Why Choose Natural Slate Roofing?

ARCHITECTS AND INSTALLERS SEMINAR SERIES

Slate Roofing Contractors Association of North America, Inc.

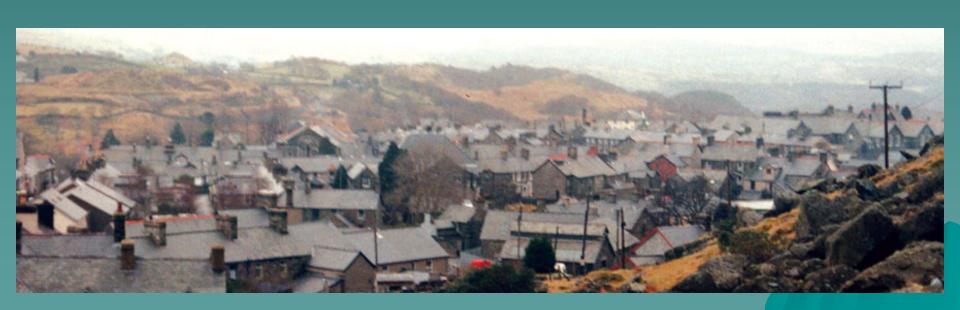
143 Forest Ln, Grove City, PA 16127

SlateRoofers.org

Mail@SlateRoofers.org

Ph: 814-786-7015

Natural quarried roofing slate provides beauty, longevity and tradition, while enhancing the architectural integrity of a community or institution.



Slate is an ecologically-friendly, recyclable natural stone containing NO plastic, petroleum, or asbestos.





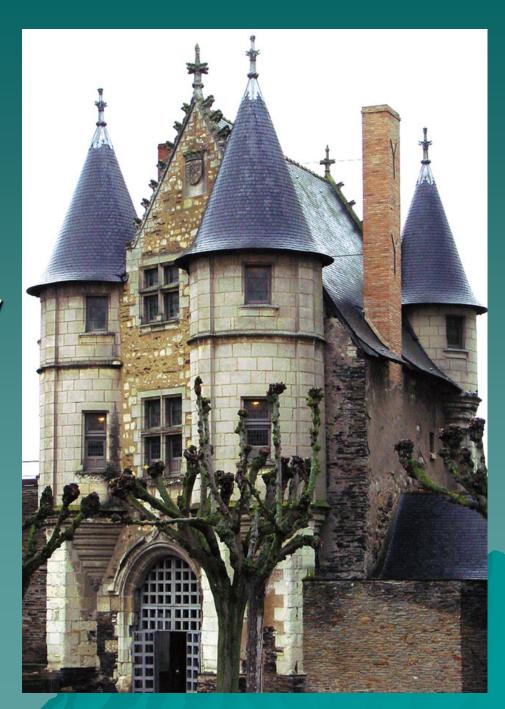
Slate deposits exist throughout the world.



Natural roofing slate has been used for thousands of years on all types of buildings, all over the world.



A correctly installed slate roof can easily last 100 years and can realistically last for centuries.



American roofing slate was first discovered in Pennsylvania in 1734 by Welsh immigrants. Commercial production developed in the mid 1800s. The VT roof below is now 169 years old.



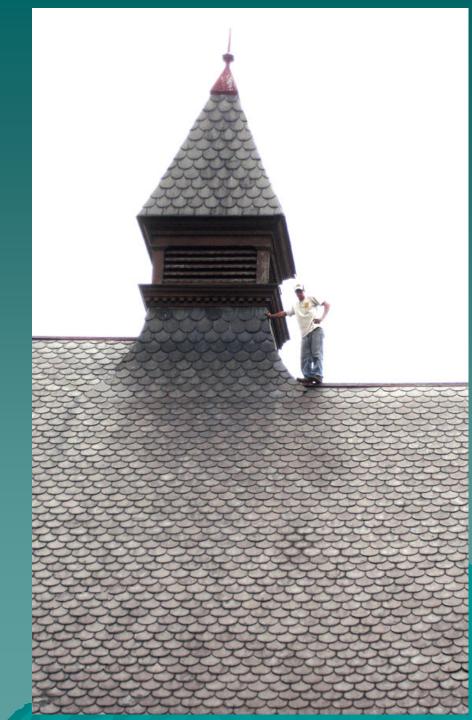
Today, North American slate is quarried in Vermont, Pennsylvania, Virginia, New York, and Canada.



North American slate deposits are still abundant. This is Vermont purple, VT green, and New York red slate.



All types of buildings have been covered with slate, from chicken houses to cathedrals.





Many older homes still have original slate roofs. This 1862 roof is 158 years old, made of Vermont slate. North Americans are proud of our slate roofing traditions and the durability and beauty of our roofing slate.



Various colors of slate are quarried in VT.



Red slate is quarried in NY state.



