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## Case Study: Michigan Group Home Combines Accessibility and Sustainability

Detroit-area dwelling for residents with physical and developmental disabilities features high-performance technology.

By: [Jennifer Goodman](#)

A Detroit non-profit serving people with developmental disabilities has built one of the country's first sustainable and accessible group homes.

[JARC](#), a 40-year-old organization that operates 20 group homes in the Detroit area, recently opened the Farmington Hills, Mich., dwelling to six women aged 30 to 70. With the main focus on barrier-free living, project planners also incorporated heavy-duty high-performance features into the 3,200-square-foot home.

The dual nature of the four-bedroom home means that curbless showers, bathroom grab bars, roll-under sinks, extra-wide doorways and ramps were speced along with a geothermal HVAC and hot water system, Energy Star-rated appliances and light fixtures, cellulose insulation, and super-efficient windows.

Many of JARC's clients have physical limitations as well as cognitive or developmental disabilities such as autism, cerebral palsy, or Down syndrome. All of the organization's homes are staffed 24 hours a day.

"We first wanted to meet the physical needs of our folks then looked at every element which made sense from an energy-efficiency standpoint," says former JARC CEO Joyce Keller, who helped to plan and implement the project.

JARC officials worked with West Bloomfield, Mich.-based builder [The Frankel Organization](#) to make sensible sustainable choices without busting the \$500,000 budget, most of which was raised through donations and grants.

"When you have a certain budget to work with, you have to consider what features will have the best payoff," Keller says. "We were always considering energy efficiency as our No. 1 green priority when we made those decisions."

For example, some tradeoffs had to be made in order to keep expenses down, Keller says, such as having to

forego pricey but locally sourced interior doors. Outfitting the home with a solar system was also too costly, but it is sited, wired, and plumbed to be solar-ready.

Other high-performance features include 1.28-gallon low-flow toilets, ultra low-flow faucets and showerheads, a two-zone heating/cooling system with programmable thermostats, renewable bamboo flooring and window treatments, and wood-composite decking. It is certified as an Energy Star New Home by Cornerstone Energy Conservation Services of Columbus, Ohio, which signifies that it is at least 15% more energy efficient than homes built to the 2004 International Residential Code (IRC).

### **CURB APPEAL**

Besides accommodating residents with special needs, another important goal of the project was that the house be attractive and fit in with its traditional-looking neighborhood. A small 1950s Ranch formerly sat on the large double lot.

“We get so many calls about that house from people driving by; it’s so quaint and charming and has a very warm and cozy feel to it,” says Laurie Frankel, Frankel Organization partner.

Neither the sustainable nor the accessible elements of the home are apparent to passers-by, notes Frankel Organization partner Mark Frick.

“You’d never know this was a green or a group home,” he says.

Although this was the first sustainable project for the builder, it won’t be the last, says Frick. The Frankel Organization recently became a member of the area’s local green building program, [Green Built Michigan](#), and plans to solicit more green jobs, particularly energy-efficient retrofits.

“When we started it seemed like it would be daunting to build a green home, but it really wasn’t,” says Frick. “We’re now hoping to use green and energy-efficient building as a niche to help us through this downturn.”

As for JARC, many of its future projects also will have an environmental aspect, thanks to the lessons learned on this project. “This is going to drive the future of what we do,” says CEO Rick Lowenstein. “As we decommission and renovate our homes it’s likely that we could build green homes to replace them.”

Most important of all, Lowenstein says, the home’s residents are “ecstatic” about life in the cutting-edge new dwelling.

“Even though it has a lot of green technology, they find it so user-friendly,” he says.

*Jennifer Goodman is Senior Editor Online for EcoHome.*