

Inner City Condominium



ADVANTAGE WALLSYSTEMS
Insulating Concrete Forming
(ICF) System

WALL FIRE RATING
3 HOURS

11.25" | R-23

ADVANTAGE WALLSYSTEMS | **EFFECTIVE INSULATION VALUE**

WALL SOUND TRANSMISSION CLASS

“ICF construction will generate energy savings that will lead to lower overall condo fees and maintenance costs.”

SAFE, QUIET LIVING CLOSE TO DOWNTOWN

Traffic noise, interior noise, fire safety and high energy costs are all serious concerns that builders of new inner city residential condominiums must overcome to attract buyers.

The 12-unit, three storey Villaggio Kensington condominium development, just minutes from the city’s downtown core, overcomes all these concerns by using the Advantage ICFs as its foundation and primary wall assembly system.

The builders of Villaggio Kensington, La Costa Housing Ltd., chose the Advantage ICFs after researching residents’ expectations and determining that, to be a success, the project had to provide residents with the quietest living environment and the lowest condominium fees possible.

La Costa is convinced that, overall, the savings in energy use that the residents will experience as a result of ICF construction, expected to be up to fifty per cent, will lead to lower overall condo fees and maintenance costs.

ICF CONSTRUCTION
FOUNDATION, EXTERIOR AND INTERIOR WALLS

The condominium’s ICF exterior walls begin at the parkade and foundation levels and are carried through to the top storey. These walls, which sandwich a core of reinforced, cast-in-place concrete between two panels of Plasti-Fab EPS insulation, provide a concrete mass with superior soundproofing and insulating qualities when compared to a typical wood-frame exterior wall.

42 PER CENT R-VALUE IMPROVEMENT

Residents will appreciate their lower heating and cooling costs as a result of the ICF construction. The Advantage ICF walls effective R-Value of 23.2 is 42 per cent greater than the 16.8 effective R-Value of typical

above-grade construction using 2x6 inch stud walls with R-20 batt insulation. (The higher the effective R-Value, the lower the heating and cooling costs.)

INTERNAL SOUNDPROOFING

To address concerns about internal noise, La Costa increased the internal soundproofing of the individual residences by also building the interior walls with the Advantage ICF system.

Residents will find that the ICF system more than adequately addresses their concerns regarding fire safety. Advantage’s six inch steel reinforced concrete walls with flame retardant PlastiSpan insulation and gypsum board have a three-hour fire rating.

La Costa did not experience any construction delays relating to building codes or inspections as a result of the use of the ICF technology. “Everyone that has walked through has commented on the quality of the construction, even the engineer sent over by the bank,” says La Costa.

All but two of The Villaggio Kensington condominiums are sold and residents are preparing to move in. The units range in size from 1,030 to 1,980 square feet.

La Costa is already planning their next project – using Advantage.

Residents will be protected from urban noise by the sound dampening effect of the ICF interior and exterior wall systems.

R-VALUE AND EFFECTIVE R-VALUE

R-Value is a measure of ability to reduce heat flow. Provincial building codes specify minimum R-Value for insulation that must be included in floor, wall and roof assemblies. However, this R-Value relates only to the insulation material itself. A more complete measurement is Effective R-Value. The Effective R-Value of a floor, wall or roof assembly includes the effect of all the components in the assembly and takes into account thermal bridging.