

## Rastra Can Be a Big Green Money Saver

Rastra saves builders money, and it's environmentally kind.

By Chuck Ross

It can be cheaper to work with than standard wood framing; it's as strong as reinforced concrete; and, to top it off, its main ingredient is recycled, post-consumer polystyrene — better known as Styrofoam. So it's no surprise that the increasingly popular construction material called Rastra is currently in short supply.

The product is manufactured in blocks that resemble giant honeycombs. Each block is 10 feet long, 10 inches thick and 15 inches high, with cores for steel reinforcing bar drilled through the product every 15 inches. The blocks can be cut using a chain saw. Builders stack these basic units on top of each other, hold them in place with staples or urethane glue, and pour concrete.

The assembly goes quickly, too, which saves money on labor. "I usually use a four-person crew – one cutter, one person taking measurements for the cutter and two stacking blocks," says Frantz Ostmann, a Park City, Utah-based contractor who says he's worked on about 40 projects using Rastra over the last 10 years. "With that crew, I can stack and grout a 1,700-sq.-ft. basement in one day, and move on to the main floor the next day."

## Saving time and money

Ostmann adds that rising construction costs also are making Rastra competitive with traditional wood-framing methods.

"Using 2x6 as the norm, I can usually save people about 10 percent on their overall construction cost," he says. "It used to be that Rastra was approximately 15 percent higher than conventional framing. Now with the rising cost of lumber and framing labor going through the roof, the cost of Rastra has reversed itself."

Advocates of the material also note that it requires no additional insulation or treatment prior to interior or exterior finishing — another labor- and time-saving bonus. Rastra wall has the same expansion coefficient as a brick or concrete wall, so contractors can stucco directly over the material. Interior drywall can be glued directly to Rastra using drywall plaster, says Ray Taylor, a Park City-based designer and Rastra dealer.

"The resulting wall becomes a self-insulating monolith," he says.

## **Availability woes**

Demand for Rastra exceeds supply these days. "In Arizona, where we produce the material, we have a 13-to 15-week lead time," says Walter Amon, a vice president in Rastra's Scottsdale office. "A lot of our customers are coming to us through recommendations from their friends and families."

The biggest drawback of the material is that the beam-like blocks are too heavy to be shipped affordably beyond 350 miles. A second production plant is scheduled to begin operations by summer 2007 in

Columbus, Ohio, supplied by raw material that would otherwise end up in the city's landfills. Additional negotiations are underway in Florida, Texas and Nevada, Amon says. As the company looks for sites for future plants, it focuses on areas near landfills — not property that's usually considered prime real estate, but convenient for a business that uses post-consumer materials.

Demand currently runs about five times what Rastra's makers are able to supply, according to Taylor, so there is a strong possibility is strong that builders soon could be fielding client questions about what is currently a niche product. Amon believes expanded adoption of the product will be aided by a design that he sees as making building with the product as easy as child's play.

"If you're able to play with Legos, you're able to work with Rastra," he says.

Chuck Ross is a freelance writer based in Brewster, Mass.