

# Roth: The built environment and coming trends

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## The built environment and coming trends

I once read "A house is made of bricks and beams, a home is made of hopes and dreams," which is a great way to describe the difference between a structure and a habitat.

And we in America, where home ownership has long been described as a main ingredient to the American dream, spend a great deal of thought and action focused on the habitat, but seemingly much less intention about the structure itself. And

both matter.

Most of us live in homes or apartments built by other people or companies, however large or small the development. About 66.5 percent of our state's citizens live in owner-occupied housing, with a median value of \$115,000, monthly owner costs of around \$1,150 including the mortgage and an average of 2.56 people per household, according to the U.S. Census. For those of us that rent, the median gross rent is \$717.

But as we learn more about choices in our built environment, Americans are becoming more conscience of the brick and beams that might determine how comfortable and how affordable our habitat becomes. Old construction techniques with cheaper windows, little to no insulation, inefficient lighting and appliances and inefficient heat and air can actually cost a family more over time than a well-built home with a slightly higher mortgage or rent and lower utilities.

Americans today, before they remodel an existing home or build a new one, are considering energy-efficiency issues more than ever and many are undertaking what's known as the whole-house systems approach for analysis. Some utilities sponsor energy assessments and retrofit programs and many modern builders are taking the lead to achieve higher Home Energy Scores in the national rating system developed by the U.S. Department of Energy.

Some trends in housing are moving the proverbial ball even further toward ultra-efficient homes, which combine state-of-the-art construction materials and techniques, lighting and commercially available renewable energy systems, such as geothermal and solar energy technologies sited with the home. Builders are also taking advantage of climate and topographic realities to position homes to block out excessive heat gain, but also maximize passive-solar gain at times like the winter months.

Here are a few of the additional, available trends to achieve your own ultra-efficient home or remodel project:

- Energy-efficient appliances and home electronics.
- Conservation principles for energy and materials.
- Low-energy lighting and greater use of daylighting.
- Advanced house framing, which reduces lumber use and waste.
- Cool roofs, which use highly reflective materials to absorb less heat by reflecting more of the sunlight during hot weather.
- Passive solar heat design, such as southern-facing windows that would allow the lower winter sun to help with heat gain, but perhaps with an awning or overhang that protects from the higher summer sun's unforgiving heat.
- Increased focus on a healthy home environment, such as increased air and water supply quality, and reducing or eliminating harmful materials or chemicals.

So whether you are a renter saving to buy a home, a homeowner ready to remodel your built environment or a person looking to design or build your own habitat, efficiency in many more forms than ever before will be found not only in the design of these structures, but also in most of the products that are used in the construction of them. Consumer awareness and demand are growing technological choices and the development of products for the most efficient built environment in American history, sans perhaps our forebearers who lived off the local land with a mutual respect for it and it for them.

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