

ThermalSafe[®]

INSULATED METAL WALL PANEL

ThermalSafe is the panel of choice for use for a fire-resistant interlocking side joint, achieving a one-, two- or three-hour fire rating for walls and 1.5 hours for ceilings. ThermalSafe is available with three profiles: Ultra-Light Mesa, Light Striated or Santa Fe for the desired look for temperature-controlled buildings. Trust Metl-Span's ThermalSafe panel, produced using veteran knowledge and experience for the industry's best contractors.



PRODUCT SPECIFICATIONS

WIDTH	42", 43" ^{nv}
THICKNESS	Nominal 3", 4", 5", 6", 7", 8" Note: 5", 6", 7" & 8" contact Metl-Span engineering for details
LENGTHS	NON-DIRECTIONAL EMBOSSED 8'-0" to 40'-0" — Variable by thickness, contact Metl-Span for exact maximum length for each thickness
EXTERIOR PROFILE	Ultra-Light Mesa, Santa Fe or Light Striated, nominal 1/32" deep, embossed
EXTERIOR FACE	G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26 and 24 ³ Ga.
INTERIOR PROFILE	Ultra-Light Mesa, nominal 1/32" deep, embossed
INTERIOR FACE	G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26 and 24 Ga.
CORE	Fire-resistant, rigid mineral wool lamellas. Mineral wool fibers are oriented perpendicular to the panel faces for maximum structural strength.
JOINT	Exclusive LockGuard [®] side joint has a flush, double tongue-and-groove connection of the metal faces with an advanced integral spline to join the mineral wool core.
FASTENING	Available with either through-fastening across the width of the panel to the support framing or non-exposed fastening (NEF) by securing through the back of the panel for a flush visual appearance. Consult fire-resistant listings for fastener types and spacing. Fastening patterns may vary depending on specific windload and fire-resistant requirements.

THERMAL VALUES K-Factor** @ 75° F (24° C) is 0.275

WEIGHT, 26 GA. 3" is 3.94 PSF, 4" is 4.65 PSF,
5" is 5.49 PSF, 6" is 6.21 PSF,
7" is 6.92 PSF, 8" is 7.63 PSF

PANEL PROFILE



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°
3"	0.086	3"	10.9
4"	0.065	4"	14.5
5"	0.053	5"	18.2
6"	0.044	6"	21.8
7"	0.038	7"	25.5
8"	0.034	8"	29.1

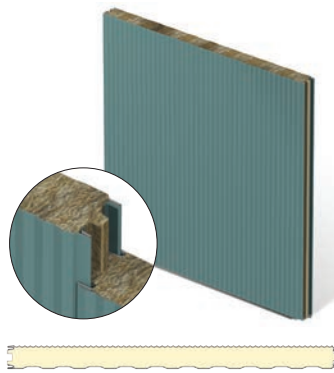
**R-Value & U-Factor per ASTM C518 & ASTM C1363/Simulation, respectively, based on a mean temperature of 75° F; Standard I-P unit convention shown | † Ultra-light mesa and Light Striated only | ** K-Factor calculations: BTU in/ft²hr. °F | † Only available in Ultra-Light Mesa*

EXTERIOR PROFILES • CROSS SECTION • SIDE JOINT

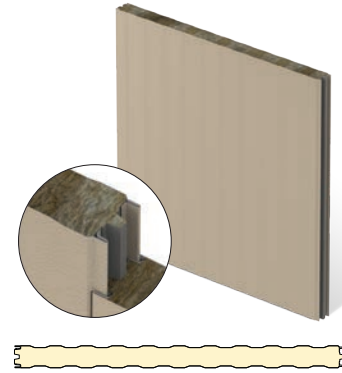
THERMALSAFE® SANTA FE PANEL



THERMALSAFE® LIGHT STRIATED PANEL



THERMALSAFE® ULTRA-LIGHT MESA PANEL



DESIGN FEATURES & BENEFITS

- High quality, fire-resistant core
- One-step construction reduces construction labor costs
- Reusable panels, highlighting sustainability
- Better sound absorption widens application use
- Aesthetic profile options open design possibilities

TESTING: CF LIGHT MESA INSULATED METAL WALL PANEL

TEST/APPROVAL	TEST METHOD	TEST TITLE	RESULTS
Fire US	ASTM E84	Surface Burning Characteristics of Building Materials	Flame spread 0, smoke developed 0
	ASTM E119	Fire Tests of Building Construction Materials	Intertek Listings: 4" panel: One hour vertical or horizontal wall 6" panel: Two hour vertical or horizontal wall 8" panel: Three hour vertical or horizontal wall 6" panel: 1.5 hour ceiling or floor
	UL 263°	Fire Tests of Building Construction Materials	UL Listings: 4" panel: One hour vertical or horizontal wall 7" panel: Two hour vertical or horizontal wall 8" panel: Three hour vertical or horizontal wall
	FM 4880°	Class 1 Fire Rating of Insulated Wall, Ceiling and Roof Panels	Product approved (Interior Only) Exterior wall requires FM 4881 approval
	FM 4881°	Class 1 Exterior Wall Structural Performance	+/- 120 psf rating for minimum 5" panels
Fire Canada	CAN/ULC S101	Fire Tests of Building Construction Materials	Intertek Listings: 4" panel: One hour vertical or horizontal wall 6" panel: Two hour vertical or horizontal wall 8" panel: Three hour vertical or horizontal wall 6" panel: 1.5 hour ceiling or floor
	UL 263°	Fire Tests of Building Construction Materials	UL Listings: 4" panel: One hour vertical or horizontal wall 7" panel: Two hour vertical or horizontal wall 8" panel: Three hour vertical or horizontal wall
	CAN/ULC S102	Surface Burning Characteristics of Building Materials and Assemblies	Flame Spread 0, Smoke Developed 0
Structural	ASTM E72	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction	See Load Chart
Thermal Performance	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat-Flow Meter Apparatus	K-Factor of 0.275 BTU.in/hr.ft ² .°F at 75° F mean core
Air Infiltration	ASTM E283	Rate of Air Leakage Through Curtain Walls Under Specified Pressure Differences	<0.04 cfm/ft ² air infiltration rate at static pressure differential of 6.24 psf
Water Infiltration	ASTM E331	Water Penetration of Exterior Walls by Uniform Static Air Pressure Differences	No uncontrolled leakage when tested to a static pressure of 6.24 psf for 2 hours
Special Approval	State of Florida°	Product Approval for the State of Florida	Product has State of Florida approval

° Only available in 42". | Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, Metl-Span reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. To ensure you have the latest information available, please inquire or visit our website at metlspan.com.