ARTspan LEADING EDGE WALL DATA SHEET

Insulated Wall Panel System:

Standard	Description
CAN/ULC S101	Standard Methods of Fire Endurance Tests of Building Construction and Materials
CAN/ULC S102	Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies
CAN/ULC S126	Standard Method of Test for Fire Spread Under Roof-Deck Assemblies
CAN/ULC S127	Standard Corner Wall Method of Test for Flammability Characteristics of Non-Melting Foam Plastic Building Materials
CAN/ULC S138	Standard Method of Test for Fire Growth of Insulated Building Metal Panels in a Full-Scale Room Configuration
ASTM E72	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction
ASTM E84	Standard Test Method for Surface Burning Characteristics of Building Materials
ASTM E1646	Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems
ASTM E1680	Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems
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
ASTM E331	Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
ASTM E1592	Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference
ASTM C518	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus
ASTM C1363	Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus
NFPA 286	Standard Methods of Fire Tests for Evaluating Contribution for Wall and Ceiling Interior Finish to Room Fire Growth

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

Profile: Leading Edge SM (Smooth) – Leading Edge LE (Light Embossed) – Leading Edge HE (Heavy Embossed)

Panel Thickness: 2" (50mm) – 3" (76mm) – 4" (101mm) – 5" (127mm) – 6" (152mm)

Coverage Width: 42" (1067mm)

Panel Lengths: 8' to 32' (2438mm to 9754mm)
(Note: Maximum panel length will be decreased with dark colours)

Exterior Face: 22ga (0.76mm) galvanized G-90 (Z275) pre painted steel – with smooth steel face (SM Smooth) **OR** light embossed steel face (LE Light Embossed) **OR** heavy embossed steel face (HE Heavy Embossed)

Interior Face: 26ga (0.46mm) galvanized G-90 (Z275) pre painted steel – Mesa Profile with smooth steel face (MS-Mesa Smooth) **OR** light embossed steel face (MSLE-Mesa Light Embossed). Standard Interior paint colour: **Regal White
*24ga and 22ga option available

Coated paint finish: PVDF 2 coat solid colours
**Other specialty coatings available for both interior and exterior

Joint Configuration: Offset tongue and groove to allow acceptance of Butyl sealant and hidden fasteners

Accessory Components: Sealant, flashing, trims, fastener and wall panel clip

Insulation Core: Continuous foamed in-place closed cell polyisocyanurate. Density: 2.4 lbs./ft³ (38.68 kg/m³)

Based on; ASTM C518-17, ASTM C1363-19, 75 °F and 40 °F mean temp with a temp differential of 39.6 °F and 58 °F respectively

Thermal Performance - Imperial [IP]

75 °F			40 °F	
BTU/hr*ft²*°F	hr*ft²*°F/BTU	Thickness	BTU/hr*ft²*°F	hr*ft²*°F/BTU
U-Factor	**R-Value**		**U-Factor**	**R-Value**
0.065	15.16	2" (50mm)	0.060	16.67
0.043	22.71	3" (76mm)	0.040	25.00
0.033	30.38	4" (101mm)	0.030	33.33
0.026	37.87	5" (127mm)	0.024	41.67
0.022	45.43	6" (152mm)	0.020	50.00

Thermal Performance - Metric [SI]

24 °C			4.4 °C	
W/m²*K	m²*K/W	Thickness	W/m²*K	m²*K/W
U SI Value	**R SI Value**		**U SI Value**	**R SI Value**
0.375	2.67	2" (50mm)	0.341	2.93
0.250	4.00	3" (76mm)	0.227	4.41
0.188	5.35	4" (101mm)	0.170	5.88
0.150	6.67	5" (127mm)	0.136	7.35
0.125	8.00	6" (152mm)	0.114	8.77

175 George Avenue, Winkler MB. | 204.331.1800 | www.artspaninc.com