

MAY 2007

# Masonry Construction

The World  
of Masonry

hanley wood



# Veneers

## Cut Stones Creating Residential Masterpiece

Source: MASONRY CONSTRUCTION MAGAZINE

Publication date: May 1, 2007

By John Deneufville

John DeNeufville is a Harvard-educated geologist turned industrial researcher-physicist, turned electronic and chemical manufacturing entrepreneur. When John and Suzanne, his wife of 40+ years, decided to build a new home in Mendham, N.J., the village where John spent his childhood, they hired their friend and noted New York architect, Jack Beyer, Beyer Blinder Belle, to design it. They asked him to create a rustic, but energy-efficient, home featuring recycled stone.

Mendham, a Pre-Revolutionary War Town in Northern New Jersey, population under 2,000, boast many of the nation's finest homes. The quaint colonial village founded in the 1750's has retained most, if not all of its original charm. The areas forested, hilly terrain is now spotted with barely visible multi million dollar homes set acres back from the narrow lanes carved into the earth by the original farmers that settled the area.

The DeNeufvilles selected John Flower, Flower Construction, located in Mendham less than a mile from the construction site, to build the residence. He accepted the multiple challenges of this project, which included the requirements to select attractive wood grown in a certifiably sustainable manner, and to locate stones that would be acceptable to John (a geologist) and the demanding architect.

The 320 tons of stones chosen came from a demolished old stone barn located near Easton, Pa. Some of

these stones were as large as 12 in. x 24 in. x 36 in.

The stones turned out to be quartzite — a rock created from the metamorphism of sandstone, itself former beach deposits, transformed by heat and pressure into a homogeneous, absolutely impervious dense rock composed largely of quartz. Quartz, the hardest and most chemically inert of all common rock-forming minerals, is the main component of marble and limestone.

However, unlike mica, a key component of granite and calcite, quartz has no "cleavage," which means quartz fractures without parallel planes. It is the presence of such parallel orientations that enables the easy fracture of all other stones. Accordingly, huge quartzite stones are a very difficult material from which to create an 8-in. elevation veneer, which was required by this residential project.

Marty Falbaim, a local stone mason contractor and craftsman, accepted the job. But little did Falbaim know of the huge challenges he would face. The contractor started the job, worked hard, but progressed very slowly.

The owner wondered if there where any machines that might speed up the process of constructing a house veneer from a special stone, but was greeted with skepticism. "I got on the Internet one evening and managed to locate a company called Block Shear LLC, which made pneumatic and manual stone and masonry splitters,"

said DeNeufville. "The company was owned and operated by Ray Lackner, a former steel industry executive with a long history of designing industrial equipment, mostly for the recycling and refuse industry." All this from a CPA who's other day job is assisting distressed companies restructure/turnaround their operations and finances.

As it turned out, Lackner was scheduled to be in Edison, N.J. the following week, which was less than one hour away by car. He volunteered to come over and have a look at the mountain of quartzite stones, and was confident his machine could do the job.

A few days later a pneumatic Block Shear splitter revved up and begun to split quartzite stones on the estate in Mendham. "It has greatly improved the rock-splitting productivity of Falbaim's team," said the home owner "There are easier rocks to split than quartzite, but chances are slim to none of finding stones with the same natural beauty and durability.

"We are delighted with the stone mason's walls, and he is very happy with the Block Shear. When the job is completed on time and on budget, this stone splitter will be my gift to him," concluded DeNeufville.

This article was contributed by John DeNeufville and Ray Lackner. For more information about the stone splitter, visit [www.blockshear.com](http://www.blockshear.com) or contact Ray Lackner at [ray@blockshear.com](mailto:ray@blockshear.com), 412-445-0703.