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# PRODUCT DESCRIPTION

# PRODUCT FEATURES USA

### DESCRIPTION

 Aluminum architectural cladding with high performance fluorocarbon coating finish or powder coated woodgrain finishes (Plank System).

#### USES

- Designed for cladding applications to provide a complete rain screen wall system.
- Designed for exterior and interior ceiling and soffit applications.

### PRODUCT ATTRIBUTES AND CHARACTERISTICS

- High performance fluorocarbon finish coating is available in a variety of standard colors including solid colors, wood line and metallic finishes. Custom colors are also available.
- High performance powder coated woodgrain finish available in a variety of colors and patterns.
- Extruded aluminum cladding.
- Cladding dimensions and configurations allow for field adjustment and thermal movement.

### SELECTION CRITERIA

 Attachment system allows for thermal movement due to thermal changes. The product should not be installed where surface temperatures are anticipated to exceed 180° F (82° C).

### APPLICABLE CURRENT STANDARDS, RELATED REFERENCES

- AAMA 508, Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems.
- ASTM B117 Standard Practice for Operating Salt Spray (Fog) Apparatus.
- ASTM D523 Standard Test Method for Specular Gloss.
- ASTM D714 Standard Test Method for Evaluating Degree of Blistering of Paints.
- ASTM D968 Standard Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive.
- ASTM D1308 Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
- ASTM D2244 Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.



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- ASTM D2248 Standard Practice for Detergent Resistance of Organic Finishes.
- ASTM D2794 Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
- ASTM D3359 Standard Test Methods for Rating Adhesion by Tape Test.
- ASTM D3363 Standard Test Method for Film Hardness by Pencil Test.
- ASTM D4145 Standard Test Method for Coating Flexibility of Pre-painted Steel.
- ASTM D4214 Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.
- ASTM E84 Test Method for Surface Burning Characteristics of Building Materials
- ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C.
- ASTM E330 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
- ASTM F1667 Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
- DAF-45, Aluminum Association Inc. Designation System for Aluminum Finishes.

### PERFORMANCE CRITERIA

- General Cladding Properties:
  - Fire Propagation ASTM E84
    - □ Flame Spread Index ASTM E84: 0
    - □ Smoke Developed Index ASTM E84: 0
  - Combustibility ASTM E136 Option A: passed
  - Pressure Equalization AAMA 508: Pass
  - Static Water Penetration (15 psf) AAMA 508: Pass
  - Dynamic Water Penetration AAMA 508: Pass
  - Structural Loading AAMA 508: Pass; Design Pressure = 80 psf
  - Wind Loading- ASTM E 330: See Technical Data Sheet

### PACKAGING, HANDLING, PROTECTION, AND DELIVERY INSTRUCTIONS

- Deliver materials and components in manufacturers' unopened containers or bundles, fully identified by name, brand, type and grade. Prevent damage during unloading, storing and installation.
- Store, protect and handle materials and components to prevent twisting, bending, mechanical damage, contamination and deterioration.
- Store materials off ground and keep clean, dry, and free of dirt and other foreign



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matter.

### SPECIAL WARRANTY

- Fifteen year limited product warranty against physical defects of system components and products that are installed in compliance with published installation instructions and maintained according to the manufacturer's published guidelines.
- Powder Coated Woodgrains: Fifteen year limited finish warranty stating finishes shall be free from workmanship and material defects and free from fading, gloss retention, peeling, chipping, cracking or blistering of finish.



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#### LIMITATIONS

- THE LIMITED WARRANTIES ARE SUBJECT TO THE FOLLOWING GENERAL PROVISIONS AND LIMITATIONS:
  - The limited warranties are effective only if there is proper storage, handling, installation and maintenance of the product in strict accordance with published instructions.
  - Claims must be made in writing to AL13's Product Performance Department within 30 days of the discovery of a problem and authorization obtained prior to beginning any repair or replacement work.
  - The Product Performance Department must be provided a reasonable opportunity to inspect and verify a claim.
  - AL13 shall have no liability for defects or damage resulting from:
    - □ Misuse or abuse:
    - Improper installation, including, but not limited to inadequate attachment and/or protection against all external damage;
    - Performance of coating other than those covered by the limited warranties;
    - Contact with harmful chemicals, fumes, or vapors;
    - Settlement, shrinkage or distortion of the structure; or
    - □ Fire, wind, flood, lightning, Acts of God, or other causes beyond the control and performance testing provided by AL13.
  - AL13 shall have no liability for the cost of removing affected products.
- Warranty for powder coated woodgrain coating is limited to 10 years in coastal areas within three miles of bodies of salt water and under the following condition:
  - Normal atmospheric conditions exclude corrosive or aggressive atmospheres such as those contaminated with chemical fumes, salt or other corrosive elements, including areas within 1,000 feet (305 meters) of a body of salt water.
- Aluminum cladding must be separated from direct contact with dissimilar metals with an approved separation coating or layer.

