FRANK HARMON DEBUNKS MODERN MYTHS ABOUT SUSTAINABLE DESIGN: These Excuses Won't Work Any Longer

Just 10 years ago, sustainable design was trumpeted primarily for its earth-saving, conservation attributes. The use of locally available construction materials, for example, reduced less pollution since trucks didn't have to haul the materials. And the use of recycled materials meant fewer trees were felled and other natural resources were conserved.

Today, "green design" has moved into the mainstream as architects' commercial, institutional and even governmental clients recognize the cost savings they receive when their buildings don't consume as much energy.

Yet myths about sustainable design still pervade public discourse, giving individuals, homebuilders and corporations "excuses" for ignoring the drum beat for sustainable design.

Frank Harmon was beating that drum long before "green design" entered the general lexicon. Now a nationally recognized leader in modern, sustainable and regionally appropriate architecture, he continues to bring the principles of sustainability to bear on each and every project his firm undertakes.

When asked recently what he feels are the most common misconceptions about sustainable design, he offered the following five, along with the reasons why these myths need to be busted for once and for all.

Myth #1: Sustainable buildings require complicated technology and exotic hardware.

Reality: The most important sustainable decision we can make for any building is its orientation on its site: how it faces the sun for natural daylight, opens to the cooling breezes for natural ventilation, and shelters its inhabitants from cold winter winds. Site orientation may be 'low-tech,' but it is the key principle of sustainability that many people don't consider when they think that sustainable design is complicated or exotic. Farmers have always practiced sustainable design for their homes and barns without even knowing they were doing so. They had to. It was common sense then, and it still is today.

Myth #2: Sustainable buildings require expensive, unusual materials.

Reality: Ordinary, locally produced materials, and how we use them without waste, produces sustainable buildings. For example, sturdy juniper shingles were a sustainable choice for the cottages built on the Outer Banks. Simple Southern yellow pine is a sustainable choice for a house in Charleston. In fact, over 75 percent of what makes a building sustainable is contained in its orientation and in its "bones" – in the materials from which it's made. There's nothing high-tech or unusual about that.

Myth #3: Sustainable buildings are expensive.

Reality: Sustainable, eco-friendly buildings cost the same as "ordinary" buildings if we respect materials and orientation. And the savings in consumption – which means savings in energy costs -- are well worth the effort. The use of natural ventilation and light provides considerable savings alone. Now imagine never having to pay for electricity or hot water and dramatically lowering your water bill if you included photovoltaic cells on your roof, a solar hot water heater, and low-flow showers and toilets.

Myth #4: Sustainable buildings are weird.

Reality: Far from weird, a sustainable house is light-filled, open to the outdoors, full of fresh air, and made of natural materials. Again, some of the buildings our ancestors built, that we cherish today, are sustainable: a Low Country house, 19th century mill buildings, and old farmhouses. Even Monticello and Mount Vernon are familiar, friendly, and sustaining because they are made of regionally appropriate materials and sited to maximize natural ventilation and day-lighting.

Myth #5: I can build a sustainable house, office, or school, but it won't make any difference.

Reality: Nothing could be farther from the truth. Forty percent of the energy used in America today is consumed in buildings. That's more than the entire transportation system -- cars, airplanes, trucks, etc. – put together. Buildings also consume 30 percent of our fresh water and 25 percent of all our wood products. So if you want to make a difference, buildings are the best place to start. And you'll have a more enjoyable place in which to live, work, and learn because of it.