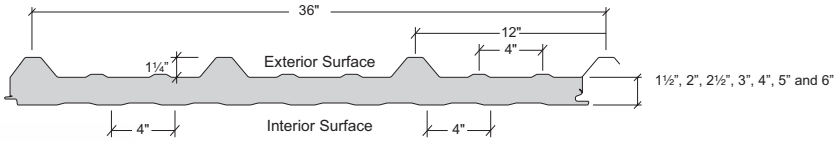
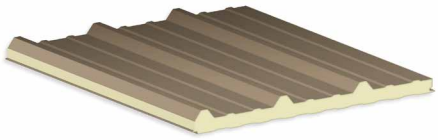
Ceco Building Systems

Insulated Metal Panels

LS-36™ Roof

The versatility of the LS-36™ roof panel offers a multitude of design options. The standard exterior skin is smooth but can be embossed if requested. The interior skin is roll-formed with our standard interior Mesa profile.





Features and Benefits:

- The LS-36™ panel utilizes a through-fastened attachment.
- The exterior surface is available in 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: Roof and Wall

Coverage Widths: 36"

Thicknesses: 1½", 2", 2½", 3", 4", 5", 6"

Lengths: Recommended maximum is 50'

Attachment: Exposed 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, 24, 22

Interior Gauge: 26, 24, 22

Exterior Finishes: Smooth; Embossed

Interior Finishes: Stucco-embossed, Mesa profile

Exterior Coatings: Galvalume Plus®, Signature® 200, Signature® 300, Applied Finishes (Wall application only)

Interior Coating: Igloo White (standard)

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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·ft²·° F (7.14/inch) at 75° F mean temperature 0.126 BTU·in/hr·ft²·° F (7.94/inch) at 40° F mean temperature 0.118 BTU·in/hr·ft²·° 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 Roof Panel Joints	ASTM E1680	Determines the resistance of exterior metal roof panel systems to air infiltration resulting from either positive or negative air pressure differences	0.0037 cfm/ft² at 12 psf static pressure
	Water Penetration Through Roof Panel Joints	ASTM E1646	Determines the resistance to water penetration of metal roof panels under uniform positive static air pressure differences	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 S102	Standard method of test for surface burning characteristics of building material and assemblies	Flame Spread index of 10 Smoke Developed Index of 40 Fuel Contributing Value of
		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
		CAN/ULC S126	Standard method of test for fire spread under roof-deck assemblies	The Panels meet the criteria published in 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
Roof Listings	Roof Performance – FM Global®	FM 4471	Sets performance requirements for panel roofs including uplift resistance. Requires a Class 1 Rating by FM Global Standard 4880 as a prerequisite.	Class 1-105 Rating at 5'-0" for min. 16 ga.