A new concept By GARY MCGOWAN Special to the Sun

A new concept in single family home construction will take shape on the east side of Leduc next month. Dabrro Homes will construct a concrete house on a lot on McKay Close in March. The custom homebuilder has been around for 10 years and built its first concrete home in Leduc four years ago. Sales manager Darren Graff says there is a great deal to recommend this building method - from energy efficiency to interior air quality to building strength. "We use something called ICF Technology," he explains. The letters stand for Inflated Concrete Forms. "They consist of two inches of polystyrene," he says. He refers to the forms as "lego on steroids." "Like Lego, we stack them up in a staggered pattern, leaving space wherever a window or a door goes," says Graff. "When everything is ready, we fill them with concrete." The result is a house that has a great number of positive characteristics. "It's 50% more energy efficient than traditional construction methods," notes Graff. "We've found these homes to be 44% cheaper to heat and 32% cheaper to cool than a wood frame home." Officially, the walls achieve an R24 insulation value. "However, you've got the thermal mass of concrete going for you as well," notes Graff. "It takes a long time to change temperature so the real insulation value is closer to R50."

There are no stud cavities in which mold or mildew can grow and there's no air leakage from the building. "We use a heat recovery ventilation system which controls the fresh air inside the home. That results in improved air quality. The heat exchanger ensures you're not wasting energy," he adds.

Concrete homes are quiet. "You won't hear traffic, you won't hear dogs barking and if a plane flies over your home it won't shake. These homes are twice as quiet as a wood frame structure," says Graff.

Most people think of strength when they think of concrete. "In fact, these homes are 8.5 times stronger than a wood frame home," Graff says. "They're tornado or hurricane proof and they have a three hour fire rating," he adds.

Graff also highlights several environmental benefits of a concrete home. "Obviously, less lumber is used in the building process and there is no off-gassing from concrete so - once again - you'll find yourself in a healthier interior environment," he asserts.

Graff acknowledges that the cost of building a concrete homes is seven to eight per cent more than an equivalent wood frame structure. "You have to weigh that against your energy savings," he says, "and the way these homes seem to hold their resale value.

The Dabrro Homes website (at <a href="www.dabbro.com">www.dabbro.com</a>) contains - says Graff - "a wealth" of information about concrete home construction. Starting in March in Leduc its possible to watch the actual building of a concrete home. "We're also building at 9745-143 Street in Edmonton's Crestwood neighbourhood," reveals Graff. "That house will be open for viewing from May 26 to June 18 and both houses are available for pre-sale."