

# Innovative First Nations Community

Penticton, British Columbia, Canada



## Innovative First Nations community achieves efficiency and affordability with Insulspan® SIP System

Based in Penticton, British Columbia, Ritchie Custom Homes has established a reputation of building quality green homes throughout the Okanagan Valley for over 20 years. So it was no surprise when they were selected by the Penticton Indian Band to construct eight identical single family homes meeting a high standard of energy efficiency, but without relying on solar panels or other expensive technologies.

Company president Nicholas Hill worked with Allen + Maurer Architects to incorporate simple and cost-effective energy reduction strategies, such as a passive solar design and well-insulated building envelope. That started with 6-inches of PlastiSpan® HD expanded polystyrene insulation beneath a concrete slab-on-grade that incorporated a radiant heating system.

On seven of the eight homes, Hill constructed the walls and roof using the Insulspan® Structural Insulating Panel (SIP) System. Insulspan SIPs deliver continuous high R-value insulation, minimizing both thermal bridging and air infiltration.

“The SIP system has a high R-value and it is easy to seal it up to

get an airtight home with low labor cost,” said Hill.

Insulspan’s prefabricated panels allowed construction crews to quickly assemble the homes, sealing as they go to virtually eliminate air leakage. Hill’s homes achieved astonishingly low blower door test results of 0.6 ACH50 and an EnerGuide rating of 88 for little additional cost over a standard home.

“The biggest key with the Insulspan system is that it is a highly energy-efficient envelope product that reduces labor cost,” said Hill. “SIPs are quickly becoming the most cost-effective way to construct a high-performance building enclosure that meets or exceeds building codes.”

“This project demonstrates that by simply combining good design, quality construction, and the Insulspan SIP system, you can save a tremendous amount of energy for very little incremental cost,” said Insulspan SIPs Sales Manager Dave Stevenson.

