

Sustainable Design for the Cheap and Lazy

Published in the Journal News on 7/10/09. Copyright 2009 by Michael Molinelli

Michael Molinelli, AIA LEED ap is an architect who practices regionally and is a LEED accredited professional (Leadership in Energy and Environmental Design)

Recently for a house renovation, we specified a central computerized control system that has the capacity to control temperature in each of the rooms according to a complex schedule, turns lights on and off, open and close windows, raise and lower shades, and operate televisions, dvrs and radios. It cost about \$65,000. I have a similar system in my house which cost \$0: me, the Dad. I am shutting off lights, closing windows and doors, opening shades and turning off electronic devices. I realize that I could be considered "green" simple because I am cheap and lazy.

When my kids ask why we don't have a big screen TV, I used to bluster about how hard I had it when I was a kid. Our TV was black and white until I got to high school or about how our remote control was a pair of pliers we kept on top of the TV because the knob had broken off the channel changer. But after some research I learned that plasma TVs consume four times the electricity as a regular TV. So now we don't have a giant flat screen TV because Daddy is saving the planet.

I did put a little money into adding heat zones and programmable thermostats to my house's hot water heating system. So in the winter, you better get up and ready to school and work on time because by 7:30 the temperature in your room will hover about 60 degrees Fahrenheit. I played with meat locker temperatures, but the extreme cold helped hide the odor of dirty laundry and some nasty unintended environmental consequences.

I do supplement our consumption of oil with an alternative non-fossil fuel source of renewable energy – wood. The trees on our property die on occasion and I can "recycle" their stored solar energy by releasing in my fire place. I have a fireplace with a glass front and control my combustion air so that burning wood is a net heat gain and not a net heat loss, like most fireplaces. I know some environmentalists are freaking because I am burning something, but it is not like I am using baby seal fur to insulate my attic! As they say, fire wood warms you three times: when you split it, when you carry it and when you burn it. And while carrying it, aren't I really hugging a tree?

Our hot water tank is not as efficient as newer ones but it is just the right size. Too many showers that are too long and the last kid gets an ice bath. We can exacerbate the problem by turning on a full dishwasher in the middle of a long shower and the kid gets the message. This is an environmental concept known as "aversion therapy."

Right now I am doing a cost-benefit analysis of developing uber-kids or couch potatoes. Couch potatoes do not need to be driven to practices or meets, saving fossil fuels. They do not need plastic protective sports equipment which is not bio-degradable. They consume relatively little electricity and a new \$40 game every six months and their brains will be amply anesthetized. But couch potatoes are more likely to stay around the house after twenty-one years, so there is

a food cost. They are also more likely to develop eating disorders and diabetes, so there is a medical cost and a even bigger food cost. Right now the uber-kids are ultimately less expensive, unless the nation goes to completely socialized medicine. Then MY costs plummet.

The truth is that every magazine or newspaper article has to write about something like it is new. Sustainable design is not new. It goes back at least 20,000 years to the end of the last ice age. Then sustainability had more to do with just staying alive. Many men and women lived in caves which were heated to a comfortable 55 degrees by means of geo-thermal energy. One hundred feet of rock above made for pretty good insulation. There was a controversial form of energy back then – fire. It was argued that it was environmentally too risky. One accident and your whole hunting ground could be burnt to the ground. The geo-politics of fire production often set one tribe warring against another. Yet mankind dealt with these issues, while the entire population look forward to global warming.