



## MUROX CI PREFABRICATED PANEL

### R-31



### DESCRIPTION

Prefabricated wall panel consisting of a steel structural core with insulated cavity, exterior R-10 (RSI-1.76) continuous insulation and prepainted interior and exterior steel cladding. Integrated in the panels, the structural columns are composed of steel C channels up to 12 in. (304.8 mm) of depth. The air/water and vapor barrier membranes are shop-installed and sealing between panels is done on site. The effective thermal resistance value of the wall assembly is R-31 (RSI-5.46). Installation can be performed any time of year.

### Components

- M-156R or M-2297 prepainted exterior steel cladding (see the Metal Cladding brochure). Refer to the Murox Technical Manual for other exterior finish options.
- Air barrier, non-woven type 1, air penetration resistance:  $< 0.004 \text{ cfm/ft.}^2$  at 1.57 psf ( $0.01 \text{ L/(s}\cdot\text{m}^2)$  at 75 Pa).
- 2 in. (50 mm) exterior continuous rigid extruded polystyrene insulation boards with a thermal resistance of R-10 (RSI-1.76).
- Structural steel framed panels.
- 9 in. (228.6 mm) friction fit fiberglass insulation batts with a thermal resistance of R-30 (RSI 5.28).
- Vapor barrier, polypropylene type 1, permeability: 0.02 perm ( $1.15 \text{ ng/Pa}\cdot\text{s}\cdot\text{m}^2$ ).
- M-156R or M-2297 prepainted interior steel cladding (see the Metal Cladding brochure).

### Versatile use

- Industrial, commercial and institutional buildings.
- New construction.
- Building expansion.
- Buildings where non-combustible construction is required.

### Restrictions

- Refrigerated and agri-food buildings with food safety standards.
- Buildings where exterior walls are required by codes to have a fire-resistance rating.

Contact your Canam representative for any question regarding restrictions and options available for your project.

### Installation

Erector skills: According to the nature/extent of work required for the project, only a steel erector with a solid experience in assembling steel structures and similar products should be selected for the installation. The erector must meet all requirements, quality standards and installation methods established by Canam.



## Technical data

Standard test methods:

- ASTM C1363 — Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus
- ASTM E2357 — Standard Test Method for Determining Air Leakage Rate of Air Barrier Assemblies
- ASTM E90 — Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

The Murox CI - R-31 panel meets industry criteria to be considered as a pressure-equalized rainscreen wall with continuous insulation.

Table of physical characteristics

Characteristics	Test method	Result
Effective thermal resistance	ASTM C1363	R-31 h-ft. <sup>2</sup> -F/Btu (RSI-5.46 m <sup>2</sup> K/W)
Air leakage	ASTM E2357	Passed
Sound transmission class	ASTM E90	38 STC

## Product data

Average weight	7 lb./ft. <sup>2</sup> (34.25 kg/m <sup>2</sup> )
Panel dimensions	Maximum width of 10 ft. (3 m), maximum height of 44.5 ft. (13.6 m)
Column sizes	8 to 12 in. (203.2 to 304.8 mm)
Transportation	Delivery by standard truck
Ventilated Thermal Panel (VTP)	Can be used with a Murox VTP solar collector

## Contribution to LEED certification

The Murox CI - R-31 prefabricated wall panel can contribute to obtaining the following LEED credits:

- EA (Energy and Atmosphere) Credit 1 for optimization of new or existing building energy performance
- MR (Materials and Resources) Credits 4.1 and 4.2 for content of recycled materials
- MR (Materials and Resources) Credits 5.1 and 5.2 for materials of local or regional origin

All Murox panels are manufactured at our plant in Saint-Gédéon-de-Beauce, Quebec.

For further information, contact your Canam representative.

## Quality control

The Saint-Gédéon-de-Beauce plant is ISO 9001:2015, CWB, SJI, AISC and CISC certified.

A strict manufacturing quality control procedure is implemented in our plants, ensuring quality and consistency of the product through several points of strategic control.

For buildings erected by Canam, a certificate of compliance is issued upon completion of building assembly.

## CSC and CSI MasterFormat™

13 34 19 – Fabricated Engineered Structures-Steel Building System.

Go to [canam-construction.com](http://canam-construction.com) for product information updates.