# **FLUTED**

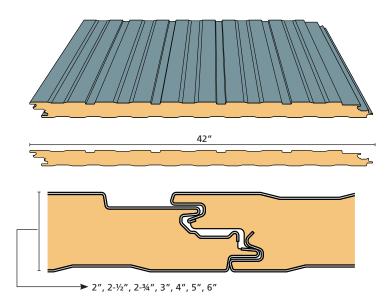


The ribbed profile of the **Fluted** insulated metal wall panel provides bold vertical lines complementary to almost any commercial or industrial building. Inverted ribs in the profile enhance the high-tech industrial look.

Fluted panels have a standard FM Approved Class 1 foam core and offer excellent insulating values. The metal and foam composite construction creates a rigid panel far stronger than the individual parts. This increases the span capability of the panel and reduces the need for secondary structural components.

#### FEATURES AND BENEFITS

- Panels are lightweight and quick to install, significantly reducing construction time.
- A double tongue-and-groove offset side joint permits concealed fastening.
- Consistent insulating values are achieved with built-in thermal breaks, saving energy.
- Recommended for the exterior of cold storage buildings.



## USES AND APPLICATIONS

In new and retrofit construction, Fluted panels function as walls for all types of architectural, commercial and industrial applications.

They are ideally suited for:

### ARCHITECTURAL

- Airport Terminal Buildings
- Arenas
- Convention Centers
- Hospitals
- Low and Mid-Rise Offices
- Mid-Rise Office Spandrel Panels
- Performing Arts Centers
- Schools & Universities
- Worship Facilities

## COMMERCIAL & INDUSTRIAL

- Distribution Centers
- Equipment Maintenance Buildings
- Hangars
- Manufacturing Facilities
- Retail Buildings
- Self-Storage Complexes
- Utility Buildings
- Warehouses

## COLD STORAGE

- Cooler Buildings
- Freezers
- Food Processing Buildings
- Dry Goods Warehouses
- All Controlled Environment Buildings where temperature control and insulation values are critical



## **FLUTED**

MATERIAL SPECIFICATIONS					
EXTERIOR PROFILE	Flutes 1" wide and nominal 3/8" deep				
INTERIOR PROFILE	Mesa wave pattern, nominal 1/8" deep				
FOAM CORE	Foamed-in-place, Non-CFC & zero ODP polyurethane, Factory Mutual Class 1 approval				
THERMAL VALUE	R VALUE WITH AIR FILM		75° Mean	40° Mean	
		2" PANEL	15.14	17.03	
		2-1/2" PANEL	18.71	21.29	
		2-3/4" PANEL	20.49	23.42	
		3" PANEL	22.27	25.55	
		4" PANEL	29.42	34.06	
		5" PANEL	36.56	42.58	
		6" PANEL	43.71	51.09	
	<ol> <li>R-Values include the air films on each side of the panel</li> <li>75° Mean based on ASTM C518 Thermal Testing. 40° Mean based on ASTM C1363 Thermal Testing (Values for C1363 based on 4" panel testing). All values for other thicknesses extrapolated</li> </ol>				
MODULE WIDTH	42"				
PANEL THICKNESS	2", 2-½", 2-¾", 3", 4", 5" & 6"				
PANEL LENGTHS	Standard 8'-0" to 53'-0"				
EXTERIOR FACINGS	Stucco embossed, G-90 galvanized and/or AZ-50 aluminum- zinc coated steel in 26 Ga., 24 Ga. and 22 Ga.				
INTERIOR FACINGS	Stucco embossed, G-90 galvanized and/or AZ-50 aluminum-zinc coated steel in 26 Ga., 24 Ga. and 22 Ga. Type 304 stainless steel in 26 Ga. embossed and unpainted.				
EXTERIOR FINISHES & COLORS	Siliconized Polyester, Fluropon® Full-Strength 70% PVDF Fluoropolymer Coating. Note: 1. Dark colors are not recommended for exterior color on				
	<ol> <li>cooler and freezer buildings.</li> <li>Prices may vary by color, gauge and quantity of metal.</li> </ol>				
INTERIOR FINISHES & COLORS	USDA-compliant Polyester, Igloo White. USDA-compliant PVC Plastisol, Polar White* *PVC Plastisol Polar White is a different color & shade than Polar White in other available finishes.				
PANEL JOINT	Offset double tongue-and-groove with extended metal shelf for positive face fastening.				
FASTENING	Fastener & Clip concealed in the side joint.				
FM Approved Class 1 with no height restrictions.					

### **TESTS AND CERTIFICATIONS**

		Standard	Standard / Test Description	
US Certifications	Fire Performance	FM Approval Standard 4880	Class 1 Fire Rating of Insulated Wall, Ceiling and Roof Panels	
		NFPA 259	Test Method for Potential Heat of Building Materials	
		NFPA 285	Evaluation of Fire Propagation Characteristics of Exterior Non- Load- Bearing Wall Assemblies	
		NFPA 286	Fire Tests for Evaluating Contribution of Wall and Ceiling Finish to Roof Fire Growth	
		ASTM E84	Surface Burning Characteristics of Building Material	
	Structural Performance	FM Approval Standard 4881	Class 1 Exterior Wall Structural Performance	
		ASTM E72	Strength Tests of Panels for Building Construction	
		ASTM E330	Structural Performance of Exterior Curtain Walls by Uniform Static Air Pressure Differences	
	Vapor Barrier Performance	ASTM E283	Rate of Air Leakage Through Curtain Walls Under Specified Pressure Differences	
		ASTM E331	Water Penetration of Exterior Walls by Uniform Static Air Pressure Differences	
	Thermal Performance	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	
		ASTM C1363	Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus	
	Special Approvals	City of Los Angeles	Product Approval for City/County of Los Angeles	
		Miami-Dade Wall	Miami-Dade County Product Control Approved (Note: WACC Vertical Installation Only) NOA No. 13-0212.06, Expiration Date: 03/06/2018	
Canadian Certifications	Fire Performance	CAN/ULC S101	Fire Endurance Tests of Building Construction and Materials	
		CAN/ULC S102	Surface Burning Characteristics of Building Materials and Assemblies	
		CAN/ULC S138	Fire Growth of Insulated Building Panels in a Full-Scale Room Configuration	

Load span tables and notes are available at RobertsonBuildings.com

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Corporate Office | 1343 Sandhill Dr., Ancaster, ON L9G 4V5 | 800-387-5335, 905-304-1111, f 905-304-2420

Western Office | 11318-163 St. NW, Edmonton, AB T5M 1Y6 | 780-485-3055, f 780-461-7785

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