

What Goes Up Must Come Down

Deconstruction offers a green alternative to demolition

By Heather C. Jackson

Building a green home or renovation takes a lot of research. There are many ways to make a home environmentally friendly and energy efficient. Consider looking for recycled building products—windows, doors, appliances, fixtures and even paint can be found secondhand at several area resale centers. However, it is not just what's going up that matters when building or remodeling an environmentally conscious home. It is also what comes down.

DECONSTRUCTION

When starting a remodel or tear-down, remember that all the materials being torn out are going to have to go somewhere. That's where the idea of deconstruction versus demolition comes in. Started in 2004, DeConstruction Services in Fairfax, Virginia, specializes in "reverse engineering. We work from what the builder put in last, and move backwards," says owner Paul Hughes.

When doing a whole-house deconstruction, Hughes says the company can salvage as much as 80 percent of the materials in the home to either reuse or recycle. While this percentage is lower for partial tear-downs and remodels, they are still able to salvage a large amount of what could otherwise end up in a landfill.

Starting with appliances, DeConstruction pulls out all the interior fixtures and trim first, donating as much as possible to such area resources as Community Forklift to be reused and resold. Recycling is divided into bins of wood, metal and shingles, and then drywall and plaster are pulled out. After gutting, workers start at the roof and pull everything apart—even all the nails from the studs—until all that is left is the concrete slab. Windows, doors and clean insulation are added to the donation piles whenever possible. Brick construction is considered "clean masonry" when it is fully gutted, and is left in place until a builder can excavate it along with the



In this deconstruction by Poste-Mellor Architects, all windows, doors and architectural elements that could be recycled are removed prior to demolition (top). Second Chance has five warehouses full of building materials salvaged from deconstruction (above and left). Photos © Alan Gilbert

concrete and have it sent to a local aggregator to be broken down and reused in road construction.

"Our goal is to keep as much of the deconstruction out of the landfill as possible," says Hughes. All salvageable supplies that are donated are tax-deductible. While the process as a whole is more labor intensive than a knock-down demolition, the tax deduction usually pays for most of the job. DeConstruc-

tion will also provide documentation if a builder or homeowner is seeking LEED certification.

Many of the crew at DeConstruction started out in the inner city, in at-risk situations, but have gained training and full-time work through the organization. Second Chance Inc. in Baltimore was founded in 2003 under a similar principle—as work force development through the Baltimore City Mayor's Office. Homes to be deconstructed are donated to the program as training sites where low-income residents can learn skills such as carpentry, craftsmanship and an understanding of how to deconstruct a building without damaging historical elements. They have branched out job-training programs into Washington, DC, and Philadelphia as well.

Second Chance's other purpose "is landfill diversion," says acquisitions manager Ann Fingles. Once a home is donated to the program, it will be carefully deconstructed, with historical and architectural detailing going into one of five Second Chance warehouses in Baltimore for resale. These warehouses carry everything from fireplace mantels and windows to garden ornaments and claw-foot tubs. Anything that is not selected for resale is recycled or donated to other home improvement initiatives. Second Chance offers several programs, from full tear-downs to skimming—clearing out all the fixtures and details prior to a renovation—and occasionally performs smaller room removals for Kitchens and baths.

"We all need to start paying more attention to the impact construction has on the

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