



Green Builder Vision House 2006



When NAHB published its *Model Green Home Building Guidelines*, *Green Builder Magazine* got right to work on a green project

with award-winning builder Norm Schreifels (Sun Mountain Construction, Corrales, New Mexico). Our goal was to design and build a house that met or exceeded the specs in the *Guidelines* and to take as much

of the home's energy load—especially heating and cooling—away from a dependency on oil or gas, and eventually off the grid. We call the project the Green Builder Vision House 2006. When planning for Vision House 2006, we sought out manufacturers who offer exemplary green products that we could incorporate within the house and present in a

"living lab" display. The Vision House will be an official tour stop at the National Association of Home Builders' 2006 National Green Building Conference (Albuquerque, March 12-14). Because the audience will be comprised mostly of builders, we have intentionally left some Vision House walls open, so visitors can see what's behind them. Other aspects of the house will be complete, to show that you don't have to compromise on comfort or beauty to go green. This is the first of two articles on the Vision House, and it's just a primer for a full-blown feature that will appear in our May issue, when we will show

the house in all its green glory. For

now, we wanted to show you

where we are at press time, and

to shine a spotlight on a few of

the top-notch contractors working

on the project. ➤



You Don't Have
to Sacrifice Comfort
or Beauty to Go Green



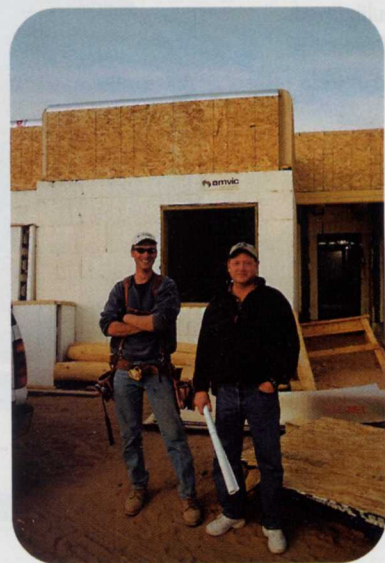


Vision House 2006: A rendering of the finished product (above), and the house at press time.



The hand-hewn spruce beams and ceiling boards in the Vision House are all from lumber recovered from a forest fire area. ("No trees gave their lives for our ceilings," said Norm Schreifels.) Hurd windows will eventually fill in these rough openings, but the mountain view won't change for another 10,000 years or so.

Earth Source Construction's Shawn Schmidt (left) has led the framing crew for the Vision House, while general contractor Norm Schreifels keeps an eye on the plans and the calendar.



Vision House

Vince Gallipoli (Vince Gallipoli and Son HVAC contractors) works on the AC duct system, which will be fed from rooftop cooling units. The heat will be provided by a ground-source geothermal unit that feeds a radiant floor system.



Going Green, Without Compromises

In designing and spec'ing the Vision House, we committed to using as many recycled or sustainably harvested products as possible, starting with the spruce used for the ceiling and beams (wood recovered from a forest fire area) and ending with the kitchen countertops (made from 100% recycled glass and concrete, from IceStone).

All the perimeter landscape walls and outer walls of the Vision House are made of concrete, and we thank the **Rocky Mountain Cement Council**, the **New Mexico Ready Mix Concrete and Aggregates Association**, and the **Portland Cement Association** for their support in providing a building material long known for its design flexibility, resistance to mold and infestation, and structural predictability.

Heated with a remarkably efficient, elegantly simple ground-source geothermal system from **WaterFurnace**, the water-to-water geothermal exchanger will supply heat through multizoned, in-slab radiant tubes. The WaterFurnace appliance was



arranged by a unique "energy services company" called **Zerofootprintenergy** (0footprintenergy.com) that has partnered with *Green Builder Magazine*.

The Vision House will also feature super-high-efficiency, roof-mounted air conditioning, distributed through a carefully engineered and well-insulated room-to-room duct system. None of these heating and cooling units will have to work very hard, because the Vision House walls—formed with **Amvic Building System** ICFs—achieve very high R-values, and there's R-10 beneath the slab. So, we won't see any wild temperature swings, even though Albuquerque's winter outdoor temperatures can range from below freezing to T-shirt weather in one day. The gas-ready **Lennox Merit Plus** indoor/outdoor wood-burning fireplace will add even more warmth.

The Vision House has 4,000 square feet of conditioned space and 1,500 square feet of covered space, including a central courtyard. There is an exquisite view of the Sandia

Mountains, which can be seen through the high-efficiency **Hurd** windows. As work progresses on the Vision House, visitors will also see **Dupont's** Tyvek and window flashing products. **Moen** contributed faucets throughout the house, and **Kohler** is supplying the tubs, sinks, toilets, and many of the faucets. The exterior stucco is a unique facade insulation system from **Sto AG**. **Wirsbo**, a well-regarded name in radiant heat, is providing the heat-delivery infrastructure.

Designtex's fabrics, upholstery, wall coverings, and drapery will dress up the Vision House, and **Del Cerro's** wool woven fabrics and rugs will play an equal role in making the house highly livable and toxin-free. In the last issue of *Green*

Builder Magazine, we profiled American Clay and its nontoxic Original Earth Plaster applications. This product will also be on display in the Vision House, along with nontoxic American Pride Paints. Rounding out the green products, will be Humabuilt's "green" doors and Sherwin-Williams's low- and zero-VOC paints. The indoor air in Vision House will be enhanced by a Beam central vacuum system that will help to greatly reduce dust and mold spores, as it cleans up after the crews have left for their next jobs. When you're visiting, there's not only lots of green to see, but plenty to read about as well, as New Society Publishers will have their books on display. Support for the Vision House has also been generously provided by Green Building Initiative®.

We hope to see you at any of the upcoming house tour events. Besides the National Green Building Conference in March, the Vision House will also be featured in the Custom Builders Council Spring Home Tour in March, the USGBC GreenBuilt Tour in May, and the Parade of Homes in October. If you can't make it to one of these, follow the Vision House progress in the pages of Green Builder Magazine.

—John D. Wagner



In addition to framing the Vision House, Earth Source Construction is the foundation sub as well. Above, Jeremy Schmidt (Shawn's brother) sets ICFs that will (below) create a perimeter wall.

Thank you to our Vision House 2006 sponsors