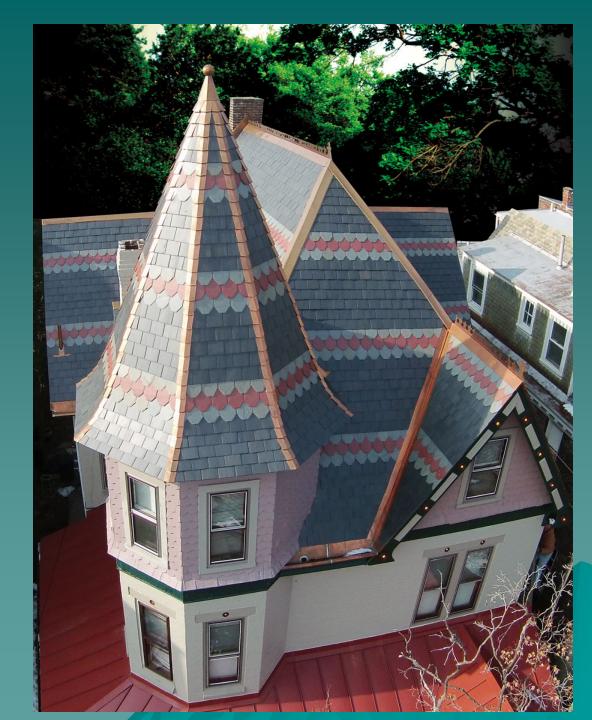
Virginia slate is "blue gray."



This is a blend of Vermont slates.



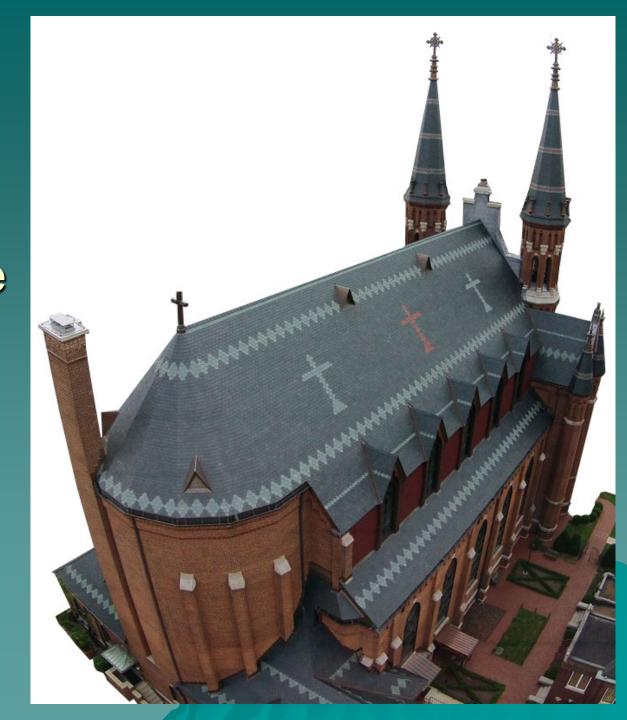
This is a blend of Vermont and New York slates.



This is Canadian black slate.



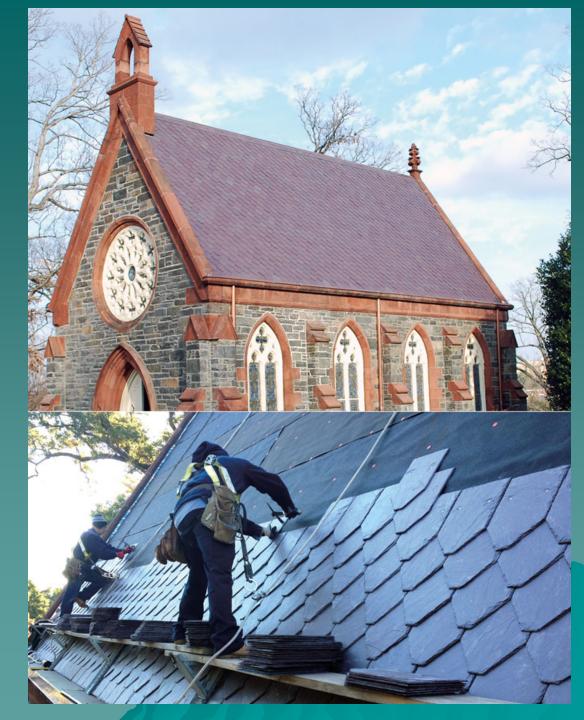
This is
Canadian slate
blended with
Vermont and
New York
slates.



This is a blend of Vermont and New York slates.



This is purple slate from Vermont.



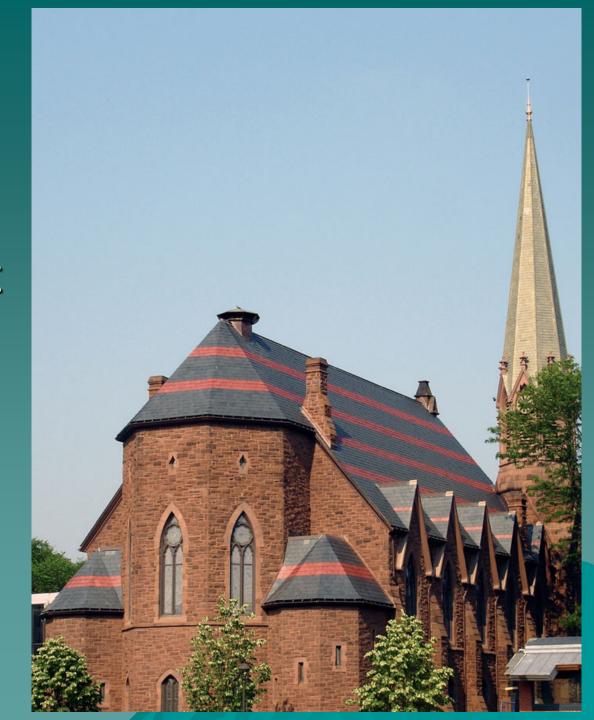
These are Vermont purple and Vermont unfading green slates.



