

CABs (Continuous Air Barriers) are critical to reducing air infiltration through the building envelope.

Continuous Air Barriers (CAB) are being implemented into model energy efficiency codes throughout North America. CABs are critical to reducing air infiltration through the building envelope. Infiltration in buildings can have many negative consequences, including reduced thermal comfort, interference with the proper operation of mechanical ventilation systems, degraded indoor air quality and increased energy consumption.

Our exterior panel skins are rated Class A, which means they are noncombustible. Our insulated roof panels qualify for a Class SH hailstorm rating, which shows they will resist destruction in storm conditions and replacement will be limited if necessary at all.

Insulated metal panels are much more thermally efficient than a traditional insulated roof or wall system. This helps to reduce our overall dependence on fossil fuels and lowers operational costs for a building using IMPs. Additionally, the superior spanning and loading capabilities incorporated into the complete building design may reduce the amount of steel required for the building substructure.

IMP provides a continuous, high-performing layer of insulation that does not compress between framing members. This layer also works in synergy with the metal skins to give the panels their excellent strength and rigidity. Below are U-values and R-values for panel thicknesses.

Panel Thickness	U-value*	R-factor*
1 ½"	0.0934	10.7
2"	0.066	15.1
2 ½"	0.054	18.7
3"	0.045	22.3
4"	0.034	29.4
5"	0.0280	35.7
6"	0.0233	42.8

*Including air film on each side of panel

When installed properly, IMPs also make excellent continuous air barriers, which are part of the ASHRAE AEDG recommendations. For more information contact Federal Steel Systems at 855-885-9570 or e-mail us at info@federalsteelsystems.com.