

# residential design & build

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inspiring architects and custom builders

High-end design,  
world-class green

Building the 2009 HGTV Green Home  
Harvesting wind power at home  
Understanding under-counter appliances

Building the 2009

# HGTV GREEN HOME



### Green indoors and out

The front porch of the 2009 HGTV Green Home overlooks a large lake. A grass lawn with plenty of drought-tolerant plants surround the home. In the outdoor living space in the back yard, an outdoor four-poster daybed sits with a mattress covered in an all-weather outdoor fabric. Indoor/outdoor rugs have been bound to create area rugs and draperies hanging from all sides.

Across from the two patios is an island deck with a state-of-the-art grill that includes a griddle and preparation space. It is far enough away from seating areas to keep smoke to a minimum. For even more relaxation, an 18-ft.-long bocce ball court is included.

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For more information on Building the 2009 HGTV Green Home visit [hgtvpro.com](http://hgtvpro.com)

*This year's project is in Port St. Lucie, Fla., and is packed with many green features*

The 2009 HGTV Green Home is in Port St. Lucie, Fla., and once again HGTVPro.com documented its construction. Following are some highlights of the construction process. For more information on Building the 2009 HGTV Green Home, visit [hgtvpro.com](http://hgtvpro.com).

To enter the 2009 HGTV Green Home giveaway, please visit [hgtv.com/greenhome](http://hgtv.com/greenhome).

**T**he Spanish-style HGTV Green Home was custom-built yet designed to complement other properties in the neighborhood.

### Building quickly

This house went up quickly. The team building all HGTV Dream Homes doesn't work on a normal building schedule — it works on a TV schedule. The team has plans in place for shows, sweepstakes, you name it — not to mention the unveiling. The first 25 days of the



**A solid ICF foundation**

The 2009 HGTV Green Home's foundation is constructed of insulated concrete forms. The builder, Leon Camarda, LEED AP, project manager at Core Communities, Port St. Lucie, Fla., used a Styrofoam product that accepts concrete in the core and provides an amazing R value to the home. "We looked at all the different products available and ICF for a green home is probably the best you can get," he says.

Corners and straight pieces are put together almost like Legos, says Antonio Toro of Fortified Structures Group in Longwood, Fla. "They stack with a running bond like a brick. It has ties in the middle that hold it in place. They act like a skeleton that hold the sides together. It serves as a form material while we're pouring these walls," he explains.

The result is solid poured concrete walls. Once the braces are removed, the insulation stays in place. "Everything is supported by these walls," Toro says. "They are structural concrete beams and columns that are going to be supporting the majority of loads, so that's where we're going to get more freedom for the interior design."

ICFs stand up well to hurricanes, fires and tornados, but also are used for energy savings.

In addition to the R value, durability is another benefit of using ICFs, Camarda says. "The walls are essentially 6 in. of solid concrete, reinforced, so you get a very durable, solid home that also has a very tight envelope, which is going to help with any air leakage and help to save on your electric bill," he adds.

Drywall will be applied directly to the ICFs. Electricians will carve out a notch for wiring and another notch for his boxes which can be fastened directly to the concrete, he notes.

build, it rained. Because this is a dynamic process, Green Home Planner Jack Thomasson and company make decisions on a daily basis that can alter the form or function of parts of the house.

**Inside the home**

Upon entering the 2009 HGTV Green Home, visitors find themselves in a welcoming, enclosed foyer. To the left is an extension of the living room with orange chaises. A storage wall contains two mini refrigerators in espresso-colored cabinetry. Kitchen cabinets are espresso with dark composite Caesarstone countertops and stainless steel Kenmore appliances. The dining room looks out to the patios. The walls are Sherwin-Williams Accessible Beige.

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**Top features of the 2009 HGTV Green Home**

The following eco-friendly features were the largest contributing factors to the Platinum LEED Certification of the 2009 HGTV Green Home.

