GREEN BUILDING: ‘Green’ house isn’t dream home — it’s a reality home

By Robert Glenn
columnist
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Over the years, my personal residences have included a 1910-era farmhouse, a ’40s one- and 1.5-story traditional, a ’50s brick ranch and a ’60s semimodern ranch. And in Asheville, I have lived in a classic 1920s cottage. Each of these houses was home to my family (spouse and, at times, two children), was lovingly decorated and maintained, and occasionally was updated within the integrity of the original structure.

None of these houses were designed with energy conservation in mind (some may remember the “all-electric” homes with electric strip heat in ceilings, baseboards, etc.) or with components designed to be healthy for the occupants and the environment.

While living in Asheville, our thinking about housing began to change. Influenced first by my son, who majored in appropriate technology at Appalachian State University, then by exposure to the Western North Carolina Green Building Council (a community of local builders, architects and individuals dedicated to sustainable building practices, energy efficiency and healthy surroundings), and by publications such as Susan Susanka’s “The Not-So-Big House” and Dwell Magazine (and perhaps by the “altitude”), my wife and I wanted to incorporate these concepts into our daily lives.

First, we considered upgrading our present home, but as the list grew from simply adding insulation to include new windows and doors, an efficient HVAC system, Energy Star appliances and then to desired alterations to the living spaces, living in the house during these upgrades became problematic. We decided instead to build a new, “green” home.

Much could be written about each phase of construction: the design and drafting of plans, dictated by the site, where on any given day, ideas and dreams soared and then crashed into budget reality; the construction process that challenged and stretched our builder (Rare Earth Builders, a member of WNCGBC); and the many artisans, craftspeople, laborers and technicians who helped locate and install the many components of our house. Each component has a story, including some that we hoped to include, but gave up on.

Green features of our home include:

• A dramatic design with minimal “footprint” on an in-town, infill location.

• Energy Star certification (resulting in a reduced electric billing rate).

• SIPs roof framing (efficient structural insulated panels).

• HardiPlank and HardiPanel (cement fiberboard) exterior siding.

• Lcynene insulation (high-efficiency spray foam).
• Sealed and conditioned crawlspace (for moisture and mold control).

• Loewen low-e windows and doors with retractable solar screens on western windows.

• Trane high-efficiency and zoned HVAC system.

• Venmar energy recovery ventilator (for fresh-air introduction throughout the house).

• Renai high-efficiency instantaneous water heater.

• Wood flooring from recycled shipping pallets and cork flooring in the kitchen.

• Local black locust for wood decking and railings (less transportation, nonexotic).

• Use of low-volatile organic compound paint and floor finishes (interior air quality).

• Concrete countertops made by local artisans (sustainable product, local).

• Landscaping using native plants and a wildflower meadow instead of a lawn.

We have lived in our new home for about a month, and we wonder if we would ever build another house. For us, the process is similar to birthing and parenting a child. You have a set of expectations, preconceived ideals and principles you want to use and incorporate. But as every parent soon learns, the “child” has a life of its own and will take you to places you never expected to go in your wildest dreams.

You will be forced to change and sacrifice, to compromise and accept the unacceptable.

This is the opinion of Robert Glenn, a new green homeowner in Asheville, a member of Western North Carolina Green Building Council and a broker associate with Town & Mountain Realty.