



NEW BRUNSWICK DEPARTMENT OF NATURAL RESOURCES

RICHIBUCTO, NEW
BRUNSWICK

(Reprinted with permission from
ArcelorMittal Dofasco Steel Design, 2010)

DESIGN AND CONSTRUCTION TEAM

OWNER:

New Brunswick Department of
Natural Resources

ARCHITECTURAL AND ELECTRICAL ENGINEERING TEAM:

New Brunswick Department of
Supply and Services

STRUCTURAL ENGINEER:

Phillips Engineering and
Consulting Services

MECHANICAL ENGINEER:

Tweedie & Associates Consulting
Engineers Ltd.

BUILDING ENVELOPE SPECIALIST:

Stantec Consulting Limited

GENERAL CONTRACTOR:

Castle Rock Construction Services
Incorporated

ROOFING AND CLADDING SUPPLIER:

Vicwest

INSTALLERS:

Losier Aluminum Ltee.

Galvalume Plus™ steel roof and wall cladding help meet LEED requirements



Designers used the Canada Green Building Council's LEED Rating System for New Brunswick's Department of Natural Resources' new office in Richibucto, completed this year. To help qualify for LEED Silver certification, they specified Galvalume Plus™ steel roof and wall cladding. Galvalume Plus met the LEED recycled content criterion, plus it is itself recyclable.

Using Galvalume™ steel cladding, rather than vinyl siding, also made the building eligible for a LEED durable building credit.

"All new provincial government buildings are to be designed with the objective of achieving a minimum of LEED Silver certification," explains Pam Barteaux, Director of Planning and Project Development, New Brunswick Department of Supply and Services.

The roughly cross-shaped office building has a 691m² (7,438 sq. ft.) footprint. The roofing material is unpainted .76mm (.0299"), AZM180 Galvalume Plus. The profile is Tradition 100-4, with an "I"-style batten cap hidden fastener system.

The office building and garage walls were clad with 1,579m² (17,000 sq. ft.) of corrugated .61mm (.0239") prepainted AZM150 Galvalume steel cladding with a 22mm (.875") corrugated profile. Three colours were used: 743m² (8,000 sq. ft.) of WeatherX (SMP) Metro Brown QC16154, 697m² (7,500 sq. ft.) of unpainted Galvalume Plus; and 139m² (1,500 sq. ft.) of Copper Metallic Finish QC3234.

The office building was constructed with ICF block walls and wooden roof trusses and the garages with both wooden walls and roof trusses.

"There is not nearly as much waste and clean-up with steel as there is with shingles or other materials," said Dennis Fiander, Project Manager, Castle Rock Construction Services Incorporated, Saint John. "However there are challenges in installing steel roofing and siding. Care must be taken in placing the siding and panels along with the flashing and soffits."

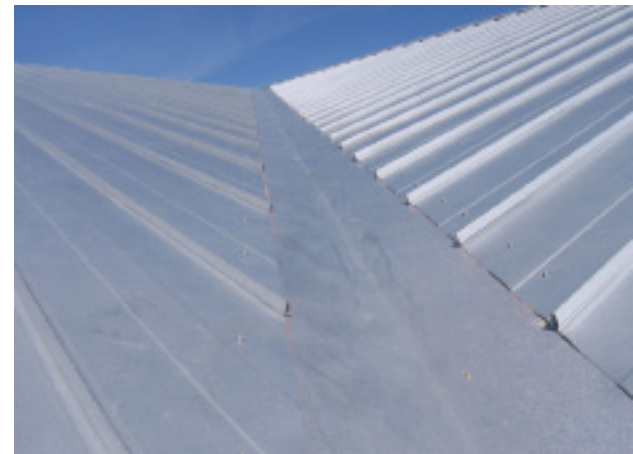
Working to LEED requirements was not particularly difficult, Fiander adds, "The manufacturer supplied some additional submittals and information."

To help qualify for LEED Silver certification, the Department of Supply and Services specified Galvalume Plus™ steel roof and wall sheathing. Galvalume Plus met the LEED recycled content criterion. Using Galvalume steel cladding, rather than vinyl siding, also made the building eligible for a LEED durable building credit.



1,579m² (17,000 sq. ft.) of corrugated .61mm (.0239") prepainted AZM150 Galvalume steel cladding with a 22mm (.875") corrugated profile was used to clad the office and both garages.

Trim and highlight panels are corrugated .61mm (.0239") prepainted AZM150 Galvalume steel cladding with 22mm (.875") corrugated profile, coloured Metro Brown QC16154 and Copper Metallic QC3234.



The roof is clad with the Tradition profile in unpainted .76mm (.0299"), AZM180 Galvalume Plus. The roofs of the two garages, one with a 241m² (2,594 sq. ft.) footprint, the other a 215m² (2,314 sq. ft.) footprint, are similarly clad. A total of 1,486m² (16,000 sq. ft.) of cladding covers the three roofs.

