

WELCOME TO “THE SHELVING ROCK HOME”!

Located near Albany, New York, this ground-breaking Logix ICF-built home won Best Large Residential Project at both the 2017 ICF Builder Awards and the 2017 Logix Awards.

This phenomenal, 3,000+ square foot home is constructed with Logix Pro Series insulated concrete forms and Logix Pro Buck™ for all window and door openings. It features an extraordinarily functional yet attractive design — a design that also meets two very exacting criteria. It's registered as a Net Zero Ready home by the US Department of Energy and it meets Universal Design guidelines.

A Net Zero Ready home is a high-performance home that is so energy-efficient, a renewable energy system can offset all or most of its annual energy consumption. Universal Design refers to products and environments that can be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Related to “aging-in-place” remodeling, Universal Design incorporates accessibility features that allow homeowners to stay in their homes even when aging makes mobility challenging.

Some of the Universal Design concepts incorporated into the Shelving Rock home include lowered sinks, no-step showers, and a microwave built-in below the counter. In addition, all hallways are a minimum of four feet wide and all doors are 36-inch-wide. Universal Design supporters claim that the concept saves tens of thousands of dollars over the long-term because it allows occupants to live independently rather than in a retirement or assisted living facility.

Andy Ellis of Halfmoon Construction Company took on the Shelving Rock Home project as both general contractor and



ICF installer. "The house has 30 corners inside and outside, and 16 of them are 45-degree angles, so it was a very complex design", says Ellis. "The main floor is multi-generational living, so it has a 780 square-foot in-law suite, featuring a full ensuite bath, living room and full kitchen", explains Ellis.

The most notable savings at the Shelving Rock home are reduced energy costs. Its Logix Pro Series ICF walls are air-tight and offer exceptional insulation with enough thermal mass to basically eliminate temperature fluctuations. Its heating and cooling is provided by an in-floor radiant hydronic system connected to a ground-source heat pump that leverages the stable temperatures in the earth for even greater efficiency. Blower door tests revealed that the Shelving Rock home has a HERS rating of 22, meaning the home uses only 22% of the energy compared to a code-minimum-built structure.

The Shelving Rock home was completed in the early summer of 2016 and became an ambassador for the industry, with hundreds of people touring the home as part of the local Parade of Homes, and being the subject of a detailed Green Energy Times article.

The initial construction cost of the Shelving Rock home with its many value-added features was somewhat higher than that of a traditional wood-frame home with standard finishes, but its annual energy savings can more than compensate for most of that upfront extra cost. With an estimated heating cost of \$559 per year and cooling cost of \$139 per year, the estimated total energy savings at Shelving Rock is \$4,302 per year when compared to a similar-sized wood-frame house.

