



INSULATED METAL PANELS

CF FLUTE

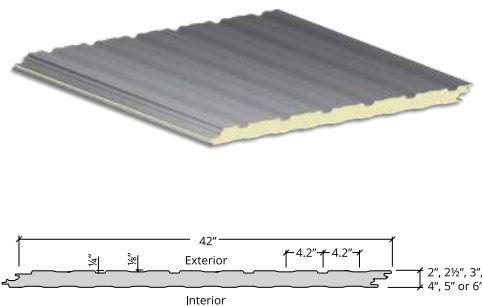
The traditional styling and distinct vertical lines of the CF Flute panel are ideal for custom-designed or conventional building construction, especially commercial and industrial applications. It can also be used in cold storage applications. The interior skin employs a Mesa profile. The CF Flute panel is available in a width of 42".

Features and Benefits:

- The CF Flute panel utilizes concealed clips and eliminates thermal short circuits.
- The standard exterior surface is 26, 24 or 22 gauge Galvalume® coated steel with silicone polyester or PVDF coatings.
- Insulated metal panels allow for fast assembly times and easy installation, resulting in reduced construction labor costs and earlier business starts.

Product Specifications

Applications: Wall (Vertical)
Coverage Widths: 42"
Thicknesses: 2", 2½", 2¾", 3", 4", 5", 6"
Lengths: 8'-0" to 32'-0" for horizontal
 8'-0" to 52'-0" for vertical
Attachment: Concealed fastening system
Insulation Material: Non-CFC foamed-in-place polyurethane foam cured to achieve a minimum density of 2.2 pounds
Accessories: Fasteners, sealants, standard and custom trim
Exterior Gauge: 26 (standard); 24, 22 (optional)
Interior Gauge: 26 (standard); 24, 22 (optional)
Exterior Finishes: Stucco-embossed
Interior Finishes: Stucco-embossed, Mesa profile
Exterior Coatings: Signature® 200, Signature® 300, Signature® 300 Metallic
Interior Coating: Igloo White (standard)



U-Factors and R-Values**

U-Factor (BTU/h-ft ² F)		R-Value (h-ft ² F/BTU)	
PANEL WIDTH: 42"		PANEL WIDTH: 42"	
75°		75°	
2"	0.0721	2"	13.87
2½"	0.0523	2½"	19.12
3"	0.0432	3"	23.15
4"	0.0328	4"	30.49
5"	0.0267	5"	37.45
6"	0.0226	6"	44.25
PANEL WIDTH: 42"		PANEL WIDTH: 42"	
40°		40°	
2"	0.0692	2"	14.45
2½"	0.0498	2½"	20.08
3"	0.0410	3"	24.39
4"	0.0311	4"	32.15
5"	0.0252	5"	39.68
6"	0.0214	6"	46.73

*Available only from Metl-Span's Nevada plant
 **Based on ASTM C518, ASTM C1363 and thermal modeling, 75°F and 40° F core mean temp.



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CATEGORY	CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
ENVIRONMENTAL	Thermal Transmission	ASTM C518	Measure the heat transmission coefficient per unit thickness (k-factor)	0.140 BTU-in/hr-ft ² -° F (7.14/inch) at 75° F mean temperature 0.126 BTU-in/hr-ft ² -° F (7.94/inch) at 40° F mean temperature 0.118 BTU-in/hr-ft ² -° F (8.47/inch) at 20° F mean temperature
		ASTM C1363	Measures the resistance to heat flow (or R-Value) of a construction assembly in a guarded hot box	Varies up to R-8.5/inch of panel thickness at 40° F mean temperature (See Appendix A)
	Air Leakage Through Wall Panel Joints	ASTM E283	Determines the air leakage characteristics of metal wall panels under specified air pressure differences at ambient conditions	0.01 cfm/ft ² at 20 psf static pressure
	Water Penetration Through Wall Panel Joints	ASTM E331	Determines the resistance to water penetration of metal wall panels under uniform static air pressure difference	No uncontrolled water penetration through the panel joints at a static pressure of 20 psf
FOAM PROPERTIES	Foam Density	ASTM D1622	Determines the apparent density of rigid cellular plastics	2.3 pcf
	Foam Compressive Strength	ASTM D1621	Determines the behavior of cellular materials under compressive load	15 psi through-thickness 22 psi other directions
	Foam Tensile Strength	ASTM D1623	Measures the tensile strength of the foam from a cored sample	30 psi through-thickness 33 psi lowest any other direction
	Foam Shear Strength	ASTM C273	Measures the shear strength of the foam from a cored sample	16 psi lowest in any direction
FIRE RESISTANCE	Surface Burning Characteristics	ASTM E84	Provides comparative measurements of surface flame spread and smoke density measurements relative to that of select grade red oak and fiber-cement board surfaces under specific fire exposure conditions	Flame Spread index of 20, Smoke Developed index of 350
	Room Fire Performance	FM 4880	Evaluates insulated roof and wall panels, interior finishes or coatings, and exterior wall systems for their performance in regard to fire	Class 1 Rating of wall and roof panels for use in unlimited height structures
		NFPA 286	Fire tests for the flammability characteristics of wall and ceiling interior finishes	The Panels meet the criteria of the IBC Section 803.1.2.1
		CAN/ULC S101	Standard method of fire endurance tests of building construction and materials	The Panels provide 15-minute remain-in-place fire resistance rating
		CAN/ULC S102	Standard method of test for surface burning characteristics of building material and assemblies	Flame Spread index of 0 Smoke Developed Index of 45 Fuel Contributing Value of 0
		CAN/ULC S134	Standard method of fire test of exterior wall assemblies	The Panels meet the criteria published in the standard
	Wall Fire Performance	NFPA 285	Evaluation of fire propagation characteristics of exterior non-load bearing wall assemblies in regard to fire	Panels meet the requirement of the standard
WALL LISTINGS	Wall Performance – FM Global [®] (See Note 1 below)	FM 4881	Sets performance standards for panel walls including wind load resistance and hail resistance Requires a Class 1 rating by FM Global Standard 4880 as a prerequisite	See FM Global Approval Guide for Building Products complete listings
STRUCTURAL	Uplift Resistance	ASTM E72 ASTM E330	Provides a standard procedure to evaluate or confirm structural performance under uniform static air pressure difference	See Load Chart Section
	Positive Load Resistance	ASTM E72	Tests the behavior of segments of wall construction under conditions representative of those encountered in service	See Load Chart Section

Notes:

1. Wall panels with textured coatings are not approved for the FM 4881 test method.

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