



## Project Profile

### Edelweiss House – Wakefield, Quebec

# DELTA® Brand Products

# First LEED® v4 Certification in Canada



#### → General Information

Building Name	Edelweiss House
Building Location	Wakefield, Quebec
Country	Canada
Project Size	1,552 sq.ft.
Building Type	Single Story
Project Type	Residential Home
Type of Cladding	Riopel FSC Wood Siding
Total Building Costs	\$250,000
Owner	Ecohome
Architect/ General Contractor	Emmanuel Cosgrove and Mike Reynolds
Year	2015

#### → Project Description

Edelweiss House is a hyper-efficient cold-climate house that earned the first LEED® v4 Certification in Canada and only the second in the world to reach the rigorous Platinum level for LEED v4. It boasts an average price tag and an extremely low operational budget. Located 40 minutes from Ottawa in the Gatineau Hills, this 1,552 sq. ft. home cost less than \$250,000 to build and its energy bills are estimated at less than \$1.40/day. In comparison, a standard new home of comparable size consumes roughly 10 times more energy

The Edelweiss House was designed and built by Emmanuel Cosgrove and Mike Reynolds, co-founders of Ecohome. “We don’t really build anymore as our mission is education,” they say. “We undertook this project to show builders and homeowners that it isn’t that hard or expensive to build better-performing homes, and that your true monthly overhead can actually be lower, right from the moment you move in.”

The home will now be used for full-day workshops, as well as for short-term rentals that allow building professionals or future homeowners to experience the comfort of a passive solar home firsthand.

DELTA® brand products from Dörken were used in the construction of the project, including DELTA®-VENT SA, DELTA®-VENT S, DELTA®-FLORAXX, DELTA®-MULTI-BAND and DELTA®-FLASHING. Together, the construction membrane products helped make the building as airtight and vapor tight as possible in order to meet the stringent energy efficiency standards required for Canada Green Building Council’s LEED v4 certification.



DELTA®-VENT S was used as a secondary air barrier providing additional air tightness.



Overnight renters can experience the comfort of an affordable Platinum level LEED® v4 home.



Blower tests confirmed that there were no leaks.



Hyper-efficient cold-climate house is ready for winter.

Fully adhered DELTA®-VENT SA was used as the primary air and water-resistive barrier. The barrier passed difficult blower door test standards, confirming there were no leaks in the air barrier system. DELTA®-VENT SA is a vapor-permeable, self-adhesive, water-resistive air barrier for commercial and residential use. It is the most technologically advanced air and watertight membrane system available on the market today.

DELTA®-FLORAXX was used as the water retention and drainage component of the green roof, which covers the structure. It helps retain water to reduce the need for irrigation, slows the transfer of precipitation from the roof to municipal drain systems and provides the plants with adequate drainage and air circulation on the rooftop. The garden roof will help cool the building in the summer through transpiration.

DELTA®-VENT S serves as the secondary moisture barrier. It was installed to the exterior of the continuous stone wool insulation, providing additional airtightness, protection from moisture ingress and protection for the insulation from wind and rain. DELTA®-MULTI-BAND tape is the high-performance, all-purpose accessory that ensures every lap and detail is sealed tight. In this building, it was used to ensure the building was airtight at detail areas, as well as vapor tight, as it was also used to seal the interior vapor barrier.