This is Virginia slate with a Vermont "semi-weathering gray-green" design.



This is Vermont black slate with a NY red accent.



Chinese, Spanish, Brazilian, and Argentinian slates are also being imported into the US in large quantities.



This is China multi-color slate.



Spanish slates are primarily black.



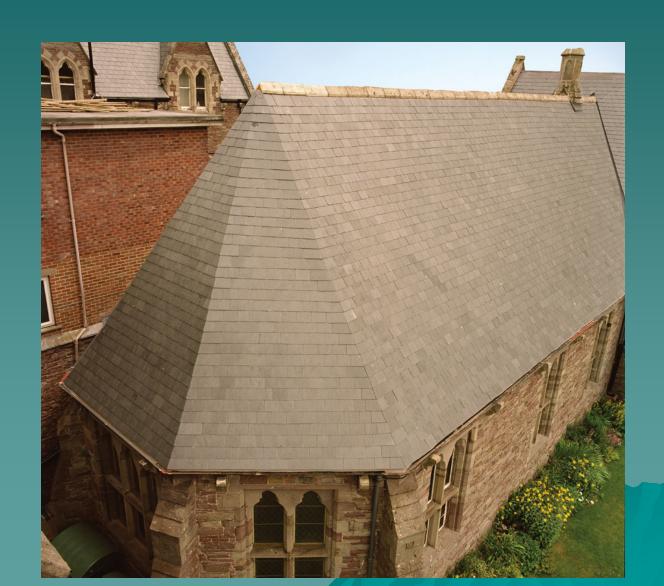
Welsh slate may be purple or black.



This is Welsh black slate with a VT unfading green design.

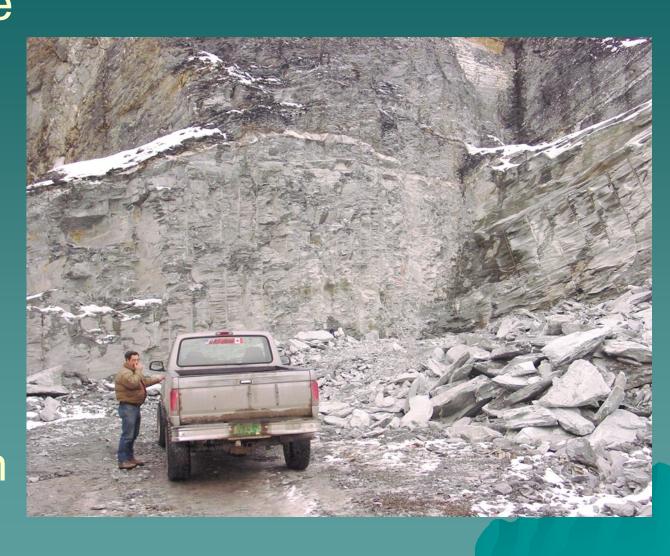


Phyllite slate from Argentina.

