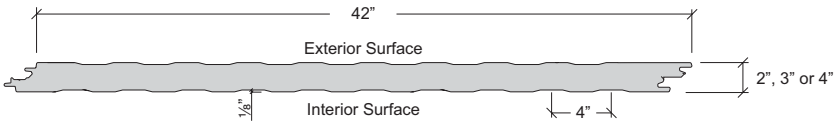
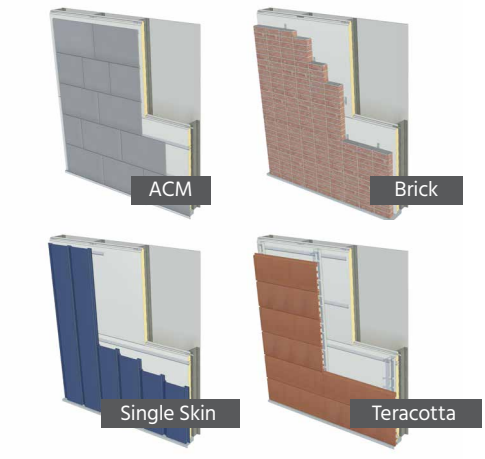
Ceco Building Systems

Insulated Metal Panels

HPCI Barrier™

The Insulated HPCI Barrier™ panel is an air, water, thermal and vapor barrier panel that can be used behind any type of façade. This back-up panel may be installed in a horizontal or vertical orientation completely outside the structural supports. There are no thermal bridges to reduce the energy efficiency of the wall. Insulated HPCI Barrier™ is quick and easy to install and provides an economical solution to conventional air, water, thermal and vapor control without sacrificing thermal efficiency. This panel must be separated from the interior of the building by an approved thermal barrier of .5" (12.7 mm) gypsum wallboard to meet IBC requirements (not required with 26 gauge or heavier interior liner skin).





Features and Benefits:

- Insulated metal panels allow for fast assembly times and easy installation, resulting in reduced construction labor costs and earlier business starts.
- Provides air, water, thermal and vapor barrier in one step.
- Ideally suited to be used with Ceco single-skin metal panels, as well as brick, tile or ACM panels.

Product Specifications:

Applications: Wall (Vertical or Horizontal)

Coverage Widths: 42"

Thicknesses: 2", 3", 4"

Lengths: Recommended maximum is 24'

Attachment: Offset double tongue-and-groove with extended metal shelf for positive concealed fastener face fastening

Insulation Material: Zero ozone depleting polyurethane

Accessories: Fasteners, sealants, standard and custom trim

Exterior Gauge: .016 (standard); 26, 24, 22 (optional)

Interior Gauge: .016 (standard); 26, 24, 22 (optional)

Exterior Finishes: No profile

Interior Finishes: Light Mesa profile

Coatings: White Polyester

U-Factors and R-Values*:

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

	75°
2"	0.0706
2½"	0.0516
3"	0.0424
4"	0.0324
5"	0.0264
6"	0.0224

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

	75°
2"	14.16
2½"	19.38
3"	23.58
4"	30.86
5"	37.88
6"	44.64

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

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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 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/ft² 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
	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