# Lightweight Steel Cladding Case Studies



# UNIVERSITY COLLEGE OF THE NORTH & THOMPSON REGIONAL <u>COMMUNITY CENTRE</u> THOMPSON, MANITOBA

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### DESIGN AND CONSTRUCTION TEAM

**OWNER:** Province of Manitoba

**ARCHITECT:** Architecture49 Inc.

### CONSTRUCTION MANAGER: UCN: PCL Constructors Canada TRCC: Akman Construction

**STRUCTURAL STEEL SUPPLIER:** Columns & Beams: Abesco

**STRUCTURAL ENGINEERS:** Crosier Kilgour & Partners

MECHANICAL & ELECTRICAL ENGINEER: WSP

**CIVIL ENGINEER:** Neegan Burnside Ltd.

ELECTRICAL & MECHANICAL CONTRACTOR: Wescan

WALL CLADDING SUPPLIER UCN AND TRCC: Agway Metals

MASONRY & WALL CLADDING INSTALLER UCN: Brxton Construction LP

WALL CLADDING INSTALLER TRCC & CURLING CLUB: Tri-Clad Designs Inc.

## Good craftsmanship is often modest architecture The community centre in Thompson, Manitoba needed a facelift. The town's University College of the

The community centre in Thompson, Manitoba needed a facelift. The town's University College of the North needed a new campus. Combining the two projects would create a multipurpose community meeting place. And that's just what Doug Corbett of Architecture49 Inc. intended. "The overall vision was to create a hub in Thompson where people could congregate and enjoy recreational activities," he says. "The new building would be a place for traditional and advanced learning."



He added, "It would also attempt to reach out to those who have not previously felt welcome in a university college environment." Corbett had spent ten years working in Thompson and recognized the need for a new city centre where people would naturally gather. The project was a tough sell at first. "There was a lot of negativity in the beginning. No one believed it would get built. They thought it was just another political promise. And then, once they realized it was going to happen, they were expecting to get a vanilla box," he explains.

The new campus building has a floor area of  $8,155 \text{ m}^2$  (87,780 sq. ft.). It was designed and built in conjunction with renovations to the existing Thompson Regional Community Centre. The two buildings are connected, sharing amenities such as food services, a gymnasium, day care and a library. Also connected to the TRCC is the curling club which is clad with unpainted Z275 (G90) galvanized steel. The campus building is a four-storey structure with a visual and spiritual connection to the Burntwood River on the north side of the site.

"What we intended to do was make a ceremonial entrance to both buildings. The First Nations people have very strong connections to the river, so we wanted the buildings to have this connection as well," says Corbett, adding that over 2,000 people came to the grand opening. "It's a striking-looking building. The community is very proud of it. They tend to show it off quite a bit."

The flexibility and durability of steel made it a natural fit for the project. The super structure, roof, standing-seam paneling, and the studs of the buildings are steel. "We left a lot of the materials exposed. Steel was the main part of our design process. We wanted a natural galvanized look. The design concept was raw," Corbett says. "One of the main advantages of using steel in a Northern climate is that you can erect it at any time of year. Steel is durable for the buildings' purpose and climate. If a panel gets damaged, you can take it off and replace it pretty easily."

Construction started on the Thompson Regional Community Centre in June 2010 and finished in November 2011. Work began on the University College of the North (UCN) campus in May 2011, and finished in September 2014.

"Architecture has a social responsibility. Our intent was to express the community's values through architecture," says Corbett. "Aboriginal youth are the fastest-growing demographic in Canada, but the lack of access to good education is a major problem facing First Nations people. The new UCN campus is an inviting destination that inspires and connects the community, and makes the First Nation students feel welcome."



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### CLADDING MATERIAL:

UCN – AGWAY METALS AR 38 STANDING SEAM ROOF PANEL: .759mm (.0299") pre-painted Z275 (G90) galvanized steel coloured QC18306 Charcoal

THOMPSON REGIONAL COMMUNITY CENTRE & CURLING CLUB: .759mm (.0299") unpainted Z275 (G90) galvanized steel AR 38 standing seam roof panel.

#### LIGHT STEEL FRAMING:

EXTERIOR WIND BEARING: 1.22mm (.048") Z275 (G90) - 152mm & 203mm (6" & 8") INTERIOR: .91mm (.036") Z275 (G90) 92mm & 152mm (3-5/8" & 6")

#### **STEEL ROOF DECK:**

.76mm (19.3") Z275 (G90) roof deck.



and enclosure. It is easily maintainable in a context of the severe winter climate and isolated northern site location.

The new four storey campus building, with a floor area of 8,155 m<sup>2</sup> (87,780 sq ft.), was designed and built in conjunction with renovations to the existing Thompson Regional Community Centre on site, to create a 'town centre'. The two building are connected, sharing amenities such as food services, a Gymnasium, a Day Care and a Library.

Both the Thompson Regional Community Centre and the Curling Club are clad with unpainted Z275 (G90) galvanized steel AR 38 standing seam roof panels and are easily maintainable.





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