Article published Dec 16, 2007

Homeowners smile through dust of a green remodeling

By HAROLD BUBIL
REAL ESTATE EDITOR
harold.bubil@heraldtribune.com

Before Ingemar and Janet Persson even finish the green remodeling of their house, they'll have saved tens of thousands of dollars.

That's because this project, on Palos Verdes Drive in the 1960s River Forest neighborhood off Sarasota's South Tamiami Trail, is the ultimate do-it-yourself effort. Ingemar, who is professional handyman, is acting as his own contractor. That's a 15 to 20 percent cost savings right there, his wife estimates.

Amazingly, the Perssons are living in the house while the project, which will increase the size of the 1977 building from 1,998 to 3,182 square feet under air, proceeds. (He figures it will take 18 more months, but he doesn't want to set unrealistic goals by being too specific. It will be done, he says, when he walks upstairs someday and tells his wife, "It's done.")

Readers who have had their homes remodeled know with mind-numbing certainty that this cannot be easy. Yet the husband and wife laugh at questions about what it is like.

"Oh, it's not a problem," says Ingemar.

Janet chuckles. "Not for the male of the family," she says. "There's lots of dusting and sweeping. For some reason, that drywall dust tends to get all over the place."

"We try to keep our living area up there as clean as we can," says Ingemar.

"We won't start on that," Janet says, "until the other two rooms are finished and the kitchen is done downstairs."

So they have a plan and are sticking to it. This is turning out to be a lesson in marital harmony as much as it is a story on green building.

Speaking of which, the Perssons are being advised by Mike Evans, regional director of Eco-$mart Inc., the Sarasota green-building consulting and product-marketing firm.

Evans, trying to keep the conversation focused on R-values and windload ratings rather than the Dr. Phil issues, earnestly points out that this is a "six-key-systems remodel."

That means the house incorporates energy-efficient, durable or health-enhancing materials and methods in the walls, attic, windows, heating and air-conditioning system, and plumbing.

What's the sixth system? The cutting-edge Brac greywater system, which cleans and recycles sink, shower and laundry water for use in the toilets, saving about 30 percent of the house's water and sewer use.

"These are my pioneers who are helping us get it through the county (permitting)," said Evans, standing by a large system of tanks and pipes in the ground-floor garage.

Eco-$mart is the regional distributor for Brac, which is based in Montreal, Canada.

The $3,900 system, not counting plumbing costs, will reclaim up to 52 gallons of water a day that otherwise would end up down the shower, tub and sink drains. The water is chlorinated, filtered and tinted blue or green so it is not confused with drinking water (perhaps dissuading a dog from drinking out of the toilet), and it flows through specially marked pipes.

It probably won't yield a big cost benefit for this two-Persson household, but Janet Persson is thinking ahead here.

"We're thinking about future use of the house. For us, it wouldn't be as much of an advantage as it would be for a six-member family," she said. "But in doing all of this work and knowing that the walls would be exposed, we felt the cost of having that put in would be a good added extra for future use."

"It's the first time that we're not taking potable water to flush the toilets," said Evans. "That's the most important thing. And that's what I'm really appreciating from these guys. It takes several people to get this going so a builder could look at it and say, 'I guess we could put this in every single house.'

"And this could easily be duplicated into a school or a commercial structure."

The greywater system is impressive, but I want to see the living space. So upstairs we go, passing the 8-by-8 pressure treated wood posts, bolted with huge steel connectors to the foundation, that are holding up the new elevated porch. Once on the second level, we can see why the Perssons are staying put and remodeling, rather than moving to someplace new: They have a delightful view of a large brackish-water pond that connects to Phillippi Creek. We pause, and pause, to take it in.

Then we go inside the living room, and it is neat as a pin. You would not know that the house is being rebuilt, except for the rapid, repetitive sound of a subcontractor's power tool being used on the other side of the wall, where two hurricane-safe bedrooms are being added.

The rooms will not have steel plates in the ceiling, but Evans figures they will be plenty safe in 140 mph winds because of the beefed-up roof trusses with spray-foam insulation, the insulated concrete form walls from E-Wall, and the impact-resistant windows.

"Other than those microburst tornadoes, this will hold that windload," said Evans, who said he wouldn't hesitate to take shelter in the upstairs rooms, above the storm surge, during a strong hurricane. Others, thinking about those microburst tornadoes, might choose to evacuate.

Cost analysis

The Perssons have a budget of roughly $300,000 for the project; Evans figures the green features add 7 to 10 percent of the cost. (The impact-resistant windows are the most costly feature, but are the sensible alternative for protecting the second-floor fenestration).

"This is a true green remodel," said Evans. "You don't have to go to the nth degree, you don't

have to live in a concrete bunker. What can you really do realistically with an existing home? You're building something that's safe, it's healthy, it's efficient, it's disaster resistant; you can hole out in storms; and it's going to pay you back for all these things, month after month, day after day ... cost-effectively so.

"Instead of building a car that gets 500 miles to the gallon, how about a car that does 80 miles to the gallon? And that's what this is. It has that hybrid concept to it. We don't have to go as far as we can, but let's take those steps and make our houses 50, 60, 70 percent more efficient."

It's all worth it to Ingemar Persson, who moved here from Sweden 33 years ago.

"I was raised a farmer," he said, "so I have a great appreciation for nature and resources."

And resources are not to be wasted. The Perssons will recycle the home's old windows and doors into their rental houses.