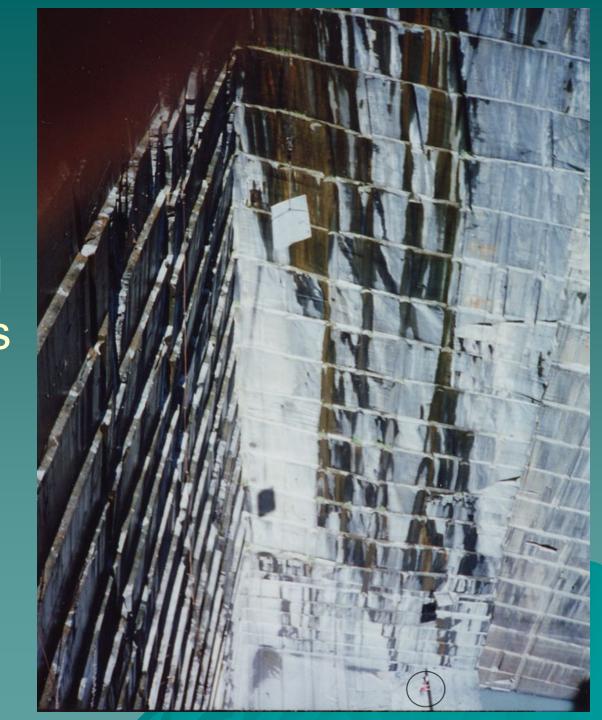


Fabrication and Manufacturing

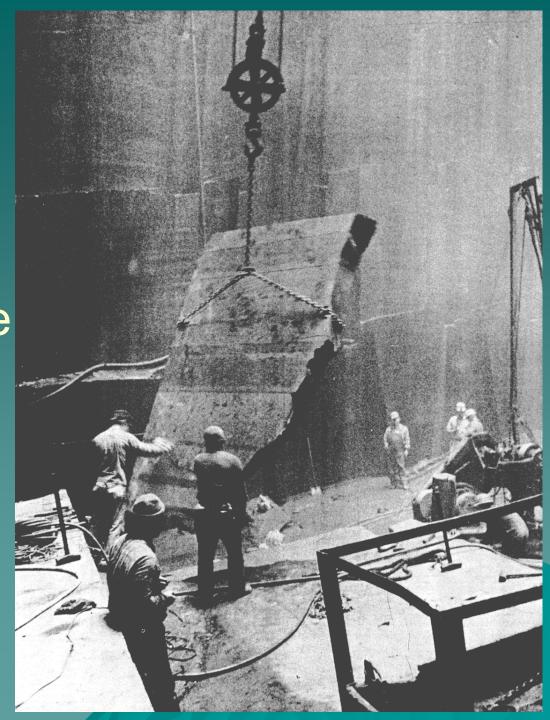
This is a slate quarry in Vermont. Most slate rock in the US is extracted from open quarries such as this one.



This 350' deep PA quarry is carved into solid rock. A worker is circled at the bottom. A block is being hoisted out on a chain.



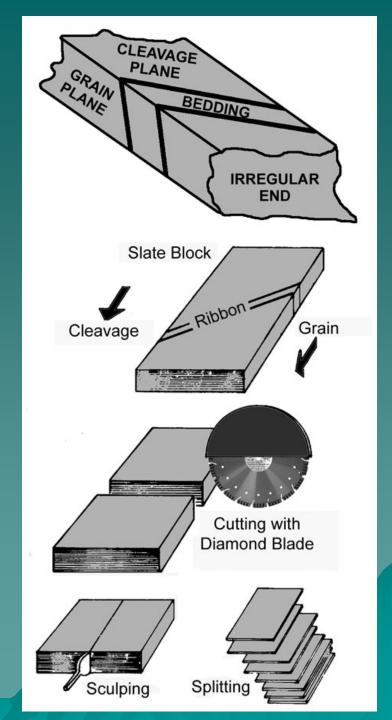
A large block of slate is shown here being removed from an old PA quarry.



Slate blocks are split according to their grain and cleavage plane.



Smaller blocks are cut using a diamond saw.



The smaller blocks are then split into shingles.



The slate is typically split by hand with hammers and chisels.



Each slate shingle is individually hand made.



Manufacturing stone roofing is a very specialized craft.



The slates are individually squared and trimmed to size.



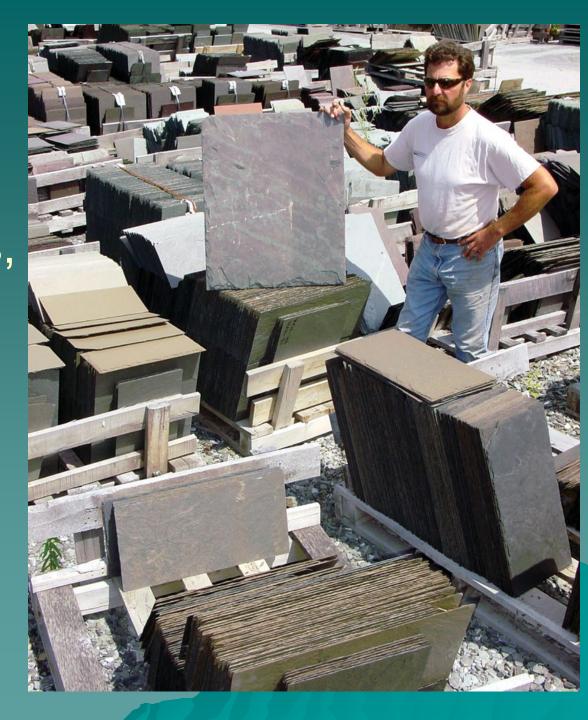
Nail holes are punched into the slates one at a time. Sometimes the slates are drilled.



The finished shingles are then sorted, palleted, and shipped.

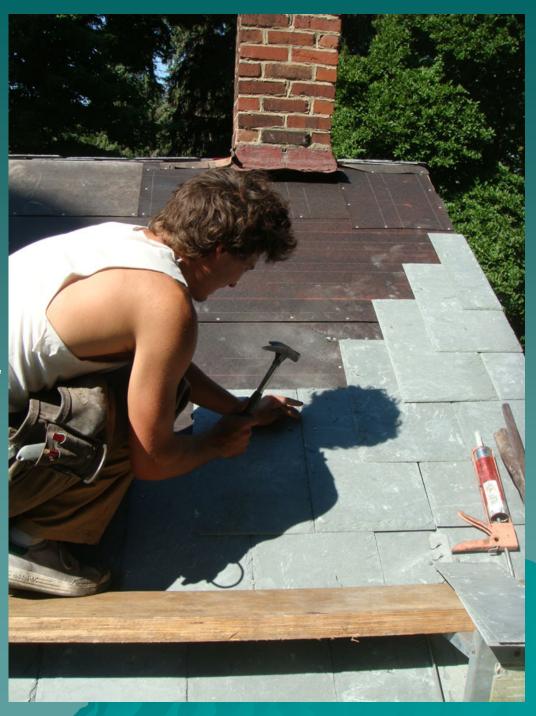


New roofing slates of all sizes, thicknesses, and colors are produced in the US and Canada today.

