



THERMALSAFE®

INSULATED METAL WALL PANEL

The ThermalSafe® insulated metal panel combines advanced design with Metl-Span's sophisticated manufacturing expertise to create a composite panel with a core made from non-combustible structural mineral wool boards processed to maximize compressive strength. This fire-rated panel has superior structural characteristics and span capability.

PRODUCT SPECIFICATIONS

- WIDTH** • 42"
- THICKNESS** • Nominal 3", 4", 5", 6", 7", 8"
- LENGTH** • 8'-0" to 40'-0", variable by thickness; contact Metl-Span for exact maximum length for each thickness
- EXTERIOR PROFILE** • Ultra-Light Mesa, nominal 1/2" deep, embossed or Santa Fe, with heavy embossing
- EXTERIOR FACE** • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26 and 24 Ga.
- INTERIOR PROFILE** • Ultra-Light Mesa, nominal 1/2" deep, embossed
- INTERIOR FACE** • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26 and 24 Ga.
- WEIGHT, 26 GA. FACE** • 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
- 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

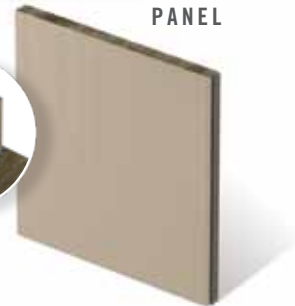
DESIGN FEATURES & BENEFITS

- Resists high temperatures and will not burn or release gases in a fire
- One-step installation that can be easily disassembled, moved and reinstalled

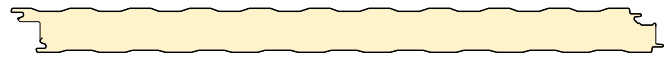
LOCK & GROOVE SYSTEM



PANEL



PANEL PROFILE



CORE • Non-combustible, rigid mineral wool lamellas. Mineral wool fibers are oriented perpendicular to the panel faces for maximum structural strength.

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

R-VALUE • The core insulating properties are 3.61 "R" per inch

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.

U-FACTORS AND R-VALUES**

U-FACTOR (BTU/h-ft²·°F)
PANEL WIDTH: 42"

	75°
3"	0.0923
4"	0.0654
5"	0.0529
6"	0.0444
7"	0.0383
8"	0.0336

R-VALUE (h-ft²·°F/BTU)
PANEL WIDTH: 42"

	75°
3"	10.83
4"	15.29
5"	18.90
6"	22.51
7"	26.12
8"	29.73

*No hourly rating available

*K-Factor calculations: BTU in/ft²·hr. °F

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

- Dimensionally stable, water repellent and will not expand
- Sound reduction acoustical properties due to mineral wool
- Non-toxic

TESTING: THERMALSAFE® 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 CAN/ULC S101 UL263	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
	ASTM E119 CAN/ULC S101 UL263	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 Interior Wall and Ceiling Panels	Product approved Exterior wall requires FM 4881 approval
	ASTM E136	Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750° C	Non-Combustible at 750° C/1382° F
Fire Canada	ASTM E119 CAN/ULC S101 UL263	Fire Endurance 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
	ASTM E119 CAN/ULC S101 UL263	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
	CAN/ULC S102	Surface Burning Characteristics of Building Materials and Assemblies	Flame Spread 0, Smoke Developed 0
Structural	ASTM E72	Strength Tests of Panels for Building Construction	See Load Charts
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
	ASTM C1363	Thermal Performance of Building Materials and Envelope Assemblies	See Thermal Performance Guide
Air Infiltration	ASTM E283	Rate of Air Leakage Through Curtain Walls Under Specified Pressure Differences	0.04 cfm/ft ² at 12 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 20 psf
Special Approval	State of Florida	Product Approval for the State of Florida	Product has State of Florida approval

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