Apartment Building Sets Example for 'Green Future'

Rosanne Skirble Washington 29 Jun 2004, 17:35 UTC

Buildings - be they homes, office towers, malls or factories - are major consumers of energy and natural resources. In the United States alone buildings account for more than one-third of the nation's total energy use and they generate one-fifth of all landfill waste.

Some builders are beginning to switch to alternative energy systems and construction materials that are kinder to the environment. As VOA's Rosanne Skirble reports, these so-called green features are showing up in homes, office buildings, hospitals, schools and apartment houses across the United States.

Russell Katz is an architect, a builder and a real estate developer with a "green" vision. Four years ago he bought a vacant lot across the street from a subway station and built Elevation 314, an apartment house named for the number of feet the building rises above sea level.

He says there are three reasons why he considers his investment a success. "In this case it all comes together to show that you can do good design, you can do environmentally cutting edge work and you can make money at it," he said.

Mr. Katz watches from the street as workmen put the finishing touches on the apartment house, due to open in a few weeks. He says the empty concrete basins on the courtyard roof will be filled with dirt and planted with bushes, trees and perennial plants. The roof garden will store rainwater and prevent polluted runoff.

Katz: "Even if you don't know what it is doing, you are going to enjoy it because your apartment with huge windows is opening out into this garden. You can walk through the garden, sit on a bench and enjoy it."

Skirble: "So, it is an amenity as well as a filtration system."

Katz: "Exactly, and that's what we tried to do with everything in the building. So if you talk about what else makes the building green, it has a lot to do with materials and spaces. We have bamboo floors, which are a renewable resource, high ceilings for good light and air to circulate. All these things are all part of saying, is that green? Is it good design? Is it a good business proposition? Because all of those things, while being luxurious amenities, also mean that you can charge higher rents and that the place will be more desirable."

The building also has a geothermal heating and cooling system.

"We dig wells deep underground. They are all closed wells. And, we are sending water way down these wells, and it always comes back at around 54, 55 degrees F," said Mr. Katz. "What that means on a hot day like today where it is about 95 degrees, is that instead of your system taking in air from outside and trying to cool it - which takes a tremendous amount of energy and electricity - you are starting with 55 degree water, which means that you just have to use the temperature of that water, blow air over it and you are cooling your apartment."

With the apartment house so close to subway and railroad tracks, a major concern was noise. Mr. Katz says design features took care of the problem.

Katz: "The building has phenomenal acoustic qualities. The train that you got a sample of there is pretty loud and that comes through probably a dozen times a day."

Skirble: "Can we take a look at an apartment."

Katz: "As we walk through here you can be sure that there is probably a metro train going by every few minutes, and the big trains go by pretty frequently this time of day. But you won't hear it. You will see it before you will hear it."

Skirble: "It is so quiet back here. What a contrast!"

Katz: "Yeah, it works! I was calling Kevin Miller, the acoustic engineer, through the construction phases. I was very nervous and every time I was out here and heard the trains going by, I thought, this is insane. This has got to be the biggest mistake of my life. And, I would call Kevin and he would say, 'I'm not worried about your building. This thing was engineered to be quiet, and once we got a certain level of finishes on it and windows in, I had the biggest breath of relief I have ever had in my life because it is really, really quiet. There is a train going by right now. I can hear it. It is a metro train. It is really quiet in here. It is almost like being in a sound studio. We have special sound insulators between every unit, in every floor ceiling system, between the hallways and the units and then all of the windows, which are fiberglass frame window a real environmental feature they are made out of sand, which is an unlimited resource essentially, have fantastic thermal and acoustic insulation. So, not only are they saving you on your energy bills, but they help contribute to the quiet space."

Daniela Maestro was the first person to sign a lease. As an environmental activist she says she jumped at the chance to live in a green building.

"I felt like I could reflect what I do for work a little bit in my regular daily life by living there," he said. "So, I took a look at the building, and I like what they have done with it." Philipe Duverger agrees. The French chef is opening his second restaurant in one of the two retail spaces on the first floor. He says having a built-in clientele isn't the only reason he is making the move.

"It is not just for profit, it is also giving back to the community, caring about the environment when you make a decision. That was also part of it," commented Mr. Duverger.

Russell Katz expects it will take six months to rent all 52 apartments in the new building, which he says would finally convert his green vision into a business success. With that project accomplished, he says, others will follow.

© 2004 Voice of America