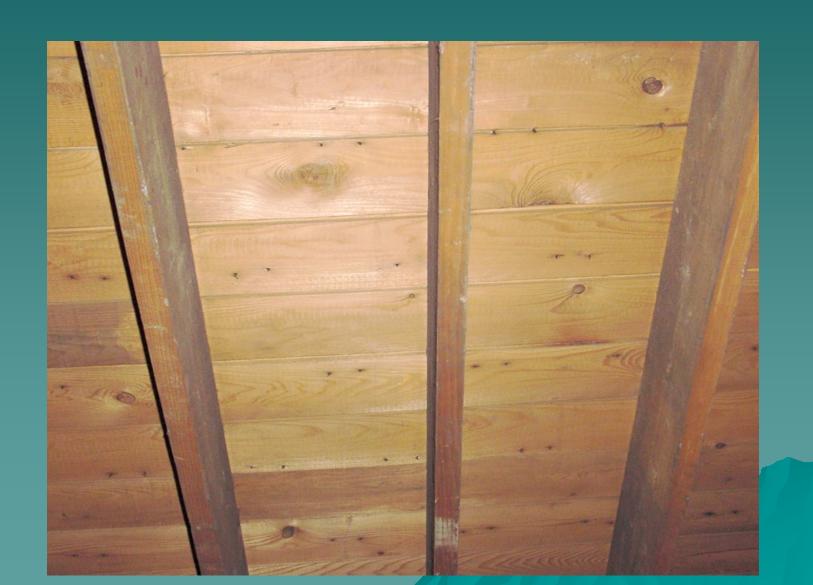


Installation

The finished shingles are fastened to the roof deck with nails.



Solid board roof decks have a proven longevity under roofing slate and can last a century or two.



Sometimes "slating lath" or "skip sheathing" is used instead of wood boards.



Local lumber was traditionally used under slate roofs in the US.



Planed, kiln-dried lumber is also commonly used. Yellow pine boards are shown here being installed on a bank.



VT unfading green slate was installed on the yellow pine decking with stainless steel nails. This roof could last 200 years.



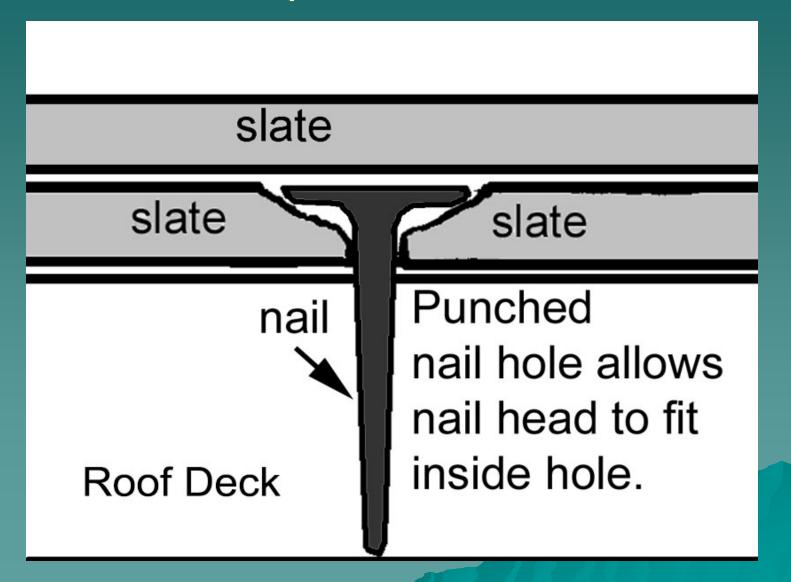
The top edge of the slates are nailed along chalk lines.



Smooth-shank copper nails are commonly used. Stainless nails may be needed on harder decking material

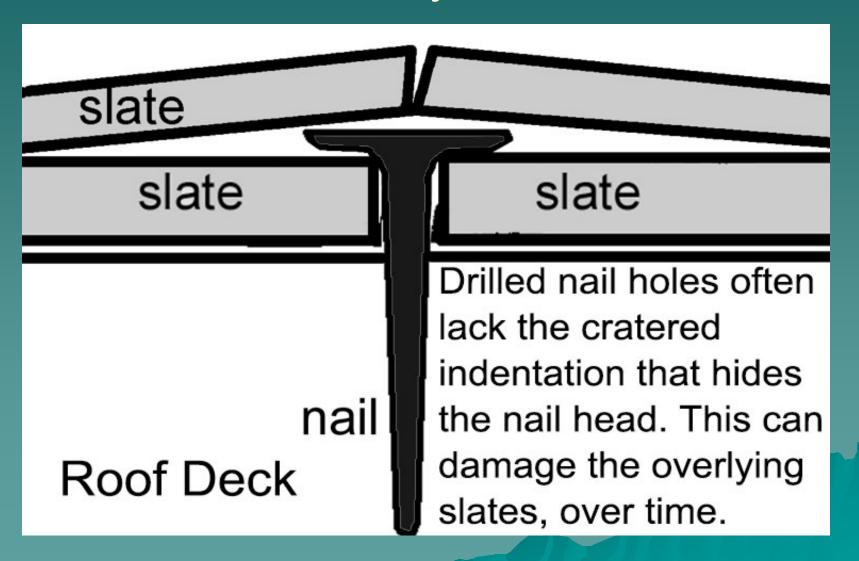


Nail holes in standard thickness slates should be punched, not drilled.



