



CFR

INSULATED METAL ROOF PANEL

Developed as the preeminent innovation in all-in-one composite panel design, this standing seam roof panel combines durable interior and exterior faces with our unmatched polyurethane core. The CFR roof panel provides an unsurpassed weathertight seal and service life. Ideal for commercial, industrial and institutional markets, the panel can be used on roof slopes as low as 1/2": 12".

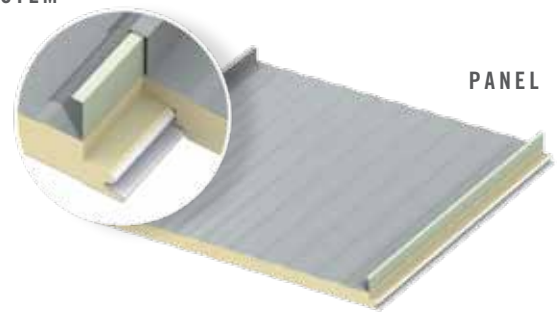
PRODUCT SPECIFICATIONS

- WIDTH** • 30" **, 36", 42"
- THICKNESS** • 2", 2 1/2", 3", 4", 5", 6"
- LENGTH** • 9'-6" to 53'-0"; contact Metl-Span for custom length availability
- EXTERIOR PROFILE** • 2" high standing seam with a Mesa profile between the seams, embossed
- EXTERIOR FACE** • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 24 and 22 Ga.; or AZ-55 aluminum-zinc coated steel with a clear acrylic coating in 24 Ga.
- INTERIOR PROFILE** • Mesa, nominal 1/8", deep embossed or unembossed
- INTERIOR FACE** • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

DESIGN FEATURES & BENEFITS

- Weathertight vertical side seaming and installation savings with fewer side joints to seal
- Factory-cut panel ends, factory notching and factory-swaged ends eliminate field work and erection costs
- Factory-installed backer plates at the endlaps eliminate pre-drilling for special fasteners
- Installed from the top side to provide concealed clips and fasteners

LOCK & GROOVE SYSTEM



PANEL PROFILE



JOINT • Concealed clip mechanically seamed singlelock standing seam at the exterior side joint. The interior side joint is a single tongue-and-groove interlock.

UPLIFT PERFORMANCE • UL 90 rated, FM Approvals Standard 4471, and Florida Building Code approved. Dade County NOA.

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"	0.0600	2"	16.67
2 1/2"	0.0490	2 1/2"	20.41
3"	0.0414	3"	24.15
4"	0.0318	4"	31.45
5"	0.0257	5"	38.91
6"	0.0217	6"	46.08

*Based on ASTM C518, ASTM C1363 and thermal modeling, 75° F core mean temp.

**Available only from Texas Plant.

TESTING: CFR INSULATED METAL ROOF PANEL

TEST/APPROVAL	TEST METHOD	TEST TITLE	RESULTS
Fire US	ASTM E84	Surface Burning Characteristics of Building Materials	Flame spread <25, smoke developed <450
	ASTM E108	Standard Test Methods for Fire Tests of Roof Coverings	Passed Class A
	FM 4880	Class 1 Fire Rating of Insulated Wall, Ceiling and Roof Panels	Product approved Exterior roof requires FM 4471 approval
	NFPA 286	Fire Tests for Evaluating Contribution of Wall and Ceiling Finish to Roof Fire Growth	Test specimen met the criteria of the IBC Section 803.1.2.1
Fire Canada	CAN/ULC S102	Surface Burning Characteristics of Building Materials and Assemblies	Meets the National Building Code of Canada requirements
	CAN/ULC S107	Methods of Fire Tests of Roof Coverings	Passed Class A
	CAN/ULC S126	Fire Spread Under Roof-Deck Assemblies	Met the criteria of the standard
Structural	ASTM E72	Strength Tests of Panels for Building Construction	See Load Chart
	ASTM E1592	Structural Performance of Metal Roof and Siding Systems by Uniform Static Air Pressure Differences	See Load Chart
	FM 4471	Class 1 Exterior Roof Structural Performance	See FM Roof Load Chart
	UL 580	Uplift Resistance of Roof Assemblies	UL Class 90 Uplift at 5' and 7'
	UL 1897	Uplift Tests for Roof Covering Systems	Uplift Resistance of 166 psf at 5' Uplift Resistance of 140 psf at 7'
Thermal Performance	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat-Flow Meter Apparatus	K-Factor of 0.126 BTU.in/hr.ft ² .°F at 40° F mean core K-Factor of 0.14 BTU.in/hr.ft ² .°F at 75° F mean core
	ASTM C1363	Thermal Performance of Building Materials and Envelope Assemblies	See Thermal Performance Guide
Air Infiltration	ASTM E1680	Rate of Air Leakage Through Exterior Metal Roof Panel Systems	<0.023 cfm/ft ² at 12 psf
Water Infiltration	ASTM E1646	Water Penetration of Exterior Metal Roof Panel Systems by Static Air Pressure Differences	No uncontrolled leakage when tested to a static pressure of 12 psf Vertical or horizontal installation
Special Approval	Miami-Dade NOA	Product Approval for City of Miami and Dade County	Product has City of Miami and Dade County Notice of Acceptance
	State of Florida	Product Approval for the State of Florida	Product has State of Florida approval

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