

# **Toward A Post-Industrial Architecture**

**by Robert Jawitz**

Post industrial architecture is what buildings should look like after our oil-based culture has declined. Coal and oil created industrialization. From it came our mass produced consumer society and our waste of energy. Soon, our energy will be too dear. We will be hard pressed to replace fossil fuels (coal, oil and natural gas) with renewable energy in the electric power sector, but we will be harder pressed to replace them in our food supply, transportation, housing, commercial and industrial sectors. We can no longer expect to use cheap products made from oil such as asphalt shingles and plastics. Furthermore, without mass production based on easy energy and cheap transportation, we will have a completely different job market. These are the facts that will spawn a post industrial architecture.

Because of this, Rockhouse Mountain Architecture. RMA, is reviving the ideals of the Arts & Crafts Movement. The A&CM too was trying to develop an idiom without a coal/oil based industry. Clearly, the post industrial (PI) architecture should support the means for a local economy. Products made by artisans, crafts, should be part of PI architecture to help create a local economy. Because of the dearness of energy, the PI architecture should be energy efficient (Green). Because building cheap houses is not sustainable, the architecture of the PI house should last as close to forever as possible.

The post industrial building can look like this: It would be built with a wood frame, maybe 2x8's, which, with closed cell foam vegetable based insulation, will yield a R of 46, and a roof of 2x10's which with closed cell foam insulation will yield an R of 61 (superinsulation). Foam cuts

infiltration to nearly 0. Then it would have stainless steel or wood shakes on the roof and stone, glass, wood shingles or stucco on the walls. The windows and/or the porch rails will have stained glass. It would have hand made thermal drapes with an R of 11 to control heat loss. It would have overhangs and large expanses of glass on the south to take advantage of passive solar heating in the winter and to control heat gain in the summer and, with the thermal drapes, to prevent heat loss at night. It would have energy recovery wheels to permit energy efficient air changes and would use renewable energy, preferably non CO2 generating renewable energy to provide power, heat and air conditioning for the building.

What we could end up with is an energy efficient building, a building that needs little maintenance and could last for generations, a building that supports an economy of local artisans, a building that avoids oil-based materials like asphalt and plastics, and is powered, heated and cooled by renewable energy.