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A nail head can rub against an overlying slate and eventually wear a hole in it.



The hole caused by the raised nail head can eventually cause a leak.



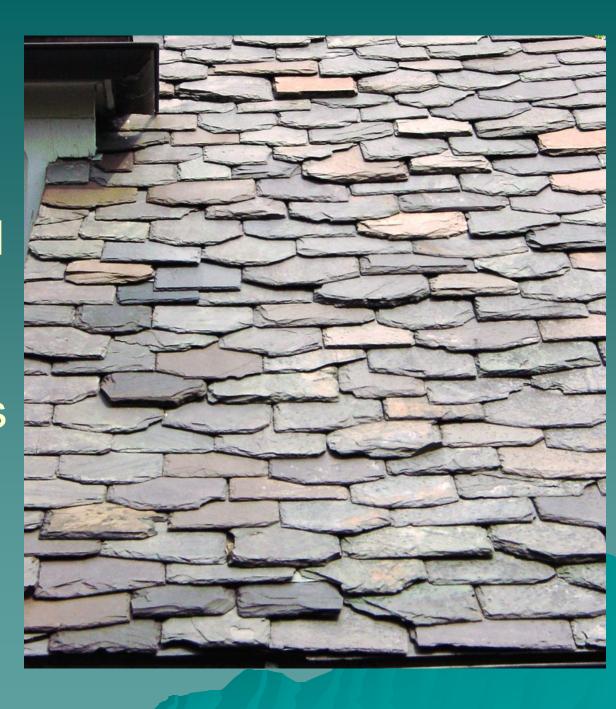
Planks are used on the roof for safety and to prevent foot traffic on the slates during installation.



A 120-year roof on a cathedral is being re-roofed with slates from Wales and VT.



Roof slate is versatile and can be installed in many styles. The wide variety of colors allows for additional artistry.



A slightly staggered Vermont slate roof.



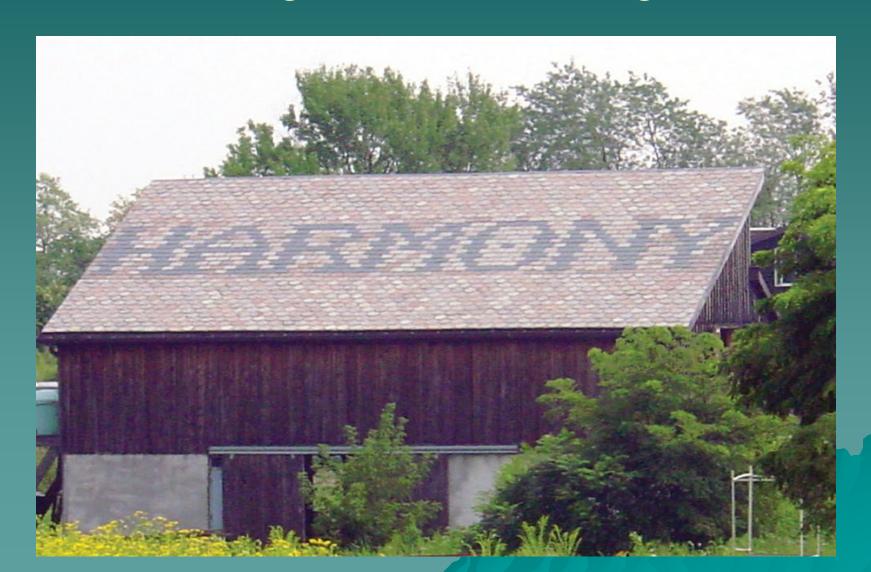
A PA black "textured" slate roof.



Roof inscriptions are a tradition in the US.



It's easy to create a landmark roof using contrasting colors of roofing slate.



