

PERSONAL ECONOMY

Dwelling from discards

By Sarah Tanksalvala



Bob Verrier turned an old, abandoned water mill into a bright, modern dwelling

Bob Verrier says he never met an old building he didn't love. That's why he spends his days recycling them.

Sometimes it's using reclaimed oak from 200-year-old piers; other times, it's turning an old mill into a new house. He's just one person participating—both as an architect and a homeowner—in a growing trend of salvaging discarded materials to use in new homes.

"Every time you recycle something, you're doing the world a little good," says Verrier, a Boston-area architect known for reinventing historic and abandoned buildings. "These [recycled materials and buildings] are valuable; people cherish them."

The trend is as varied as the materials people throw away. Some families and people are turning old shipping containers into cozy and functional homes for their families. One family in England turned a hillside into their very own hobbit hole. A man in Texas makes low-income housing entirely out of things others might consider trash, from aluminum cans to license plates and crystal platters.

New York-based architect Andrew Franz, though, says there are some important considerations for anyone thinking about building with recycled materials. It can be harder to get them certified as structurally sound, because the testing requirements weren't in place when many historic buildings were constructed. He also notes that importing reclaimed materials from far away may be less green than simply using new ones, but if the materials are going to be imported anyway, using salvage can again be more eco-friendly. He also says people have to be flexible approaching these projects.

"It adds a degree of complexity," he says. "It requires more extensive calculations and testing to ensure lumber meets building code requirements, and just finding materials you're looking for."

What's Old Is New

People are embracing this style of building for a number of reasons. The first is simply that many of the materials people used in the past are of higher quality than those available today. Teak wood was harvested at a more mature age a century ago, giving the wood a distinct character that today's younger wood lacks. Hard pine isn't even available anymore except in salvaged form.

For homeowners, this means longer-lasting, more durable and prettier materials with a unique character and history. The opportunities are virtually endless, from Italian terra cotta to historic wrought iron or even old subway tiles. They're also almost impossible to replicate. As society moves more toward cheaper, disposable materials, these high-quality relics become more and more unique.

"For the most part, they're being used to instill a certain aesthetic character in the projects," says Franz. "They're there to complement an existing image, or to create an image that isn't there."

While higher-quality materials offer clear benefits to homeowners, they're also good for the environment. The short-term impact of using salvage is to keep materials out of landfills and give them a second life while preventing the need for more materials to be created. The Building Materials Reuse Association (BMRA) estimates that 25% to 40% of landfill is comprised of old building materials.

"The more attention people pay to building with high-quality materials, the greater the impact down the road," notes Anne Nicklin, head of the BMRA. "Reused materials are of a higher quality—solid wood, masonry—typically things that can withstand time. By using reusable materials, we ensure the future opportunity for salvage and not creating a long-term landfill obligation."

Salvage can be used to build any part of a house, or the entire house can be a recycled building. Repurposed granite curbs can make excellent foundation stones, recycled bricks mean energy doesn't need to be expended to create new ones, and old fixtures create a one-of-a-kind accent to a home. Moreover, repurposing and salvage create a form of historic preservation, where threads from the past weave their way into modern life.

"The important thing is these buildings are icons of their communities," Verrier says. "The mill was the focal point, like a church, of the neighborhood. So when we restore these vacant structures, it brings vitality back to the neighborhood."