500 and 3000 lbs per square.

Call us to discuss the appropriate grade for your project: **800.619.4333**



GREENSTONE SLATE®
greenstoneslate.com



Slate Colors and Textures

Greenstone® slate is available in many popular colors and a variety of textures for roof repair, traditional new construction and unique and custom architectural design. All Greenstone® slate is S-1, 100 year rated roofing slate. For more about weathering and non-weathering slate see the back of this brochure and visit us at greenstoneslate.com. Questions about finding the right slate for your project? Give us a call: 800.619.4333



Semi-Weathering Gray/Green

A premium quality roofing slate which over time will yield a variety of rich earth tone colors. This slate is gray/green when quarried, yet between 10% and 25% of the pieces will gradually begin to show soft tones of buffs and tans. Semi-Weathering Gray/Green slate brings a rustic, textured appearance to a roof and is used extensively on commercial, residential and institutional buildings.



Non-Weathering Purple

This is a vibrant, non-weathering Vermont Slate with color that can range from a clear plum to a deep magenta with green splashes. Use it alone or in a blend.



Vermont Clear Gray

A semi-weathering, excellent hard-vein slate that comes in shades of light to medium gray. When weathered, 10% to 20% will transform in buff shades.



Vermont Clear Black

An excellent hard-vein slate in shades of black, with an abundance of textures. 10% to 25% of these slates will weather into colors ranging from chocolate brown to dark buff shades. This should be considered when a roof is a particularly important visual design element and a truly unique and spectacular character is desired.



Non-Weathering Mottled Green and Purple

This unusual slate is uniquely Vermont. Its colors are blends of soft shades of purple and green. At times, purple will be the predominate color and at others green becomes predominate.



Vermont Gray/Black

This premium quality roofing slate blends shades of gray and black. It is one of the most widely used slate colors and is used equally on commercial, residential and institutional buildings where a traditional slate roof appearance is desired. Approximately 4% to 6% of these slates will exhibit slight signs of weathering after 12 to 18 months.



Non-Weathering Gray/Green

This Vermont slate is green with shades varying slightly to light gray. It is one of the most popular roofing slates. It is often used alone and frequently chosen to be used in a blend of colors for multi-colored roofs.



Royal Purple

Rich purple in color yet some pieces may exhibit small markings of green. These slates are a favorite of architects and owners for custom homes where they are blended with other slates to create multi-colored roofs. Purple slates are also popular on their own, as a roof covering for commercial, university and religious buildings.



Vermont Strata Gray

A distinctive slate with an overall grayish background. Its mottling with various shades of darker gray/black give it excellent character. Its varying textures contribute to its unique character and will display some weathering.

Also available...

Variegated Purple

Primarily a purple tone slate, some having spots or streaks of green of varying size. However, in some slates, green will be predominate with only tints of purple. A varying but small percentage will weather to shades of tan.

Non-Weathering Red

A hard-vein red slate, consistent in color, texture and strength. This color becomes more pleasing with age and is the rarest of the colored slates.



GREENSTONE SLATE®
greenstoneslate.com

Nu-lok™: The Lightweight Slate Roof



Photo © Jeremy Markunas

“We install traditional slate, the Nu-lok system and other roofing materials. Nu-lok delivers all the practical benefits of a slate roof with great efficiency. And there’s no sacrifice in aesthetics at all, because it’s genuine Vermont slate!”

— Rick Wright
Vermont SlateWright

Nu-lok™ is a roof installation system that combines 21st century technology and design with the industry’s most respected and desirable roofing material: Natural Slate. Slate has long been revered as the finest roofing material available. No other roof offers the same long-term investment value. Slate, as natural stone, is the most durable roofing product available, and is completely fireproof (ASTM E108-00, Class A). Slate’s inherent practicality combined with its distinctive natural aesthetic appeal has made it a favorite among architects worldwide.

Until now, slate would be incorporated into a new building or renovation design only after careful consideration of the costs involved. The expense of providing the necessary structural support and the labor cost for specialized installation craftspeople can push the installation of a traditionally installed slate roof beyond budget.

The Nu-lok system eliminates these obstacles. It uses less slate which reduces weight, and because of its innovative design it can be installed by all quality roofing contractors. This makes slate the right choice in a much wider range of design-build projects.

Traditional elegance, today’s technology

Nu-lok effectively leverages slate’s excellent insulating properties by creating an air gap between the slate and roof deck. And by using Nu-lok’s integrated solar panel option you’ll have a roof made with the roofing material of choice for centuries, as well as the roof of the future!



Greenstoneslate.com • Nu-lokusa.com



800 619 4333 • Greenstoneslate.com • nu-lokusa.com • sales@greenstoneslate.com



A Nu-lok™ roof is a genuine Greenstone Vermont Slate Roof installed using a patented installation system. Nu-lok™ saves slate and simplifies the installation process.

**Less slate,
Less weight ...**





A Nu-lok slate roof installation employs batten grid and Link Channels made from Galvalume to support the slates. Stainless steel clips securely fasten the slate tiles and reduce slate overlap so less material is needed.

**100% Natural
Vermont Slate**



The **nu-lok**[™] roofing system is unique—and field proven!

