

# **Technical Information Sheet**



## UNA-CLAD™ UC-6

**Item Description** 

Standing Seam Panel for Architectural Metal Roofing

## **Description**

UNA-CLAD UC-6 Double-Lock Standing Seam roofing panel utilizes the proven seaming process of Pittsburgh Locking in conjunction with the floating action of a concealed clip assembly. This design allows for expansion & contraction caused by natural elements, providing a virtually leak-proof roof with exceptional wind uplift ratings. An optional thermally-applied pre-assembly in-seam sealant is available. The minimum slope requirement for a Red Shield™ Warranty is 3:12. For warranty requirements below 3:12, please contact Regional Technical Coordinator.

**NOTE:** The UC-6 panel is designed and tested for roofing applications only. Any installation outside of a roofing application, is at the risk of the contractor and is not the responsibility of Holcim Solutions and Products US, LLC.

# **Method of Application**

- 1. A smooth, solid substrate of plywood, OSB, or a rigid insulation board mechanically attached to a steel deck is recommended for the UC-6 metal roof panel.
- 2. The UC-6 panels must be installed in a sequential order.
- 3. Application of a ElevateTM approved underlayment prior to panel installation is recommended.
- 4. Panels must be locked in the field by a mechanical seamer.

**NOTE:** Install assembly according to Elevate Metal Design and Application Guides found on the Elevate website. Follow approved installation details.

#### Storage

- UNA-CLAD metal panels should be stored in a well ventilated, dry place where no moisture can contact
  them. Moisture (From rain, snow, condensation, etc.) trapped between layers of material may cause
  water stains or white rust, which can affect the service life of the material and will detract for the
  appearance.
- If outdoor storage cannot be avoided, protect the panels with a ventilated canvas or waterproof paper cover. Do not use plastic, which can cause condensation. Keep the material off the ground in an inclined position with an insulator such as wood.

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## Storage Continued

- Storage of end-use materials with protective film applied to the surface should be:
  - Less than six months with masking applied (warehouse storage and outdoor exposure combined).
  - Stored in an enclosed building or holding facility.
  - Wrapped/packaged to prevent exposure to direct UV, water, oils, or other contaminants.
  - o Protective film may become brittle with long term UV exposure.
  - Maintained in an environment within a temperature range of 45 to 90°F (7 to 32°C) and 20 to 80% relative humidity.

#### **Precautions**

- Oil canning is not a cause for rejection. Heavier gauges, narrower widths, striations, and embossing minimize oil canning.
- Ensure the mechanical seamer is properly adjusted prior to field seaming to reduce the risk of seam damage.
- Sealant for end laps and lap joints shall be non-drying, non-toxic, and non-shrinking with a serviceable temperature of -60 to 212 °F (-51 to 100 °C).
- Quality, long-life butyl sealants work best as a gasket sandwiched between two pieces of metal. Non-acetic cured silicone color matching sealants are recommended when voids must be filled. Sealants are not a substitute for proper assembly and workmanship.
- Exercise caution when lifting, moving, transporting, storing, or handling UNA-CLAD metal to avoid possible physical damage.
- Refer to Safety Data Sheets (SDS) for safety information.
- Immediately remove protective film after installation.

Manufacturing Location: Anoka, MN



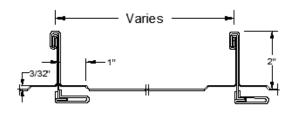




Product Data				
Property	Value			
Tapered Panels	NO			
Radius Panels	Yes; 8.0' (2,438 mm) Min. Convex Only* (not available in .040 aluminum)			
Stiffening Ribs Striations Sealant	Optional Optional Optional In-Seam, Thermally Applied			
Standard Panel Surface Optional Panel Surface	Smooth Stucco Embossed 26 ga (0.48mm), 24 ga (0.64 mm) & 22 ga (0.64 mm) Steel 0.032" (0.81 mm) & 0.040" (1.02 mm) Aluminum			
Clip	UC-6 Low Float Clip, UC-6 Super Clip & UC-6 Fixed Clip			

