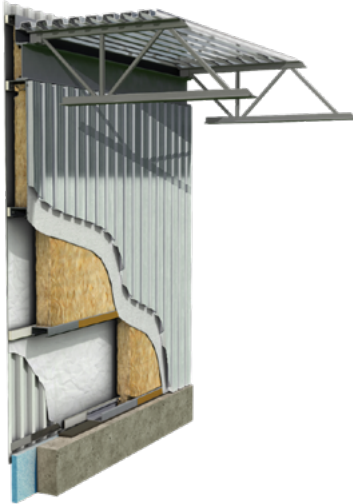




MUROX PREFABRICATED PANEL

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 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-20.53 (RSI-3.61). Installation can be performed any time of year.

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: $< 0.004 \text{ cfm/ft.}^2$ at 1.57 psf ($0.01 \text{ L/(s}\cdot\text{m}^2)$ at 75 Pa).
- Exterior thermal break: 1 in. (25.4 mm) high density Polyform Neopor expanded polystyrene R-5 (RSI-0.88).
- Structural steel framed panels.
- 6 in. (152 mm) friction fit fiberglass insulation batts with a thermal resistance of R-20 (RSI 3.52).
- 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 pre-painted 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 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	R-20.53 h-ft. ² /F/Btu (RSI-3.61 m ² K/W)
Air leakage	ASTM E283	Air infiltration: 0.0033 cfm/ft. ² (0.017 l/s-m ²) Air exfiltration: 0.00314 cfm/ft. ² (0.016 l/s-m ²)
Sound transmission class	ASTM E90	39 STC

Product data

Average weight	7 lb./ft. ² (34.25 kg/m ²)
Panel dimensions	Maximum width of 10 ft. (3 m), maximum height of 44.5 ft. (13.6 m)
Column sizes	6 to 12 in. (152 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 - 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 for product information updates.