ATAS International, Inc.
Sustainable Building Envelope Technology

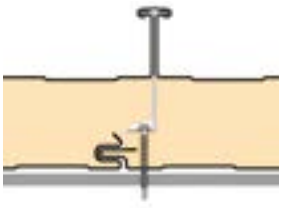
ISOLEREN® RL
TECH DATA SHEET

Exterior Profile:	Isoleren RL
Interior Profile:	Isoleren ML
Rib Type:	2⅜" tall, tee shaped rib with separate batten
Attachment:	Mechanically seamed rib with clip
Exterior Gauge:	26, 24, 22
Exterior Texture:	Smooth
Exterior Finish:	70% PVDF, Standard Gloss, Siliconized Polyester
Interior Gauge:	26, 24, 22
Interior Texture:	Smooth or Embossed
Interior Finish:	Polyester, Siliconized Polyester, 70% PVDF, Standard Gloss (USDA White) Plastisol, Stainless
Substrate:	Galvalume®, G90 Galvanized & Stainless Steel
Thickness (A):	2½", 3", 4", 5", and 6"
Panel Coverage (B):	42"
Core:	Continuously poured-in-place, polyisocyanurate, insulating foam
R- Value	R-8 per inch of thickness (nominal)
Standard Lengths:	12'-0" to 53'-0"
Minimum Slope:	½:12
Note:	All information subject to change without notice. Please reference website for most current data.

Panel

Line Drawing

Interlock



Sidelap

KEY ATTRIBUTES - THE ATAS DIFFERENCE

- Single component installation
- Slides together; no rolling or lifting to engage the sidelap
- Continuous weathertight seal at the sidelap means no interruptions at the clips
- Factory-applied sealant in the batten clip
- Bi-directional mechanical seaming equipment
- Proprietary shoulder fastener to prevent over-driving
- Normal R-8 per inch of insulation thickness

TESTING

TYPE	TEST PROTOCOL	DESCRIPTION	RESULTS
Environmental Performance	ASTM C518	Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apperatus	K-Factor 0.139 BTU-in/hr-ft²- F° at 75° mean K-Factor 0.129 BTU-in/hr-ft²- F° at 35° mean
	ASTM E1680	Rate of Air Leakage Through Exterior Metal Roof Panel Systems	0.001 - cfm/sf at 12-psf
	ASTM E1646	Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference	Zero penetration at 12-psf
Foam Core Characteristics	ASTM C273	Shear Properties of Sandwich Core Metals	Shear Strength = 16psi
	ASTM D1621	Coompressive Properties of Rigid Cellular Plastics	Compressive Strength = 18psi
	ASTM D1622	Apparent Density of Rigid Cellular Plastics	Apparent Density - 2.25pcf
	ASTM D1623	Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics	Tensile Strength - 21psi
	ASTM D6226	Open Cell Content of Rigid Cellular Plastics	Open Cell Content > 90% closed cells
Fire Resistance	ASTM E84	Surface Burning Characteristics of Building Materials	Flame Spread < 25, Smoke Developed < 450
	FM 4880	Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems	Class 1 Fire Rated
Impact Resistance	FM 4771	Factory Mutual Approval Standard for Class 1 Panel Roofs	Class 1 Approved
Engineering Properties	ASTM E1592	Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference	See Load Tables
	ASTM E72	Strength Tests of Panels for Building Construction	See Load Tables
	FM 4471	Factory Mutual Approval Standard for Class 1 Panel Roofs	Class 1 Approved
Bond Strength	Fatigue Endurance	2,000,000 Alternating Cycles of L/180 Deflection	No evidence of facer or liner delamination, fracture of foam core or permanent set
	Freeze/Heat Cycle	Twenty-One (21) Eight-hour Temperature Cycles (-20°F to 180°F)	No evidence of delamination, blistering or permanent set
	Humidity Endurance	1,200 Hours of 93% Humidity at a temperature of 158° F	No evidence of delamination, blistering or interface corrosion
	Autoclave	Exposure to 218° F and a pressure of 2-psig for 2½ hours	No evidence of facer or liner delamination

FM APPROVED