



## Mr. Edison's Concrete Home

With some modern help, he was right!

More than 100 years ago, Thomas Edison advocated homes made of concrete. "Concrete homes will revolutionize American life. They will be fireproof, insect proof and easy to clean," he said. And with a model he made himself, he great extolled the virtue of this tough core. Obviously, it didn't catch on right away.



He was, as he often was, ahead of his time. But time has added enhancements that had to be invented first, and with that, the process has become commonplace in tougher climates. But the builder, Lynn Sill and the Ottwein family believe that with these added features, the process especially serves "Active Seniors" perfectly.

So they've committed a new empty nester community in Troy, to be started soon, to the use of these concrete walls exclusively...along with several related construction techniques that promise to make their homes much safer and stronger, with far less maintenance and a longer life, all while cutting utility and maintenance costs immensely.



Basically, the walls end up being made of reinforced concrete, sandwiched between thick slabs of Styrofoam,. In fact, commercial forms are made of the Styrofoam that simply stay in place...forever.

With reinforcing steel added, it creates a unitized monolithic "sandwich" of concrete, with 2 and a half inches of styrofoam on both sides, and an "R factor" approaching 40. Drywall can be directly applied on the inside, all kinds of siding can be applied directly on the outside. Of course, all openings through the wall, such as windows, doors and utility-ways need to be anticipated. Putting up the blocks creating the forms is reminiscent of a giant game of Legos.

The idea has been growing steadily continent wide and in Canada, and hot spots for its use are springing up throughout the nation. Recent engineering advances are hurrying that process. It costs a bit more, but a quick repayment of the difference leads to

many years of enjoyment of the benefits. These permanent benefits also then lead to better resale, no matter how far away that is. It's been used enough to have proven track records in all of these features. It's also being used for commercial buildings and low to medium rise housing projects where it excels. The builder of Serenade, Lynn Sill, says he feels he is working on that "breakout" event now.

Incredibly, when complete, the homes have a "normal" appearance. The only visible difference is thicker walls, leading to much wider window sills, which everyone loves, too. But they also love the fact it can't be blown down or burned, and the fact that energy and maintenance costs are hugely reduced...savings of 60% or more are routine for heating and cooling costs.

A lot of people are familiar with them from at least three episodes so dedicated on "This Old House", but publicity is increasing greatly, extolling the benefits and making the public more aware of this awesome option for their future homes.

It will be the First downstate Illinois development/project/subdivision to use insulated concrete walls, although several exist in mid and northern Illinois. There are several self-built homes using the forms scattered around Metro East that we've found and a large subdivision in Urbana.

These concrete-styrofoam walls are too, basic to other features. It's anticipated that a main-floor absolute safe room can easily be created, having all 4 walls and a roof of concrete, (preferably, in the master bedroom walk-in closet, just a few feet from the bed.) In the national scene, a few of these homes were in the Moore, Oklahoma tornado and others, and all of them survived with walls intact. (Some roofs even remained, although some were torn off.) Others resisted nature in California fires and during Hurricanes in Florida and New Orleans.

But benefits go on....much smaller heating and cooling equipment will be possible, and insurance rates should be less. Maintenance costs are minimal, and longevity of the package is infinite. Outside sound is reduced to nearly zero. That feature in a "common wall" is just perfect, obviously. All of that contributes to better resale, too.

There's a segment in our Reference Section (black, below) about the technical aspects of these walls, and a short note about Mr. Edison's experience...rather interesting.

But the very next article is a resume of how these walls become the centerpiece of an awesome "green" home, contributing to the safety and health of occupants...saving them a lot in operating costs. These walls alone justify a designation of "LEEDS – Green", but we think you'll like the enhanced package. This awesome performance would be impossible to attain with any other building technique, but they support even greater attention to performance and costs as we'll show.