#### SAFETY PRECAUTIONS

State safety concerns of product itself – or handling or installation precautions.

### AVAILABILITY

Available from appointed distributors. See distributor listing on website.



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#### COST

Consult distributors for specific product costs or relative costs.

#### PRODUCT PROPERTIES

- MATERIALS, COMPOSITION, PROPERTIES
  - Aluminum Extrusions: 6063 T5 aluminum alloy.

#### ACCESSORIES

- Fasteners for System Clips:
  - Attachment of System via Clip to Steel Substrate: #12-14 x 1 ½ inch (38 mm) drill-point fasteners with EPDM composite washers and corrosion-resistant coating. Installed every 32 inches (81.28 cm) on center.
  - Attachment of System via Clip to Wood Substrate: #12-14 x 1 ¾ inch (44.45 mm) mini drill-point fasteners with EPDM composite washers and corrosion-resistant coating. Installed every 32 inches (81.28 cm) on center.
  - Fastener Corrosion Resistance:
    - Carbon Steel: Coated to provide not less than 1,700 hours of ASTM B 117 salt spray performance with no white or red rust; 18 cycles of ASTM G 87 (DIN 50018) SO<sup>2</sup> Kesternich testing with not more than 15 percent red rust.
- Fasteners for Frame Components:
  - Attachment of System frame components to Steel Substrate: #10-16 x ¾ inch (19.05 mm) self-drilling screws with corrosion-resistant coating. Installed every 24 inches (60.96 cm) on center.
  - Attachment of System frame components to Wood Substrate: #12-14 x 1 ½ inch (38 mm) mini drill-point fasteners with EPDM composite washers and corrosion-resistant coating. Installed every 16 inches (40.64 cm) on center, unless securing a segmented (3 ¼ inch) (8.25 cm) backplate (installed 16 inches (40.64 cm) on center), in which case two fasteners per segmented piece are required.
  - Fastener Corrosion Resistance:
    - Carbon Steel: Coated to provide not less than 1,700 hours of ASTM B 117 salt spray performance with no white or red rust; 18 cycles of ASTM G 87 (DIN 50018) SO<sup>2</sup> Kesternich testing with not more than 15 percent red rust.



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### SHAPE, MASS, AND DIMENSION

- Cladding Weight: 1.35 lb/ft² (6.59 kg/m²)
- Profile: Solid or Woodgrain Pattern (See finishes for additional information.)
- Standard cladding size of 144 inch x 4 or 6 inch (3658 mm x 100 or 152 mm)

### FINISH, COLORS AND TEXTURES

Powder coated woodgrain finish in compliance with AAMA 2604.

#### PRODUCT INSTALLATION

### PREPARATION

- Ensure structural supports are aligned and meets structural requirements for wind loading and gravity loads.
- Ensure building surfaces are smooth, clean, dry and free from defects detrimental to installation of cladding system.
- Ensure framing is planar with variations on not more than ¼-inch in ten feet.
- Inspect cladding and components before installation and verify that there is no shipping, storage, or staging damage. Do not install damaged cladding. Remove from jobsite to avoid re-application.
- Ensure all products received are as ordered/required for project, including finish and size.

### INSTALLATION

- Install products in accordance with manufacturer's published handling and installation instructions.
- Erect components plumb and true.
- Adjust assembly to secure cladding safely to wall while allowing for calculated expansion and contraction of components. Ensure extrusion tabs overlap cladding edges by at least half of extrusion tab depth.
- Do not cut, trim, weld, or braze component parts during erection in manner which would damage finish, decrease strength, or result in visual imperfection or failure in performance.
- Apply isolation coating to areas of contact between dissimilar metals.

### **Corporate Identification**

AL13 Architectural Systems™



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Toll Free Number + 855.438.2513

General E-mail <u>info@al13.com</u>

Order Support <u>orders@al13.com</u>

Website <a href="http://www.AL13.com/">http://www.AL13.com/</a>

## **Technical Services Available:**

Phone or e-mail for technical services. Check website for technical support.

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