- **Thousands of roofs installed worldwide**—Nu-lok[™] was developed in the 1980's by an Australian roofing contractor.
- **50 year warranty**, on Nu-lok[™] installation components.
- **100 year warranty** on Greenstone Slate[®].
- **Marazzi ceramic tile colors available** for seamless integration with Nu-lok's SolarRoof[™] photovoltaic panels.
- **The Nu-lok[™] system uses less slate than a traditional slate roof—saving material.**
- **A Nu-lok[™] slate roof weighs less** than six pounds per square foot, allowing installation on a very wide variety of structures (check with your contractor).
- **Nu-lok[™] installs without specialized labor.** Roofing contractors can now install a slate roof with quality standard roofing crews.
- **A Nu-lok[™] roof is walkable!** Nu-lok[™] supports slates uniformly, simplifying installation and maintenance.
- **Self-ventilating** The hollow that is created by the Nu-lok[™] framework provides excellent circulation.
- **Nu-lok[™] is ideal for cedar shake roof replacements / upgrades.**



Vermont Architectural Roofing Slate

 **GREENSTONE SLATE[®]**

A Nu-lok[™] roof comes with genuine **Vermont** natural slate

How the innovative Nu-lok[™] installation works:

A **Nu-lok[™]** roof installs very differently from a traditional slate roof. The basic process is shown here. To see details of techniques for applying in valleys and around chimneys and vents, visit nu-lokusa.com for a downloadable guide to installation.



The Nu-lok[™] battens run horizontally across the roof and are fastened to standard wood counter battens, applied on top of the underlayment.



Nu-lok[™] Link Channels snap into battens. They support the slates and guide water down the roof.



Slates drop into place, held on each side by 316 grade stainless steel clips.



The slates supported very evenly. **A Nu-lok[™] roof is a slate roof you can walk on!**

Watch as the Nu-lok[™] system withstands **hurricane force** wind and rain!
nu-lokusa.com



MIAMI-DADE COUNTY
APPROVED

The Nu-lok[™] system is strong—engineered to resist the elements

Visit nu-lokusa.com to see the Nu-lok[™] slate roof system withstand sustained hurricane force winds—up to 110 MPH! This 100% successful test brought Nu-lok[™] an official notice of acceptance in Miami-Dade County, Florida for installation in hurricane zones.

Visit <http://www.greenstoneslate.com/news1.htm> to view the certificate.



Nu-lok™ SolarRoof™ The Integrated Solar-Slate Roof



Your Nu-lok™ / Greenstone® Natural Slate Roof will keep many shingles out of a landfill. Add solar panels and you have taken "green" to the next level!

Talk to your contractor about how easy it is to add solar panels to your Nu-lok slate roof. They're designed specifically to install in the Nu-lok™ system and fit flush with the slates. Wiring is easily accomplished, and fully hidden in the Nu-lok batten support system. Reduce your energy costs, make a positive environmental impact and have a great looking roof.



Important facts about slate...

Slate is a tried and true material for building a beautiful and very long lasting roof for any structure. The 100 year life expectancy is not a projection—it is the result of “field application”. There are thousands of slate roofs still in service today installed in the 1800’s! With such a long history, many terms describing the material have been coined and over the years some have evolved into *misinterpretation*. For example, a common misconception associated with the nomenclature of describing slate occurs when the terms weathering and fading are erroneously interchanged. Below is a clarification of slate terms:

Nomenclature of Blue Black & Black Slates

Fading

The term fading refers to certain slates, that after prolonged exposure to the elements, exhibit a chalk-ashen residue on the exposed surface of the slate. The chalk-ashen residue is the result of a chemical reaction and the associated release of calcium from the body of the slate. This release weakens the structure integrity of slate and is detrimental to the slate’s life expectancy. The term is most often used in conjunction with the Blue Black or Black slates of Pennsylvania and Virginia.

Non-fading or Unfading

The term refers to certain slates that after a prolonged exposure to the elements do not produce the chalk-ashen residue. Non-fading or Unfading slates usually have greatly extended life expectancies over those slates prone to calcium release.

Classification of Colored Slate

Colored slate *does not fade*, but it will experience varying degrees of color *change*. This *weathering* of slate is due to the oxidation over time of minerals embedded in the slate. Depending on mineral content, the weathering process slowly changes the slate color. The color change is often a movement toward buff, brown, gray or tan. *This surface oxidation is not detrimental to the slate’s structural integrity and does not shorten the life of a roof.*

Colored slates are classified in three types. This classification is based upon the degree of color change over time:

Weathering

The term refers to slates that will exhibit the largest number of individual pieces that will transform from the original color to an earth tone.

Non-weathering

The term refers to slates that exhibit the least amount of color change.

Semi-weathering

The term refers to roofing slates that are manufactured from slate that has varying mineral content. Some of these slates will undergo a color change while others remain their original shade. The percentage of semi-weathering slates that will experience color change is variable depending upon the location in the quarry from which the slate was extracted.

Attention Architects & Contractors!

Call us for a FREE resource CD with comprehensive information on Greenstone Slate®—including an interactive slate color selector, detail on specifying slate, project library, lightweight installations, solar options, manufacturing videos and much more.



Member:



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