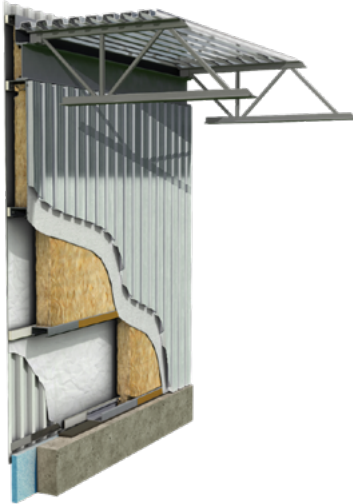




## MUROX PREFABRICATED PANEL

### R-20



#### DESCRIPTION

Prefabricated wall panel consisting of a steel structural core with insulated cavity, exterior thermal breaks and pre-painted interior and exterior steel cladding. Integrated in the panels, the structural columns are composed of steel C channels up to 304.8 mm (12 in.) 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 RSI-3.61 (R-20.53). Installation can be performed any time of year.

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#### Components

- M-156R or M-2297 pre-painted 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:  $< 0.01 \text{ L}/(\text{s}\cdot\text{m}^2)$  at 75 Pa (0.004 cfm/ft.<sup>2</sup> at 1.57 psf).
- Exterior thermal break: 25.4 mm (1 in.) high density Polyform Neopor expanded polystyrene RSI-0.88 (R-5).
- Structural steel framed panels.
- 152 mm (6 in.) friction fit fiberglass insulation batts with a thermal resistance of RSI 3.52 (R-20).
- Vapor barrier, polypropylene type 1, permeability: 1.15 ng/Pa-s-m<sup>2</sup> (0.02 perm).
- M-156R or M-2297 pre-painted interior steel cladding (see the Metal Cladding brochure).

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#### Versatile use

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

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#### 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.

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#### 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 E283 — Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E90 — Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

Table of physical characteristics

Characteristics	Test method	Result
Effective thermal resistance	ASTM C1363	RSI-3.61 m <sup>2</sup> K/W (R-20.53 h-ft. <sup>2</sup> -F/Btu)
Air leakage	ASTM E283	Air infiltration: 0.017 l/s-m <sup>2</sup> (0.0033 cfm/ft. <sup>2</sup> ) Air exfiltration: 0.016 l/s-m <sup>2</sup> 0.00314 cfm/ft. <sup>2</sup> )
Sound transmission class	ASTM E90	39 STC

## Product data

Average weight	34.25 kg/m <sup>2</sup> (7 lb./ft. <sup>2</sup> )
Panel dimensions	Maximum width of 3 m (10 ft.), maximum height of 13.6 m (44.5 ft.)
Column sizes	152 to 304.8 mm (6 to 12 in.)
Transportation	Delivery by standard truck
Ventilated Thermal Panel (VTP)	Can be used with a Murox VTP solar collector

## Contribution to LEED certification

The Murox - R-20 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.