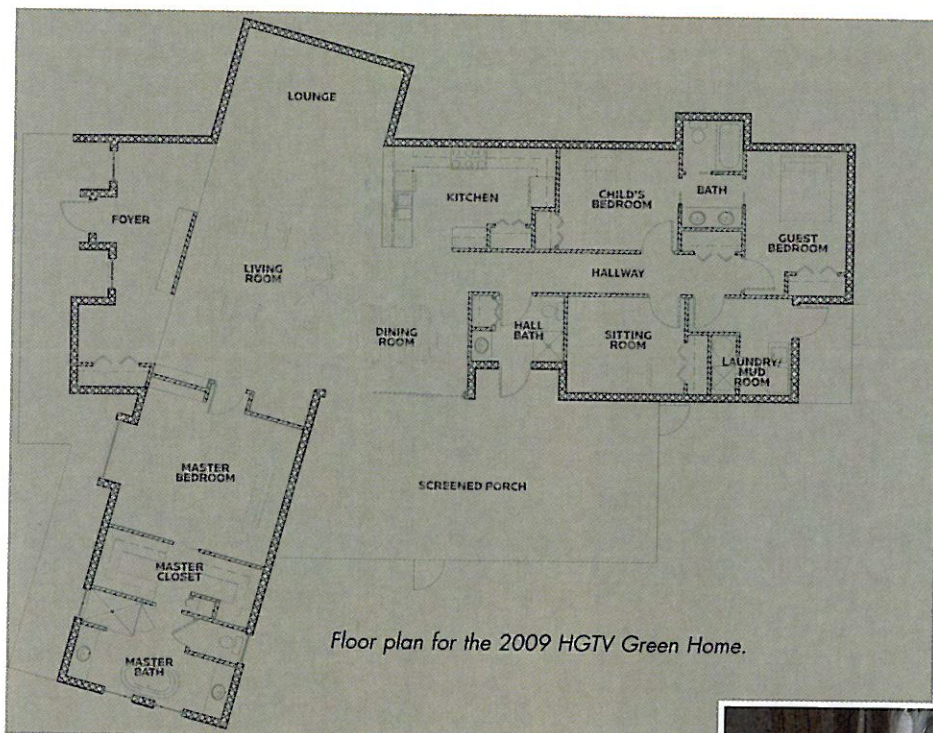
1. Solar energy panels;
2. ICF walls, spray foam insulation, sealed envelope;
3. Solar hot water;
4. Low-E windows;
5. Metal roof;
6. High-efficiency air conditioning.

Indoor air quality, A/C filtration, energy recovery ventilators and contaminant control (i.e. detached garage) also contributed, as did the landscaping that incorporates drought-tolerant plants and high-efficiency irrigation.



**Metal studs, not wood**  
Metal-stud framing made of recyclable material to provide durability throughout the house.

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Floor plan for the 2009 HGTV Green Home.

**HGTV Green Home team**

- Jack Thomasson**, house planner
- Linda Woodrum**, interior designer
- Leon Camarda**, builder
- Michael Carlson**, architect
- Brian Snell**, structural engineer
- Wes McCurry**, developer
- Bill Stewart**, mechanical and electrical engineer

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**Spray-foam insulation**

A view looking up into the clerestory (at right) shows spray-foam insulation with an R-30 rating in the ceiling and an R-19 rating in the walls. Spray-foam insulation creates a barrier that prevents drafts from creeping into interior spaces during the winter months and prevents heat from entering the home during summer months.



**Maximizing roof space**

Not only does the roof of the 2009 HGTV Green Home feature a deck area for relaxing, but it also contains a garden (left). Pat Hogan of Legacy Contracting Solutions, Palm Beach Gardens, Fla., reviews the installation process for builders interested in incorporating a rooftop garden into future projects.

"Your first consideration is going to be waterproofing," Hogan notes. "We started with a concrete patio deck, which is also maybe a little bit different than a normal deck situation. Prep the concrete then start with a rubber roofing membrane. In this case we chose American Hydrotech, which is a rubberized asphalt membrane. It's heated up to an almost liquid, viscous form and then spread out." When the membrane hardens it forms a tough skin.

Pavers are placed directly on top of the membrane, Hogan explains. At the very bottom of the planting area, a drain is placed with a component designed to both retain and drain water. A filter material keeps soil from not getting into the drain system. The growing soil for the rooftop garden is lighter than traditional soil. Once the soil is put in place, landscaping can begin.

