

PRODUCT DATA SHEET

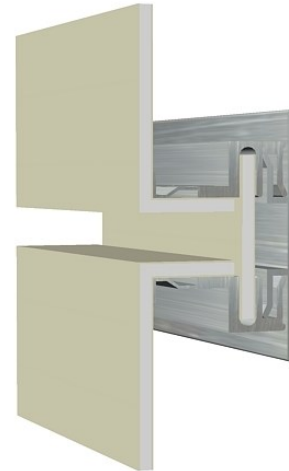
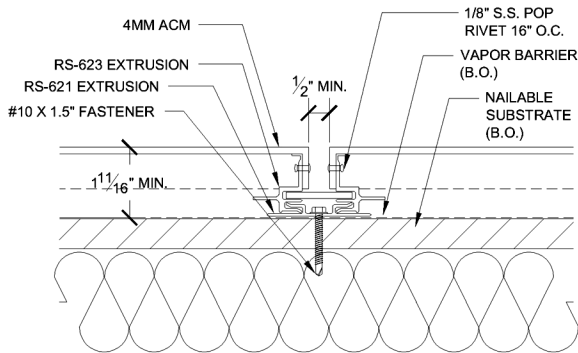
RS-175 - Rainscreen Panel System

Product Description:

The RS-175 Rainscreen Panel System consist of a 4mm or 6mm aluminum composite panel that is fabricated and installed with an aluminum extrusion attachment system. The joint condition is an open reveal with prefinished colorstrips inserted in the recessed joint. The RS-175 system is designed to be installed over a weathertight vapor barrier and weep out water that penetrates. The owner or professional has the option to design panel dimensions (5' x 16' max) to there own appeal and in return gives the system a captivating appearance.



TYPICAL PANEL JOINT



Performance Testing

Test Method	Title of Test	Results
<i>ASTM E 283-04</i>	Air Infiltration 1.60 psf (25mph)	<0.01 cfm/ft ²
<i>ASTM E 331-00</i>	Water Resistance 25 psf	No Leakage
<i>ASTM E 330-02</i>	Uniform Load Deflection 135.43 psf (positive) 135.43 psf (negative)	0.09" 0.13"
<i>ASTM E 330-02</i>	Uniform Load Structural 203.15 psf (positive) 203.15 psf (negative)	0.03" 0.01"

System Uses:

- Exterior Walls
- Interior Walls
- Columns
- Fascia / Soffits

Panel Finishes:

Finishes feature 70% KYNAR 500 or HYLAR 5000 polyvinylidene fluoride (PVDF) resins. Manufacturer supplied 20 Year Finish Warranty provided. Color shall be selected from manufacturers standard Opaque, Mica or Metallic finishes. Custom colors can be supplied at an additional charge.

Aluminum Composite Panel Engineering Properties

U.S. and Metric Equivalent

Composite-designed panels consists of a thermoplastic compound core faced with two sheets of aluminum. Their are two varieties, a Polyethylene (PE) core and a Fire Resistant (FR) core.

Property	Units	4mm PE	4mm FR	6mm PE	6mm FR
Thickness	Inches mm	0.157 4.0	0.157 4.0	0.236 6.0	0.236 6.0
Min. Bond Strength ASTD 1781	in-lb/in Nm/m	40 178	22.5 100	40 178	40 178
Flatwise Shear ASTM D1002	lb/in ² MPa	1,221 8.42	92.8 6.4	2,055 14.7	2,055 14.7
Allowable Bending Stress	lb/in ² MPa	11,500 79.3	11,500 79.3	11,500 79.3	11,500 79.3
Coefficient of Expansion ASTM E228	in/in/°F mm/mm/°C	1.31x10 ⁻⁵ 2.36x10 ⁻⁵	1.31x10 ⁻⁵ 2.36x10 ⁻⁵	1.31x10 ⁻⁵ 2.36x10 ⁻⁵	1.31x10 ⁻⁵ 2.36x10 ⁻⁵
Stiffness (EI)	lb in ² /in Mpa cm ⁻⁴ / m	1,140 1.3x10 ⁻⁴	1,262 1.4x10 ⁻⁴	1,896 2.1x10 ⁻⁴	1,896 2.1x10 ⁻⁴
Flexural Modules Aged per ASTM C393	lb/in ² MPa	6.0x10 ⁻⁶ 4.1x10 ⁻⁴	6.7x10 ⁻⁶ 4.6x10 ⁻⁴	4.0x10 ⁻⁶ 2.8x10 ⁻⁴	4.0x10 ⁻⁶ 2.8x10 ⁻⁴
Moment of Inertia	in ⁻⁴ /in cm ⁻⁴ /m	1.89x10 ⁻⁴ 0.310	1.89x10 ⁻⁴ 0.310	4.58x10 ⁻⁴ 0.751	4.58x10 ⁻⁴ 0.751
Section Modulus	in ³ /in cm ³ /m	2.41x10 ³ 1.555	2.41x10 ³ 1.555	3.88x10 ³ 2.503	3.88x10 ³ 2.503
Tensile Yield ASTM D638	lb/in ² MPa	6,405 44.16	6,367 43.90	5,314 36.64	5,314 36.64
Flatwise Tensile ASTM C297	lb/in ² MPa	1,371 9.45	961 6.62	1,099 7.58	1,099 7.58
"R" Thermal Resistance (core only)	Ft ² hr ² F/ BTU m ² K/ w	0.051 9.0x10 ³	0.026 --	0.086 1.5x10 ⁻²	0.086 1.5x10 ⁻²
STC Sound Transmission Coefficient ASTM E90	—	26	—	—	—
Fire Performance (2) ASTM E84 & NFPA 285	ASTM E84 NFPA285	CLASS A Untested	CLASS A PASS	CLASS A Untested	CLASS A Untested



Property	Units	4mm PE	4mm FR
Weight	lb/ft ² Kg/m ²	1.12 5.47	1.53 7.48
Standard Width	Inches mm	50" & 62" 1,270mm & 1,575mm	50" & 62" 1270mm & 1,575mm
Standard Length	Inches mm	16'-4" 4,978mm	16'-4" 4,978mm

