

Slate Roofs

If your customers want a princely kind of roof, they can expect to wait a full year for Buckingham slate from the Virginia quarry. Due to backlogs and growing demand, the country's leading roofers often deal in antique slate salvaged from buildings facing the wrecking ball.

The roof on Jack Wagner's home in McLean, Va., tells a story about a building product industry that may be on the downswing despite an unprecedented demand for its goods.

The roof is made of Buckingham slate, so-called because it is mined at a quarry in Buckingham County, Va. But when Wagner wanted to reroof his house, he had to comb the country for a slate supplier. A severe backlog of orders at the quarry drove Wagner to Rhode Island where he salvaged Virginia slate from a 75-year-old church for his own house built circa 1923.

The use of slate for roofing "is off the charts," says Wagner, who is president of J.S. Wagner Co., a roofing company operated by his family since 1914 in

Hyattsville, Md. Just a few working slate quarries exist today compared to 1953 when demand was far less.

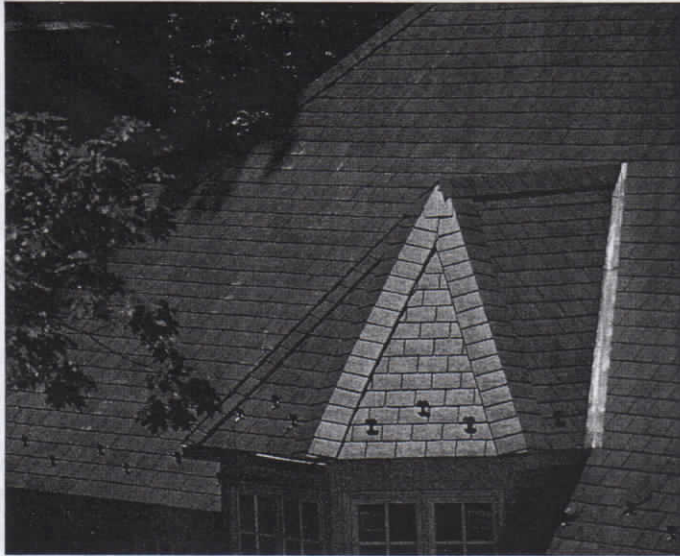
Roofers can wait up 14 months for Buckingham slate, a black sedimentary rock considered to be one of the finest and most durable roofing materials in existence. Wagner is doing more slate work than his father did in the 1930s and '40s when the business was in its heyday. The shortages in domestic slate production means he has to turn to European sources for much of what he needs.

Besides the Virginia slate, the other quality rock being quarried in the United States comes from a region of Vermont and adjoining territory in New York. Bangor slate, which is quarried in Pennsylvania, is inferior because its

lifetime is about 40 years, insists Wagner. That charge has often been disputed, including in this magazine, by the slate producers and dealers in Pennsylvania.

Paging through a reference book on slate, Wagner pointed out an English chapel built in 800 AD at Stratford-on-Avon that has its original slate roof. Many other buildings in Europe have slate roofs, which have weathered for more than five hundred years: "They won't accept less like we do," Wagner says.

The slate industry faces a threat of foreign competition and investment in U.S. operations as serious as that felt by domestic auto manufacturers, Wagner believes. Quarries in France and Spain produce slate that is priced about



Pretenders on the slate scene are mineral fiber roofing shingles from Supradur Manufacturing Corp. Shunned by authentic slaters, Supra-Slate fiber reinforced concrete shingles are nevertheless making inroads as a substitute for the real thing. Approaching its 75th anniversary, The Wagner Roofing Company seeks out workers who have some interest in learning the trade and then trains them on the job.

50 percent lower than domestic slate due to different labor rates, he said. French slate quarries use automated equipment for mining and manufacturing processes that are 20 years ahead of U.S. production methods, Wagner estimates.

French slate roofers, called slaters, have devised a system for installing slate roofs that does not require a hole in each piece for anchoring. The free-floating method uses hooks secured to strips of wood batten to hold each piece of slate in place. St. Paul's Church in Centreville, Va., and a building at the Talisman Farm in Graysonville, Md., are the only two structures in the United States known to have been roofed using the French technique. The method allows for expansion and contraction, thus reducing breakage and lessening the chance of leakage.

