

## Weather every storm with concrete walls (423 words)

Now is the time to take a few precautionary steps towards the utmost security of your home and family in the event of extreme weather occurrences, say officials observing climate change. You may be doing so already, but recent survey findings show that most Canadians are worried about the ability to cope with damage caused by severe wind, fire, and flooding. Safety is the main preoccupation, but so are the costs associated with destruction and loss.

“One answer that solves many issues is to opt for the strongest impact-resilient house available,” says Keven Rector at NUDURA, a leading name in building with insulated concrete forms. “This ICF method is an advanced departure from traditional wood framing – and our Canadian design is recognized to be even more efficient. At the construction site, these compact concrete forms interlock (like Lego) to build a rock solid envelope from 10 to 30 centimeters thick.”

And, says Rector, this construction innovation gives homeowners far more for their investment, such as:

**Walls to weather any storm** – If high winds and fire are a concern, data shows that an ICF home delivers hurricane and tornado impact-resistance up 402 kilometers per hour – and the fire protection rating is up to four hours.

**Energy bills with a smile** – Concrete walls vastly reduce air infiltration as compared to wood walls and that is the key to lower energy consumption. This saving is even more pronounced, says Rector, if builders use the most advanced ICFs available. The Canadian design, for instance, combines two panels of thick (EPS) foam with the structural strength and thermal mass of concrete. The resulting envelope produces an energy efficiency rating as high as R-50 (compared to an average R20 in wood structures) saving you up to 50 per cent on your utility bills.

**Temperature consistency** – The outside cold air easily travels through wood-framed walls causing thermal bridging and that causes drafts and chilly spots inside your home. Walls with a solid concrete core prevent thermal bridging so even temperatures result throughout the house.

**Better, breathable air** – Mould, mildew, and toxins associated with wood structures are also diminished.

**Shut out the noise** – Solid concrete is an effective sound barrier. It dampens sound vibrations from outside

noise such as traffic, trains, and neighborhood parties. This internal peace and quiet is a welcomed bonus.

**Rock solid asset** – It is generally expected that a stronger, safer, storm resistant, greener home – and one that is cost efficient with less maintenance and repair – will steadily increase in resale value.