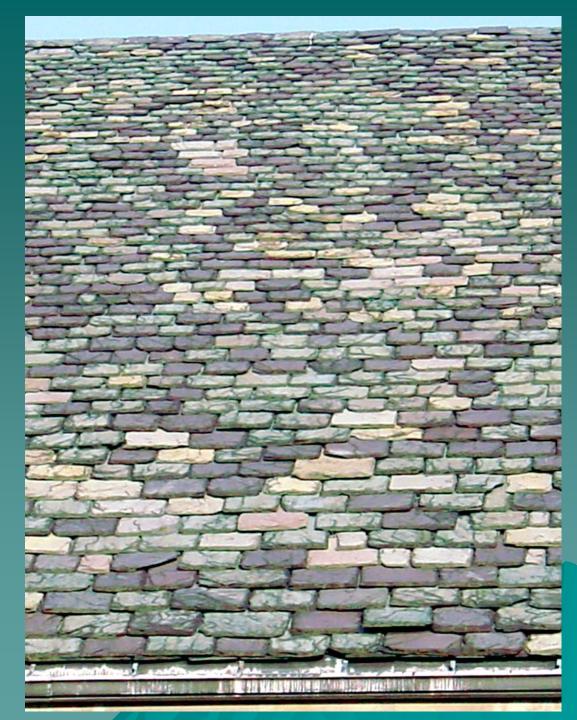
This roof is made of reclaimed slates.



Even modest buildings can look elegant with an artistic slate roof.



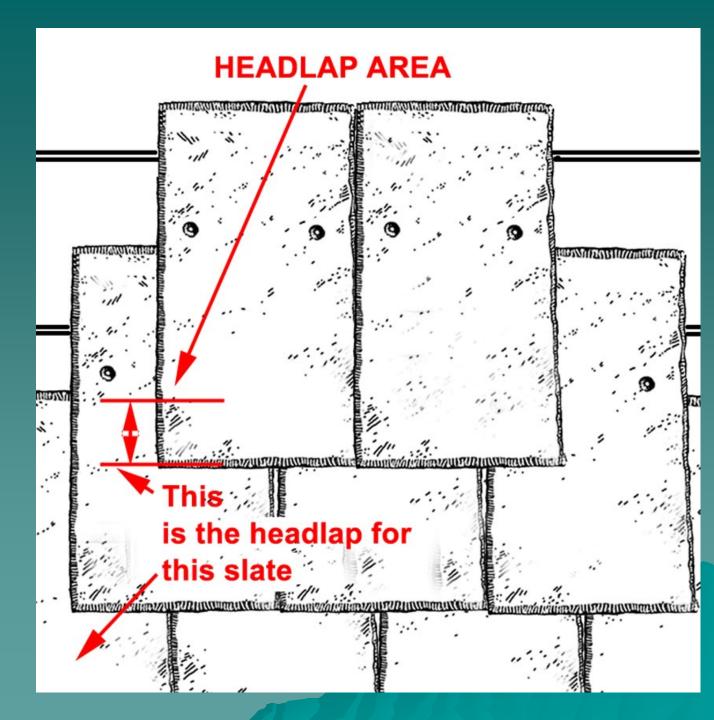
This is a mixed-color graduated slate roof on a chapel built in 1930.



Installation procedures vary from roof to roof.



Proper headlap is critical.



The Slate Roofing Contractors Association of North America Inc. has published slate roof installation guidelines for free download.

General Installation Guidelines for Natural Quarried Roofing Slate

Version 1.5, October, 2017



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Ph: 814-786-7015; Web: SlateRoofers.org; Email: mail@slateroofers.org

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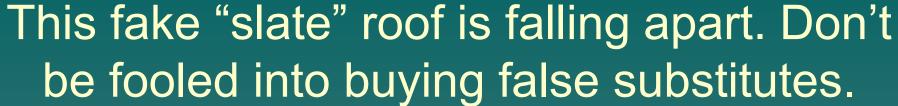
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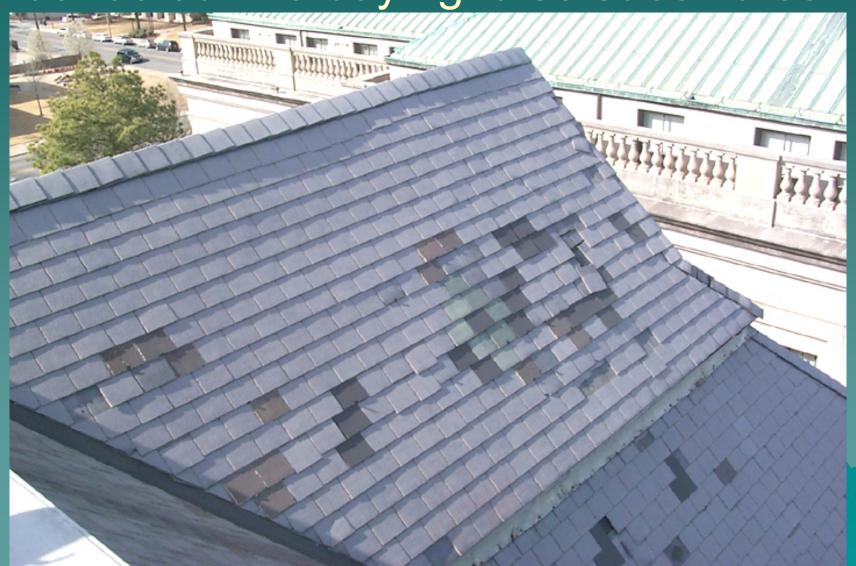
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The SRCA also has a "Fake Slate" web page well worth reviewing.