Wagner's firm employs about 100 roofers. Sometimes desperate for qualified slaters, he has gone to the State Department to get permission to hire foreign workers, but government officials do not consider the occupation to be a critical skill. Nevertheless, the White House waited five months for security agents to clear Israel Shimberg, a skilled metalsmith from Kiev and still a Russian citizen when employed by Wagner Roofing Co., to do a day's job repairing a downspout.

In the early 1970's Wagner spent two

and a half years repairing the slate on the White House, the Blair House, and the old Executive Office Building. The office building is roofed with Peach Bottom slate, a dark stone with a purplish hue that is no longer mined in Maryland. Although the demand for slate roofing is at its zenith, according to Wagner, there are no unions or schools to train or represent slaters.

The decision to roof with slate involves a number of considerations. On the average, a slate roof costs \$8 a square foot for materials and labor, or about five times as much as asphalt shingles. Apart from the aesthetics a slate roof offers, owners should consider the length of time they expect to say in a home. Buckingham, Vermont, and some European slates provide lifetime durability when they are installed properly with rustproof anchors, Wagner maintains. He cautions, however, that the roofs require routine and periodic maintenance. Flashings, hips, ridges, and valleys will have to be checked, pointed up, or replaced.

Because slate roofs weigh about 7 pounds per square foot, materials for a typical 1500-square-foot roof will add over 5 tons to the framing and foundation members. Wagner recommends that an engineer always be consulted to check the design of a house before roofing with slate.

Wagner attributes the soaring popularity of slate in residential build-

ing in large measure to "the era of megawealth.

"With the advent of megahouses, people don't stop with four-car garages; they go all the way with a slate roof."

Although some modern technology is invading slate quarrying abroad, the trade itself is basically unchanged in more than six centuries. Slaters still use a zax, a multi-purpose tool, to punch nail holes in the material and trim and size pieces used since the Middle Ages. In his own work, Wagner uses tools passed down from grandfather and father. Some of the equipment dates from 1898.

Like slate now on his own house, much of the material Wagner works with is antique, taken from buildings that have fallen down or are about to be demolished. Antique slate gathering, inspecting, and sizing is a new industry that has spawned a number of entrepreneurs. In contrast to the shortage of new domestic slate, antique slate is normally available from suppliers at about the price of new product.

"You get a feeling of accomplishment when you tear out a piece that you can't match, call around the country, and find it," Wagner said with a smile.

Although slaters like Wagner have lists of clients with names out of Who's Who, he and his colleagues get much satisfaction when they "do a house for Mr. and Mrs. Jones."—Dave Goska

For More Information

Custom Builder checked with quarries early in July. Delivery times for residential slate were running about four months. But the wait was 12 months at Buckingham. Business can have seasonal lulls, so to speak, and some styles and sizes can be ordered more quickly than others. In any case one of the first things builders and architects should do together with their clients is order slate for the project. You can get samples. Vermont Structural Slate says it sends boxes to as many as 15 prospective new customers a week.

The quarries we know about in Pennsylvania work with wholesale distributors and don't normally deal directly with customers. So that you'll at least have some contact point with suppliers in Pennsylvania, we've listed a company there that deals mainly, but not exclusively, with structural slate applications, and has helped us with information about roofing slate in the past.

There is no longer a national trade association for slate although many organizations represent allied manufacturers in the building stone and marble industries.



Roofing two new homes with Vermont slate.

Buckingham-Virginia Slate Corporation, 4110 Fitzhugh Avenue, P.O. Box 11002, Richmond, VA (804) 355-4351

Evergreen Slate Co., Inc., 68 Potter St., Granville, N.Y. 12832 (518) 642-2530 (518) 642-2530

Structural Slate Company, 222 East Main Street, Penn Argyl, PA 18072 (215) 863-4141

Vermont Structural Slate Co., Inc. 3 Prospect Street, P.O. Box 98, Fair Haven, VT 05743 (802) 265-4933

Mineral fiber roofing shingles, a slate substitute, are manufactured in colors resembling quarried rock by Supradur. They are made of Portland cement, silica, and asbestos. The company says that none of its products in place are capable of emitting any measurable quantity of fibers, and it has test results from a residential installation where all air samples were below OSHA's action guideline for asbestos fibers.

Supradur Manufacturing Corp., P.O. Box 908, Rye, N.Y. 10580 (914) 967-8230 **Circle No. 81**