

GREEN SPAN PROFILES®



Panel Use

Coverage Width

Thickness Length

Exterior Gauge

Interior Gauge

Exterior Substrate

Interior Substrate

Exterior Finish Interior Finish

Exterior Texture

Interior Texture

Exterior Joint Interior Joint

Core

R-Value

Minimum Slope

U.S. Patent

Exterior Standing-Seam Roof

42-inch

2.5, 3, 4, 5, 6-inch 12'-0" to 53'-0"

26, 24, 22

26

Galvalume®, G90

Galvalume®, G90, Stainless Steel

Siliconized Polyester, standard gloss PVDF

Polyester, Siliconized Polyester, Plastisol (PVC)

Smooth

Embossed, Smooth

2"-tall, tee-shaped vertical rib with mechanically seamed batten

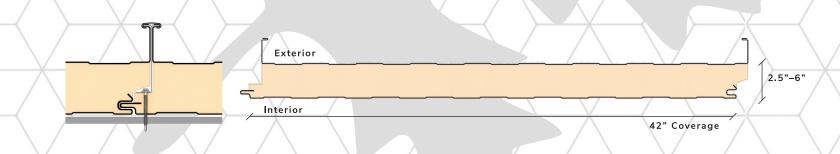
Green-Lock, offset tongue-and-groove

Continuously poured-in-place polyisocyanurate insulating foam

R-8 per inch of thickness (nominal)

1/2:12

9,206,606 B2



TESTING: RIDGELINE INSULATED METAL PANEL

| TYPE | TEST PROTOCOL | DESCRIPTION | RESULTS |
|------------------------------|---------------------------|---|--|
| ENVIRONMENTAL PERFORMANCE | ASTM C518 | Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus | 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 E283 | Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen | 0.0011-cfm/sf at 20-psf |
| | ASTM E331 | Water Penetration of Exterior Windows, Skylights, Doors and Curtain Walls by Uniform Static Air Pressure Difference | Zero penetration at 20-psf |
| FOAM CORE CHARACTERISTICS | ASTM C273 | Shear Properties of Sandwich Core Materials | Shear Strength = 16-psi |
| | ASTM D1621 | Compressive Properties of Rigid Cellular Plastics | Compressive Strength — 18-psi |
| | ASTM D1622 | Apparent Density of Rigid Cellular Plastics | Apparent Density — 2.25-pcf |
| | ASTM D1623 | Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics | Tensile Strength — 21-psi |
| | 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 — see technical bulletin ATB-0005 |
| IMPACT RESISTANCE | FM 4771 | Factory Mutual Approval Standard for Class 1 Panel Roofs | |
| | TAS 201 | Florida Building Code Impact Test Procedure | Miami Dade County NOA No. 17-0619.08 |
| 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 — see technical bulletin ETB-0015 |
| APPROVALS | Miami-Dade County | Miami-Dade County Product Control Section — Notice of Acceptance | Miami Dade County NOA No. 17-0619.08 |
| | State of Florida | Florida Product Approval | FL21349 |
| | Underwriters Laboratories | Roof Deck Construction — Class 90 | TGKX.698 |
| 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 |











