

# BUILDING SYSTEMS®

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## Spring Issue: A Variety of Modular Solutions to Building Green

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Epoch Homes (Pembroke, NH) is one modular home manufacturer that has gotten into the green home building business in the Northeast in a big way. Recently, architect John Rossi and partner Quincy Vale, owners of Powerhouse Enterprises, saw a need for a quick, green solution for a small office, weekend home, starter-house or bachelor pad. They created the PowerPod, a self-contained modular green building with about 500



sq.ft. of living space.

“There are a lot of different views right now on what green means. We try to respond to what the customer wants and give as much guidance as we can,” says John Ela, CEO of Epoch Homes. He argues that this approach is more effective at introducing green

building to the mainstream market than the practice of offering specific green home models or features.

According to Ela, many firms making green modular housing offer only a few models with several customizable options. “Homeowners want more options than that,” he says.

Units come stripped down or tricked-out for a more complete living experience, and the whole deal ships complete and can be installed in one day. Roof designs depend on location and use. Decks, bathrooms and kitchens come in a variety of configurations and options, or you can do the interior build-out and finishing yourself.



PowerPods feature options such as:

- Active solar array
- Remote building monitoring system
- High-efficiency lighting and water use
- Heavy insulation and airtight exterior
- Radiant floor heating
- Solar windows
- Rainwater collection scupper
- Optional composting septic and grey water technology

The company recently signed on its first customer, The Yellow Barn Music School, which will be using eight PowerPods for its music lessons. Yellow Barn Music School and Festival was founded in 1969 by cellist David Wells, then chair of the Chamber Music Department at the Manhattan School of Music, and his wife, pianist Janet Wells. Yellow Barn students include many of the finest up-and-coming young professional musicians currently studying at, or recently graduated from, Juilliard, the New England Conservatory, the Curtis Institute, the Cleveland Institute of Music, the San Francisco Conservatory, Peabody, Yale, and other leading conservatories and schools of music.

PowerPod’s solar butterfly roof generates electricity, hot water—and compliments. This

configuration allows windows to be placed up to 10' high, bringing in lots of warm southern sun in wintertime. Conversely, the roof's sizeable overhangs keep things cool in summer. Other advantages: high ceilings without excessive volume, lovely northern light and a center trough that's ideal for rainwater collection. Finally, the butterfly's asymmetrical pitch makes the solar collection system almost invisible from ground level.

### **Abode Achieves Platinum LEED Using**



### **Mods**

If you were going to build a ski house in the White Mountains of New Hampshire, energy efficiency would certainly be high on anyone's list of "must haves." The Mountain Home model that Abode Builders (Plymouth, NH) constructed, using Epoch Homes as their modular supplier, is more than just energy efficient.

This home achieved a U.S. Green Building Council Platinum rating in the LEED program, and a Gold rating in the Build Green NH program, modeled after the National Association of Homebuilders' Green Building Program. This is the first and only modular home in the country to achieve these high standards.



The Mountain Home architectural style, a blend of Adirondack and Arts & Crafts, inspired the forest green Pella window and exterior fascia and rake trim. A small but comfortable front porch and functional mudroom to doff the ski boots after a day on the slopes top off a floor plan that packs a lot into a small area. The open concept kitchen, dining, living room and entry have ceilings that reach 11' in some areas. Yes, in a modular home! A zero clearance fireplace adds warmth and atmosphere for those cold après-ski evenings. Two bedrooms and a home office complete the



plan.

The LEED Platinum and Build NH Gold ratings were achieved by paying attention to a host of sustainable and high-performance energy-saving items. Modular construction itself is awarded 13 points under the new NAHB Green Building Guidelines. This is the single highest line item point award you can get in this program.

Other features of the Abode home are the Icynene spray foam insulation and natural materials, such as cedar shakes, fir beams, Carlisle reclaimed oak flooring, stone fireplace and slate floors and recycled materials that give substance and warmth to this classic home. The insulated concrete form (ICF) foundation adds additional energy efficiency.