

# Labour Saver



*An interlocking foundation and wall system reduces need for skilled labour.*

We remember walking into a Woodbridge, Ontario warehouse a decade ago to see the first prototype house in Canada built with interlocking rigid polymer components. Since then, the Royal Building System™, a patented concrete forming technology, has become one of the world's fastest growing building systems with six world-wide manufacturing plants and thousands of structures. The house has survived Caribbean typhoons, earthquakes in Japan and Colombia, the jungle humidity of Central America and the extreme cold of Northern Canada.

Now it is facing a real challenge: the Canadian home builder. And, if new home projects

in Western Canada are any indication, it may be maturing into a competitive system for an industry facing a severe labour shortage.

The Royal Building System™ consists of extruded components that slide and interconnect together on-site to create a finished formwork that remains in place after the concrete is poured and cured. The wall components of The Royal Building System™ are extruded in three widths: 4" (100 mm), 6" (150 mm), 8" (200 mm), and 8I (200mm insulated).

Home builder **DANIEL WEBSTER**, president of Vancouver-based **IGC Triumph Inc.**, turned to the Royal System after 25 years of conventional stick-frame construction and experiments with insulated concrete form systems. "I have used the Royal Building System for foundations in many projects. What used to take several days to complete — usually in adverse conditions — is now accomplished in hours," Webster said.

Prior to starting construction, Webster's foundation plan is sent via e-mail to technicians at **Royal**, who provide a basement plan and a computer-generated foundation package that is pre-cut to wall height, with window and doorway dimensions, in a ready-to-assemble plan.

After building and pouring a typical strip footing, the System is assembled by sliding the panels together vertically. Reinforcing steel is placed both vertically and horizontally, following the structural engineers' design. The rebar is placed in vertical and horizontal cells, eliminating the need to tie the steel together.

After a limited amount of bracing, the concrete is poured using a line pump. "The foundation is then ready to build on as no stripping

or dampproofing is required," Webster explained.

Electrical conduit is provided to accommodate wiring requirements, among the engineering aspects that Webster said makes it easy for the homes to meet building codes and local bylaws.

Webster added that a major benefit is the low labour component, since the on-site simplicity of the System "reduces the need for highly skilled trades people."

This may prove the key selling point as home builders across Canada wrestle with the worst labour shortage in history.

Webster, who has become a Royal dealer, is currently building a house on Puget Drive in Vancouver with the Royal Building System™ and he has welcomed other builders to visit the site this summer and see how it works.



**Vancouver home builder Dan Webster completes walls with concrete-filled polymer components**