

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. This system provides reveal joints and includes closure strips to provide weathertightness. System is designed to take on controlled water and weep out allowing no water to penetrate building envelope. 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.

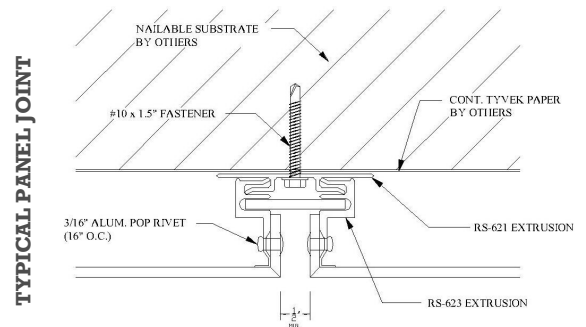
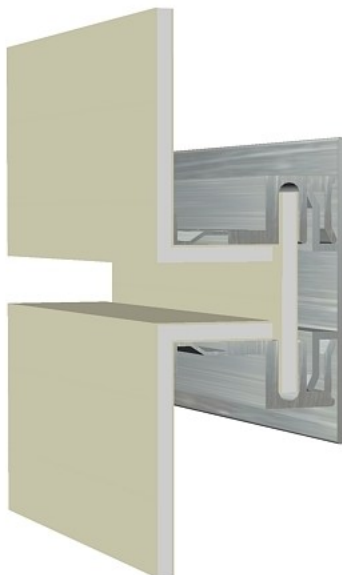
PRODUCT DATA SHEET



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

System Uses:

- Exterior Walls
- Interior Walls
- Column Wrap
- Soffits
- Fascia Wrap



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

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

| Property | Units | 4mm PE | 6mm PE | 4mm FR |
|--|---|-----------------------|-----------------------|-----------------------|
| Thickness | Inches | 0.157 | 0.236 | 0.157 |
| | mm | 4.0 | 6.0 | 4.0 |
| Min. Bond Strength ASTD 1781 | in-lb/in | 40 | 40 | 22.5 |
| | Nm/m | 178 | 178 | 100 |
| Flatwise Shear ASTM D1002 | lb/in ² | 1,221 | 2,055 | 92.8 |
| | MPa | 8.42 | 14.7 | 6.4 |
| Allowable Bending Stress | lb/in ² | 11,500 | 11,500 | 11,500 |
| | MPa | 79.3 | 79.3 | 79.3 |
| Coefficient of Expansion ASTM E228 | in/in/°F | 1.31x10 ⁻⁵ | 1.31x10 ⁻⁵ | 1.31x10 ⁻⁵ |
| | mm/ mm/°C | 2.36x10 ⁻⁵ | 2.36x10 ⁻⁵ | 2.36x10 ⁻⁵ |
| Stiffness (EI) | lb in ² /in | 1,140 | 1,896 | 1,262 |
| | Mpa cm ⁴ /m | 12.8x10 ⁻³ | 21.4x10 ⁻³ | 14.3x10 ⁻³ |
| Flexural Modules Aged per ASTM C393 | lb/in ² | 6.0x10 ⁻⁶ | 4.0x10 ⁻⁶ | 6.7x10 ⁻⁶ |
| | MPa | 41.4x10 ⁻³ | 27.6x10 ⁻³ | 46.2x10 ⁻³ |
| Moment of Inertia | in ⁴ /in | 1.89x10 ⁻⁴ | 4.58x10 ⁻⁴ | 1.89x10 ⁻⁴ |
| | cm ⁴ /m | 0.310 | 0.751 | 0.310 |
| Section Modulus | in ³ /in | 2.41x10 ³ | 3.88x10 ³ | 2.41x10 ³ |
| | cm ³ /m | 1.555 | 2.503 | 1.555 |
| Tensile Yield ASTM D638 | lb/in ² | 6,405 | 5,314 | 6,367 |
| | MPa | 44.16 | 36.64 | 43.90 |
| Flatwise Tensile ASTM C297 | lb/in ² | 1,371 | 1,099 | 961 |
| | MPa | 9.45 | 7.58 | 6.62 |
| "R" Thermal Resistance (core only) | Ft ² hr ² F/ BTU | 0.051 | 0.086 | 0.026 |
| | m ² K/w | 9.0x10 ³ | 15.1x10 ³ | - |
| STC Sound Transmission Coefficient ASTM E90 | — | 26 | — | — |
| | — | — | — | — |

| Property | Units | 4mm PE | 6mm PE | 4mm FR |
|------------------------|--------------------|----------------------|----------------------|---------------------|
| Weight | lb/ft ² | 1.12 | 1.49 | 1.53 |
| Standard Width | Inches | 50" & 62" | 50" & 62" | 50" & 62" |
| | mm | 1,270mm & 1,575mm | 1,270mm & 1,575mm | 1270mm & 1,575mm |
| Standard Length | Inches | 16'-4" | 16'-4" | 16'-4" |
| | mm | 4,978mm | 4,978mm | 4,978mm |