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Product Size				
Property	Value			
Panel Width	8" (203.2 mm) – 24" (609.6 mm)			
Optimal Panel Width	18" (457.2 mm)			
Seam Height	2" (50.8 mm)			
Minimum Panel Length	36" (914.4 mm)			
Maximum Panel Length	600" (15.24 m)			







Technical Information			
Property	Value		
Uplift Resistance Air Infiltration Structural Performance	UL 580 Class 90 ASTM E 1680 ASTM E 1592		
Water Penetration Fire Rating	ASTM E 1646-95 & E2140 UL Class A Rated Assemblies, UL 263, and UL 790		
Hail Impact Rating Miami-Dade County & Florida Building Code	Class 4, UL 2218 Approved		



**NOTE:** Testing is not applicable for all combinations of substrates, materials, and dimensions. All construction assemblies must be installed in accordance with the tested assembly. Please refer to the Metal Tested Assembly Guide on the Elevate website for tested assemblies and code listings. Please contact your Regional Technical Coordinator for warranty requirements and additional Information.

Typical Properties		
Material and Thickness	Metal Specification	Available Finishes
Aluminum 0.032" (0.81 mm) 0.040" (1.02 mm)	Base Metal: Aluminum Minimum Yield: 21 KSI (145 MPa) Thermal Expansion: 12.6 x 10 <sup>-6</sup> in/in/ °F (22.2 m/m.K x 10 <sup>-6</sup> ) Mod. Of Elasticity: 10.0 x 10 <sup>3</sup> x KSI (68.9 MPa)	Anodized Kynar 500®/Hylar 5000® Unpainted/Mill Finish
Galvanized Steel 26 ga (0.48 mm) 24 ga (0.64 mm) 22 ga (0.79 mm)	Base Metal: AISI-G90 Galvanized steel Minimum Yield: 33 to 45 KSI (227 to 310 MPa) Thermal Expansion: 06.7 x 10 <sup>-6</sup> in/in/ °F (13.9 m/m.K x 10 <sup>-6</sup> ) Mod. Of Elasticity: 29.0 x 10 <sup>6</sup> x KSI (200 GPa)	Kynar 500®/Hylar 5000® Unpainted G90
Galvalume® Steel 26 ga (0.48 mm) 24 ga (0.64 mm) 22 ga (0.79 mm)	Base Metal: AZ-50 Hot Dipped Galvalume Minimum Yield: 50 KSI (345 MPa) Thermal Expansion: 06.7 x 10 <sup>-6</sup> in/in/ °F (13.9 m/m.K x 10 <sup>-6</sup> ) Mod. Of Elasticity: 29.0 x 10 <sup>6</sup> x KSI (200 GPa)	Zincalume <sup>®</sup> Plus – Clear Acrylic Coated Kynar 500®/Hylar 5000®
Copper 16 oz (0.56 mm) 20 oz (0.69 mm)	AGSC minimum copper content of 99.9% copper, silver counting as copper, cold rolled from ingots of 122 alloy. Thermal Expansion: 9.3 x 10 <sup>-6</sup> in/in/ °F (16.5 m/m.K x 10 <sup>-6</sup> ) AGSC copper meets and/ or exceeds ASTM B370 specification.	Natural

**NOTE:** For standard color selection, consult the current UNA-CLAD Color Selection Guide. Custom color services are available upon request. Consult the current base metal Sheet & Coil TIS for additional information on the base metal and coating. Not all materials and thicknesses are available from all locations.

Please contact Holcim Technical Services at 800-428-4511 for further information.

This sheet is meant to highlight Elevate products and specifications and is subject to change without notice. Holcim takes responsibility for furnishing quality materials that meet published Elevate product specifications or other technical documents, subject to normal manufacturing tolerances. Neither Holcim nor its representatives practice architecture. Holcim offers no opinion on and expressly refuses any responsibility for the soundness of any structure. Holcim accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Holcim representative is authorized to vary this disclaimer.

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