

New Homes Wired for 21st-century Living

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Many of today's custom homes and luxury high-rises are being "smart wired" for the future with devices and technology that go well beyond standard wiring for Internet, phone and fax connections. In many cases, home owners can use remote controls to switch on lights, raise temperatures and perform a multitude of other tasks as they're commuting from work. Some builders have even installed security features that allow home owners to view their residence while they're thousands of miles away on vacation.

Liberty Harbor, a master-planned, mixed-use community being built along the Jersey City waterfront, is a prime example of a new-home community that features this type of 21st-century "smart home" living.

"We're in the process of creating one the most technologically advanced residential communities in the nation," says Peter Mocco, the

developer of Liberty Harbor. "We will absolutely have the largest superhighway of bandwidth and capability, which will be brought into every housing unit we build here, whether it's a studio apartment or a five-bedroom townhome."

In addition, all of Liberty Harbor's public areas will feature wireless capabilities, allowing residents to enjoy convenient Internet access whether they're in a park, restaurant or retail store.

"All of the public areas and the streets also will have closed-circuit cameras in carefully selected locations to provide residents with video access to the outside from their homes, offices or even their PDAs," says Mocco.

Heating and cooling equipment, lighting, computers, televisions and other appliances can also be remotely controlled from outside the home.

"Everyone who lives at Liberty Harbor will have a view of real time. They can see computer views of what's going on inside and outside their home, from any place in the world," Mocco says. "We've also made it possible that when you're away on vacation and someone rings your doorbell, your cell phone will ring, letting you know someone is at your door. You can then talk to them just as if you were in your home."

Mocco says a security system also can be used so that when a child returns home and enters their code, the parent will be able to receive notification.

"There are really no limitations to what this system can do," he says. "More importantly, it will not become obsolete. This technology will be current 30 to 40 years from now."

Mocco says sales opened about three months ago for the first phase of 667 condominium residences. Liberty Harbor will eventually comprise as many as 10,000 homes and feature approximately 250,000 square feet of retail space. The mixed-use community, located between the Jersey City historic districts of Paulus Hook and Van Voorst Park, will be spread out over a 28-block site.

"Construction is well under way, sales have been phenomenal and we expect our first move-ins by Spring," Mocco says. "It's very exciting to see the community taking shape. We have a new hospital, grammar school and middle school right across from the community on Jersey and Grand streets. Commuters can use the nearby PATH station

or the ferry service to get into Manhattan. The Light Rail system also has two convenient locations within Liberty Harbor."

New materials and construction techniques, combined with big advances in heating and cooling technology, also have allowed builders to construct homes with much higher levels of energy efficiency than those of the past.

"Building an energy-efficient home helps home owners save more money on utility bills and enjoy a comfortable indoor environment," says Michael Skea, vice-president of sales and marketing for K. Hovnanian Homes. "Our Energy Star homes are not only beautiful, but very efficient. People love features like open spaces and soaring, two-story entryways and family rooms. But it's easier to enjoy those when you know it's costing you less to heat and cool these spaces."

Skea says about five years ago, K. Hovnanian made a commitment to construct all of its single-family homes and townhomes to meet the criteria of the New Jersey Energy Star Homes program. Built with energy-efficient systems and measures, a New Jersey Energy Star Home is certified by the Environmental Protection Agency (EPA) to be at least 30 percent more energy efficient than a standard home.

"As we learn more about innovations in energy-efficient techniques, we then apply these new features as part of our commitment to constructing a quality home," says Skea.

"Building energy-efficient homes remains a priority for us, and we've received several awards for achievement in this area."

Skea says the key to constructing an energy-efficient home is



to incorporate an insulation package that goes above and beyond the minimum standard.

“You can install energy-efficient windows but that’s not going to do you much good if you don’t have the proper amount of wall, attic and floor insulation,” he says. “The caulking and sealing techniques being used today result in a much tighter home. You’re not losing as much conditioned air as you would in older homes. The heating and air conditioning being installed in today’s home is also more efficient than it was 10 years ago.”

Other energy-efficient components include proper duct and air sealing, along with the proper installation of high-efficiency heating and cooling equipment. The use of more advanced caulking and air-sealing materials, including such techniques as expanding foam, mastics or house wrap, enhances the performance of heating and cooling systems because the equipment doesn’t have to “work” as hard to keep a home more comfortable. This conserves fuel and helps the home owner save money.

Skea adds that it’s critical that that heating and cooling systems be “sized” properly and installed correctly. If not, the home owner will not get the full benefit of a high-efficiency system, he says.

“With an energy-efficient home, home owners can expect an annual savings of 30 percent on utility costs,” says Skea. “K. Hovnanian also uses Energy Star-rated appliances, which adds to the savings.”

Among the new-home communities being developed by K Hovnanian are Governor Estates in Mendham, an enclave of 17 high-end estate homes that offer as much as 6,000 square feet of living space. All homes include four bedrooms, three-and-one-half baths, basements and a three-car side-entry garage. ◆



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