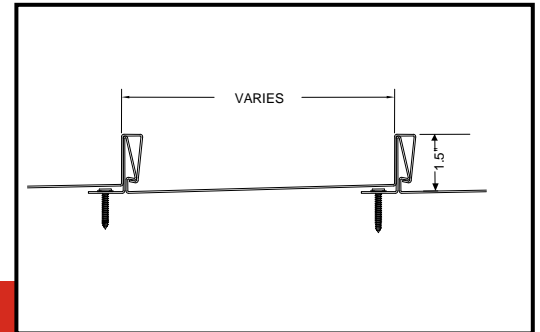


# TECHNICAL INFORMATION SHEET

## UNA-CLAD™ UC-4

### Item Description

Standing Seam Panel For Architectural Metal Roofing



### Product Information

#### Description:

Firestone UNA-CLAD UC-4 Roofing Panel is a patented self-locking, architectural standing seam metal roof panel that completely eliminates the need for clips. The 1½" high panel seams snap together for easy installation. No mechanical seaming tools or clips required. An optional thermally-applied pre-assembly in-seam sealant is available. The minimum slope requirement for a Firestone Red Shield™ Warranty is 3:12. For warranty requirements for slopes between 3:12 and 1:12, please contact your Roof System Advisor.

#### 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 Firestone UC-4 metal roof panel.
2. Firestone UC-4 panels must be installed in a sequential order.
3. Application of a Firestone approved underlayment prior to panel installation is recommended.
4. Use Firestone fasteners that contain a nylon washer to allow for thermal movement and to minimize oil canning.

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

#### Storage:

- Firestone 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. Protective film may degrade or become brittle with long term exposure to direct sunlight.

#### Precautions:

- Oil canning is not a cause for rejection. Heavier gauges, narrower widths, striations, and embossing minimize oil canning.
- Firestone recommends a minimum bend radius of 2T. Anything less than a 2T bend radius can cause crazing to the material.
- 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 Firestone metal to avoid possible physical damage.
- Refer to Safety Data Sheets (SDS) for safety information.
- Immediately remove protective film after installation.

# TECHNICAL INFORMATION SHEET

## UNA-CLAD™ UC-4

### Manufacturing Location:

Anoka, MN



### Product Data

Tapered Panels:	No
Radius Panels:	No
Stiffening Ribs:	Optional
Striations:	Optional
Sealant:	Optional In-Seam, Thermally Applied
Standard Panel Surface:	Smooth
Optional Panel Surface:	Stucco Embossed
Clip:	No Clip Required

### Product Size

Panel Width:	8" (203.2 mm) – 24" (609.6 mm)
Optimal Panel Width:	9.75" (247.7 mm) & 17.75" (450.8 mm)
Seam Height:	1.5" (38.1 mm)
Minimum Panel Length:	36" (914.4 mm)
Maximum Panel Length:	600" (15.24 m)

### Technical Information

Uplift Resistance:	UL 580 Class 90
Air Infiltration:	ASTM E 283 & E 1680
Structural Performance:	ASTM E 330 & E 1592
Water Penetration:	ASTM E 331 & E 1646-95
Fire Rating:	UL Class A Rated Assemblies, UL 263 and UL 790
Hail Impact Rating:	Class 4, UL 2218
Miami-Dade County & Florida Building Code:	Approved

NOTE: \* Not Manufactured at all Facilities.

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 Code Approval Guide on the Firestone website for tested assemblies and code listings.

Please contact your Building Systems Advisor for warranty requirements and additional information.

# TECHNICAL INFORMATION SHEET

## UNA-CLAD™ UC-4

### Typical Properties

Material and Thickness	Metal Specification:	Available Finishes:
<b>Aluminum</b>	Base Metal: Aluminum	Anodized Kynar 500®/Hylar 5000® Unpainted/Mill Finish
0.032" (0.81 mm) 0.040" (1.02 mm)	Minimum Yield: 21 KSI (145 MPa) Thermal Expansion: $12.6 \times 10^{-6}$ in/in/ °F (22.2 m/m.K x $10^{-6}$ ) Mod. Of Elasticity: $10.0 \times 10^3$ x KSI (68.9 MPa)	
<b>Galvanized Steel</b>	Base Metal: AISI-G90 Galvanized steel	Kynar 500®/Hylar 5000® Unpainted G90
26 ga. (0.48 mm) 24 ga. (0.64 mm) 22 ga. (0.79 mm)	Minimum Yield: 33 to 45 KSI (227 to 310 MPa) Thermal Expansion: $06.7 \times 10^{-6}$ in/in/ °F (13.9 m/m.K x $10^{-6}$ ) Mod. Of Elasticity: $29.0 \times 10^6$ x KSI (200 GPa)	
<b>Galvalume® Steel</b>	Base Metal: AZ-55 Hot Dipped Galvalume	Acrylume® – Clear Acrylic Coated
26 ga. (0.48 mm) 24 ga. (0.64 mm) 22 ga. (0.79 mm)	Minimum Yield: 50 KSI (345 MPa) Thermal Expansion: $06.7 \times 10^{-6}$ in/in/ °F (13.9 m/m.K x $10^{-6}$ ) Mod. Of Elasticity: $29.0 \times 10^6$ x KSI (200 GPa)	
<b>Copper</b>	AGSC minimum copper content of 99.9% copper, silver counting as copper, cold rolled from ingots of 122 alloy.	Natural
16 ga. (0.56 mm) 20 ga. (0.69 mm)	Thermal Expansion: $9.3 \times 10^{-6}$ in/in/ °F (16.5 m/m.K x $10^{-6}$ ) AGSC copper meets and/ or exceeds ASTM B370 specification.	

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 Quality Building Services Technical Department at 1-800-428-4511 for further information.

This sheet is meant to highlight Firestone products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials which meet published Firestone product specifications or other technical documents, subject to normal roof manufacturing tolerances. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone 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 Firestone representative is authorized to vary this disclaimer.