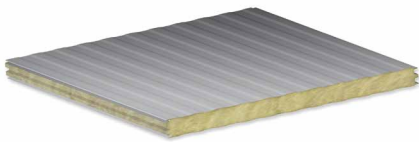
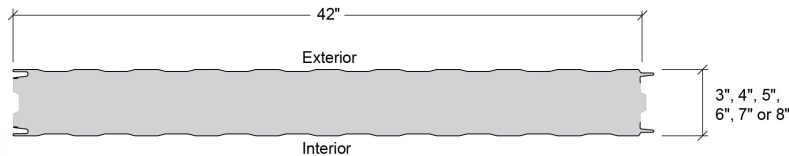




The ThermalSafe® panel consists of metal facings bonded to a structural mineral wool core to create a composite panel that achieves fire resistance ratings under the most demanding conditions. Unlike traditional wall materials, ThermalSafe® offers a level of flexibility architects, contractors and building owners won't find in any other product in the U.S. The mineral wool panel is rated for its 1-, 2- and 3-hour fire resistance qualities and provides satisfactory thermal performance and protection from the elements. The R-value of this panel is 3.61 per inch of insulation.



### Features and Benefits:

- Resists high temperatures and will not burn because of mineral wool core
- Can be disassembled, moved and reinstalled rather than having to be demolished, waste materials disposed of and the walls completely rebuilt
- Our exclusive integral spline design eliminates labor to install a separate cement board spline at side joint of panels to maintain the fire rating.
- Good sound reduction acoustical properties because of mineral wool
- Dimensionally stable, water repellent and will not expand
- Can be combined with other insulated metal panels for an aesthetically consistent profile facing, texture and color

### Product Specifications:

**Applications:** Wall (Vertical or Horizontal)

**Coverage Widths:** 42"

**Thicknesses:** 4", 5", 6", 7", 8"

**Lengths:** Recommended maximum is 40'

**Attachment:** Flush, double tongue-and-groove connection of the metal faces with an advanced integral spine to join the mineral wool core

**Insulation Material:** Mineral Wool

**Accessories:** Fasteners, sealants, standard and custom trim

**Exterior Gauge:** 26, 24

**Interior Gauge:** 26, 24

**Exterior Finishes:** Stucco-embossed, Ultra Mesa profile

**Interior Finishes:** Stucco-embossed, Ultra Mesa profile

**Coatings:** Signature® 200, Signature® 300

**UL Listings:** UL 263

**U-Factors and R-Values\*:**

U-Factor (BTU/h-ft <sup>2</sup> -°F)		R-Value (h-ft <sup>2</sup> -°F/BTU)	
PANEL WIDTH: 42"		PANEL WIDTH: 42"	
	75°		75°
4"	0.0654	4"	15.29
5"	0.0529	5"	18.90
6"	0.0444	6"	22.51
7"	0.0383	7"	26.12
8"	0.0336	8"	29.73

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

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 <sup>2</sup> -° F (7.14/inch) at 75° F mean temperature 0.126 BTU-in/hr-ft <sup>2</sup> -° F (7.94/inch) at 40° F mean temperature 0.118 BTU-in/hr-ft <sup>2</sup> -° 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 <sup>2</sup> 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
	CAN/ULC S138	Standard method of test for fire growth of insulated building panels in a full-scale room configuration	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	
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
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



**Notes:**

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