CISION Media Monitoring Print

Wall Street Journal

Circulation: 2011999 City: New York
DMA: New York, NY State: NY

Account: 221100
Date: 03/05/2009
Pub Num: NY-D365
Section/Page: D1
Page Count: 1 / 4

Lisa Haney

This Old House, Better Than New

By Gwendolyn Bounds


PERSONAL JOURNAL.

This Old House, Better Than New

SYMANTEC PROTECTS MORE

THAN ANYONE.

CISION Media Monitoring Print

Wall Street Journal
Circulation: 2011999 City: New York
DMA: New York, NY State: NY

Account: 221100
Date: 03/05/2009
Pub Num: NY-D365
Section/Page: D1
Page Count: 2 / 4

RECENTLY, I FOUND my home of the future. Or, what it might be if I started from scratch and had $4 million to spare.

This "New American Home" was showcased at the International Builders Show in Las Vegas earlier this year and boasted plenty of cosmetic perks—from a luxe roof deck and outdoor kitchen to a master bath with a spa-like tub featuring changing colors and music. But it was the less glam stuff hidden behind the walls (and on the roof and in the basement) that I coveted most. The house's thermal shell was toasty: thick spray foam insulation under the roof deck, and exterior walls constructed with air-tight insulated concrete. The hot-water system was tricked out with tankless water heaters and solar technology to let the sun heat the swimming pool, as well as provide electricity. And an internal home-automation system ran the TVs, stereo and security systems from one central interface—or an iPhone.

ABOUT THE HOUSE

It's a far cry from the 1978 post-and-beam construction I bought six years ago with its power-guzzling old appliances, analog TV

James F. Wil

The house of the future—if you started from scratch, with $4 million.

CISION Media Monitoring Print

Wall Street Journal

Circulation: 2011999 City: New York
DMA: New York, NY State: NY

Account: 221100
Date: 03/05/2009
Pub Num: NY-D365
Section/Page: D1
Page Count: 3 / 4

roof antenna, sagging pieces of fiberglass insulation and door frames leaking so much air in the winter that the dog's fur ruffled when she walked by. Back then, "energy efficiency" and "green" building were still environmentalists' lingo and housing prices seemed like to only go up.

Today, the median age of the American home is 36 years, according to the U.S. Census Bureau, and like millions of others, I'm in the midst of "future-proofing" my house so it doesn't become an edificial dinosaur amid fast-changing new building science and a hemorrhaging home-sales market. New regulations, like California's recent move to reduce formaldehyde emissions from composite wood products such as those used in kitchen cabinets, are contributing to the urgency and sparking established manufacturers to transform product lines. Financial incentives are helping too, from "green" homeowner-insurance policies to expanded tax credits for energy-efficient home improvements in the new federal economic-stimulus package.

And these dwellings aren't just for the wealthy: The average new green home is 2,477 square feet and costs $296,600, according to a recent study by **McGraw-Hill** Cos. Spending a bit more on such upgrades can pay off in immediate energy savings and a higher resale price down the road. One-third of home buyers say they are willing to pay a premium of $20,000 or more for a green home, according the study.

"Five or 10 years ago, people didn't wonder, 'What can we do to insulate or what sort of lighting to use to save energy?' " says Gary Drake, owner of Los Angeles-based Drake Contractors Inc. "It was more like, 'Why am I spending all this money on insulation?' "

Now, Mr. Drake estimates, a quarter of his remodeling clients request energy-efficient lighting and appliances as well as paints and cabinetry built with fewer volatile organic compounds (VOCs), solvents that can cause environmental and health problems. He is currently remodeling his own home with low-energy LED (light-emitting diode) lights and nontoxic denim insulation (like what's found in blue jeans). "I know when I go to sell it these are all things I can say I did. And I'll know I can get top dollar for my house," he says.

Here are five remodeling "future-proofing" tips experts recommend. Before you...

1. . . . Tear down sheetrock or take off siding.

Figure out where you can beef up insulation, particularly in exterior walls, basements and attics. Today there are multiple forms of insulation, many promoted as "green," including soy-based foams, loose-fill cellulose (recycled newsprint) and denim. Go for the highest R-value (thermal resistance)—typically, the bigger the number, the better the insulation—you can afford and fit with proper installation.

Batt or blanket insulation is often cheapest; fiberglass is still widely used. The main drawback is that batts must be trimmed to fit around pipes and fixtures, leaving spaces susceptible to air leaks.

Loose-fill insulation made of fiberglass and cellulose can flow better around wires, pipes and other obstructions. Spray-in, expanding foam insulations do a particularly good job at this and don't settle or sag over time, though are often pricier because of the materials' high R-values. Many are urethane-based but some now substitute petroleum content with soybean material. "Fill the cavity any time a wall is open," says Bruce Harley, author of "Insulate and Weatherize."

■ **Resources:**

BioBased Insulation (www.biobased.net) and Soy Therm (www.soyol.com): soybean-based spray urethane foams with low or no VOCs.

air krete (www.airkrete.com): a lightweight spray foam made from cement, air and water, containing no CFCs or formaldehyde.

GreenFiber (www.greenfiber.com): a blow-in insulation made from 85% recycled-paper fiber.

SafeTouch (www.building.dow.com/na/safetouch): fiberglass-free batts made from non-irritating polyester fibers.

2. . . . Replace kitchen cabinets.

