

# TESTING: INSULATED METAL PANELS

Standard	Description	Results
CAN/ULC S101	Standard Methods of Fire Endurance Tests of Building Construction and Materials	15-minute stay in place
CAN/ULC S102	Standard Method of Test for Surface Burning characteristics of Building Materials and Assemblies	Flame Spread $\leq 25$ , Smoke Development $\leq 200$
CAN/ULC S126	Standard Method of Test for Fire Spread Under Roof-Deck Assemblies	Complies
CAN/ULC S127	Standard Corner Wall Method of Test for Flammability Characteristics of Non-Melting Foam Plastic Building Materials	Flame Spread $\leq 350$ foam core w/o steel skin
CAN/ULC S138	Standard Method of Test for Fire Growth of Insulated Building Metal Panels in a Full-Scale Room Configuration	Complies
ASTM E84	Standard Test Method for Surface Burning Characteristics of Building Materials	Flame Spread $\leq 25$ , Smoke Development $\leq 200$
NFPA 286	Standard Methods of Fire Tests for Evaluating Contribution for Wall and Ceiling Interior Finish to Room Fire Growth	Complies
ASTM E72	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction	See Load Charts for load/span and deflection tables
ASTM E1592	Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Charts
ASTM E1646	Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems	No water penetration at 20 psf pressure differential
ASTM E1680	Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems	0.02 L/(s·m <sup>2</sup> ) at 75 Pa (0.004 cfm/ft <sup>2</sup> at 1.57 psf)
ASTM E283	Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen	0.02 L/(s·m <sup>2</sup> ) at 75 Pa (0.004 cfm/ft <sup>2</sup> at 1.57 psf)
ASTM E331	Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference	No water penetration at 20 psf pressure differential
ASTM C518	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	K-Factor of 0.136 BTU·in/hr·ft <sup>2</sup> ·°F at 75°F
ASTM C1363	Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus	K-Factor of 0.12 BTU·in/hr·ft <sup>2</sup> ·°F at 39°F

\*Standards are tested and valid for all IMP Product lines, including Edge Wall, Horizon Wall, and Skyline Roof panels.  
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