

Now anyone can build a disaster-resilient home (431 words)

The calamities caused by weather extremes could be better controlled with stepped-up storm prediction, better citizen preparedness, and by the ongoing ingenuity of the building sector, say observers in the field of climate change.

Governments, for example, are improving public warning systems and municipal infrastructure maintenance is an ongoing priority. As a direct result of extreme wind, fire and flooding, the damage costs on both public and private buildings in North America are expected to keep tallying into the billions of dollars – but there is good news. Builders already have the technology and means to construct disaster-resilient homes.

“Now you can build a house with hurricane and tornado wind-resistance up to 250 miles per hour,” says Keven Rector at NUDURA, the manufacturer of an advanced design for ICFs, insulated concrete forms. “As compared to wood, concrete walls stand up to the strongest winds and they are also far more sound-resistant, fire-resistant, and give homeowners significant energy savings and occupant health benefits as well.”

The construction system works like this: At the building site, the ICFs interlock (like Lego) to create one thick monolithic wall. The assembly is quick, creates less waste, and according to Rector, this type of insulation material can save you up to 50 percent on your energy bills.

“ICF home-building technology is solving storm security, energy costs, interior air quality, and occupant conservation priorities all at the same time,” he continues. “In addition to greater impact resilience and a fire-protection rating of up to four hours, concrete buildings are more comfortable to live in. For example, eliminated will be the uneven temperatures and drafts we’ve come to tolerate living inside wood framing – and since the walls are less prone to mold and toxins, the household air will remain reliable and easier to breathe. This rock solid envelope keeps more noise outside, requires far less energy for heating and cooling inside – and by leaving more trees in the forests every homeowner will be making such a sound contribution to the sustainability of the planet.”

Concrete homes are visually beautiful as well, Rector points out. Choose a finish on the outside like stone, wood siding, stucco, and other aesthetic touches. And on the inside, many innovative architectural shapes like arches, bay windows, and decorative door styles can be easily designed.

“Be sure to request ICFs from your builder early in the planning stages,” he adds. “The system is well over a decade in use, but builders usually default to the standard construction methods if not asked.”

More information is available online at www.nudura.com.