Inquire whether materials contain added urea formaldehyde, which is used in the adhesives of certain pressed-wood products, including those used to make kitchen cabinets. Formaldehyde has been classified as a human carcinogen by the World Health Organization and the National Cancer Institute recommends that "buyers should ask about the formaldehyde content" of such products.

The Formaldehyde Council Inc., a group of formaldehyde producers and users, says that at the low levels to which people are exposed there "is essentially no risk" and that formaldehyde-based products are harmless when used as directed. However, starting this year, California began regulating formaldehyde emissions from composite wood products sold in the state.

More mainstream wood-product manufacturers are adjusting product lines. **Armstrong World Industries** Inc. is developing a line of cabinetry boxes with no added formaldehyde.

Columbia Forest Products Inc., a large manufacturer of formaldehyde-free hardwood plywood, has organized a network of green fabricators to make it easier to find products like cabinets and furniture built without formaldehyde. "Consumers are asking for products that don't emit VOCs into their kids' rooms or kitchens, and that are made with environmentally accountable materials," says Todd Vogelsinger, Columbia Forest Products' director of marketing.

■ **Resources:**

Kitchen Cabinet Manufacturers Association Environmental Stewardship Program (www.greencabinetsource.org) lists makers who embrace practices that benefit "the environment and society."

Neil Kelly Cabinets (www.neilkellycabinets.com) and Breathe Easy (www.breatheeasy-cabinetry.com) make cabinetry with some formaldehyde-free materials.

The EPA's Web site discusses formaldehyde (www.epa.gov/iaq/formalde.html).

3. . . . Buy a new hot water heater.

Consider going "tankless" or investing in solar technology to bolster your system. On-demand or "tankless" hot-water heaters fire up only when you turn on the hot-water tap. As water runs through the heater, it's warmed instantly by an electric or gas-fired mechanism. Such appliances are considered more efficient in many cases than standard water-heater tanks, which continually consume energy to heat and store water you don't use most of the day.

Meantime, a growing number of homeowners are enlisting the sun to help heat their water. U.S. installations of solar water-heater systems nearly tripled between 2005 and 2007, and some states, such as Hawaii, are beginning to mandate them in new homes. What's more, residential solar water-heating systems can qualify for a 30% federal tax credit, while qualified tankless hot-water heaters can earn up to a $1,500 federal credit; there also may be state incentives.

■ **Resources:**

Find information on federal and state tax credits and rebates for renewable-energy and energy-efficiency options (www.dsireusa.org).

Find certified solar installers (www.findsolar.com).

Energystar.gov lists manufacturers of energy-efficient tankless water heaters.

4. . . . Build a new media room.

Make sure it's designed to meet the future of home technology. Can wiring support a centrally located media-distribution system that feeds Internet access, movies, games and music to the rest of the home? Can you control lighting, security, and heating and air conditioning from a touch screen or remotely from a cellphone or PDA?

Gone are the days of just making sure you have enough outlets to run the stereo, TV and DVD player. Fast-advancing home-automation technology in every aspect of life means one day, refrigerators and other appliances will be more efficient and interconnected to relay problems to homeowners or central repair databases. **General Electric** Co., for one, now sells an Energy Monitoring Dashboard (www.ge.com/yourhome) that tracks home indoor energy and water consumption and emissions, and can be integrated with solar technology, thermostats and music to pipe throughout the house.

With 76 million baby boomers beginning to approach retirement, home tech will increasingly communicate with outside health-care providers. And it all will require proper planning and wiring to prevent information overload. While the upfront costs can be more, it can pay off to hire an electronic-residential-design pro to plan along with your contractor.

■ **Resources:**

The Custom Electronic Design & Installation Association

CISION Media Monitoring Print

Wall Street Journal

Circulation: 2011999 City: New York
DMA: New York, NY State: NY

Account: 221100
Date: 03/05/2009
Pub Num: NY-D365
Section/Page: D1
Page Count: 4 / 4

helps locate certified electronic-design professionals in your region (www.cedia.net).

Continental Automated Buildings Association (www.caba.org), a not-for-profit industry association, is dedicated to intelligent home and intelligent building technologies.

5. . . . Paint a wall or refinish the floor.

Products that contain few or no volatile organic compounds (VOCs) are one of the fastest-growing segments of the $21 billion paint and coatings market. VOCs are solvents that disperse into the air as paint dries, and have long been used to help it spread evenly and adhere to surfaces. But VOCs, which are largely responsible for that new-paint smell, can contribute to smog as well as kidney and liver damage, respiratory and memory problems and other illnesses, particularly in children. While you don't need to rush out to repaint if your walls are in good shape (most VOCs dissipate after 30 days), home buyers increasingly are asking if these coatings have been used in residences. Plus, low-VOC paints are generally healthier for your family while painting is going on.

They typically cost the same as regular paints or just a few dollars more per gallon. You can also find low-VOC water-based urethane finishes for wood flooring. Some states, such as California, have already strictly limited the VOC emissions of paints sold there, and the federal government is expected to propose tightening its restrictions later this year.

■ **Resources:**

Green Seal (www.greenseal.org), Greenguard (www.greenguard.org) and Scientific Certification Systems (www.scscertified.com) post lists of certified paints based on health and environmental criteria.

The Environmental Protection Agency provides an overview of VOC health risks (www.epa.gov/iaq/voc.html).