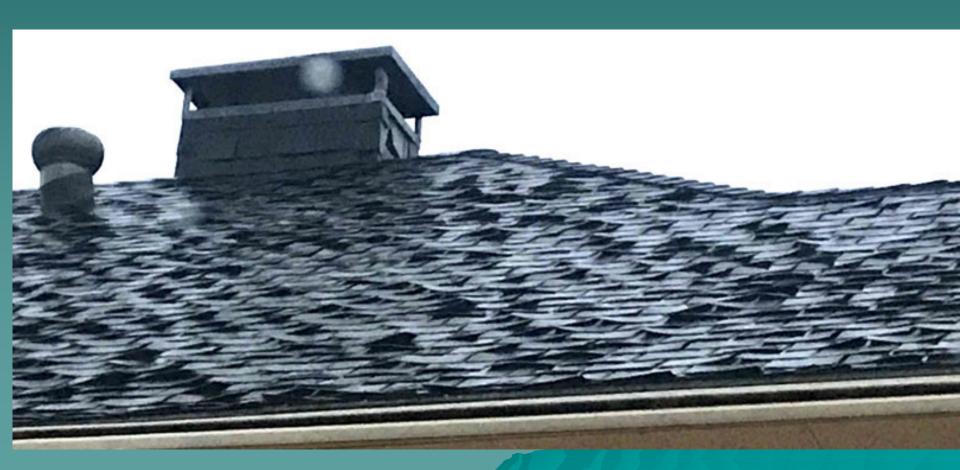


http://slateroofers.org/Fake_Slates.html





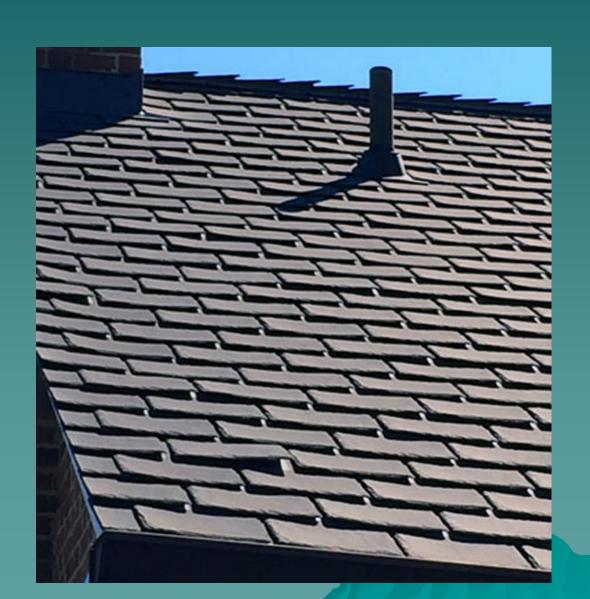
If the "slate" is rubber, plastic, faux, composite, synthetic, or engineered, it's NOT SLATE!



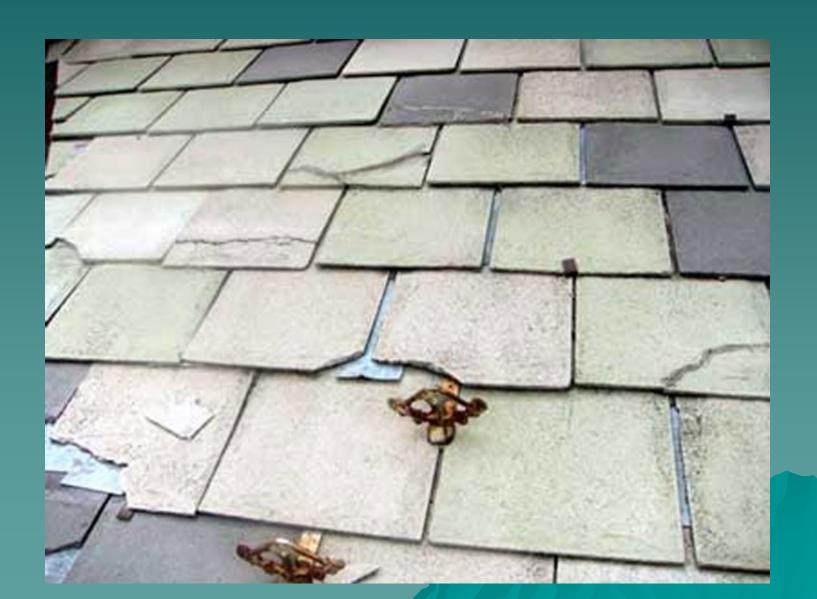
Rubber shingles are not slate!



Plastic shingles are not slate!



Composite shingles are not slate!



A natural slate roof is the least expensive roof over the lifetime of the roof system.



The SRCA has developed slate roof installation training courses and slate roof repair and restoration training courses, as well as various slate roofing educational seminars.



Please visit our web sites for more information.

Slate Roof Installation Guidelines can be downloaded free online:

- http://slateroofers.org/downloads/SRCA_Installation_Guidelines.
 pdf
- Find additional information at SlateRoofers.org: Contractor List, Source Lists for new slates, salvaged slates, and architectural sheet metal, etc.
- SRCA Training courses are available.
- Additional SRCA educational seminars are also available.
- http://slateroofers.org/training.html

QUESTIONS?