TDI | Texas Department of Insurance

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Product Evaluation

RC254 | 1223 Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: RC-254

Effective Date: December 1, 2023
Re-evaluation Date: December 2027

Product Name: Elevate UNA-CLAD™ UC-6 Standing Seam Steel or Aluminum Roofing Panels Installed Over a Wood Structural Panel Roof Deck

Manufacturer: Holcim Solutions and Products US, LLC
26 Century Blvd, Suite 205
Nashville, TN 37214
(800) 428-4442

General Description:
Elevate UNA-CLAD UC-6 standing seam roof panels installed over a wood structural panel deck (either plywood or OSB). Panels are either 24-gauge steel or 0.032" aluminum. Panel have a maximum width of 18" and a 2" tall double lock standing seam rib. The 24-gauge steel material is ASTM A 792 AZ-50 hot dipped Galvalume or ASTM A 653 G-90 galvanized steel with an optional Kynar 500/ Hylar 5000 painted finish. The aluminum is ASTM B 209 minimum 0.032" thick.

Limitations:
New Roof Framing Attachment: The roof framing must meet or exceed the uplift requirements of the IRC or IBC. Install as required for resistance to wind loads. The maximum allowable spacing of the roof framing must be as specified in each assembly listed in this evaluation report.

Design Wind Pressures: The design pressure uplift load resistance requirements are specified in the assemblies listed in this evaluation report.

Roof Slope: Do not install the metal roof panels on roofs with a slope less than 3:12.

Installation over an Existing Roof Covering: Limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing applied over a solid roof deck of wood structural panels as listed in the assemblies in this evaluation report. Note: Inspection of the existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before the metal roofing panel installation proceeds. Underlayment is not required.

Installation:
General: Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Installation: Installation must be in accordance with the following assemblies:

Assembly No. 1	
Design Pressure:	-41.5 psf
Deck:	Minimum 7/16" APA rated OSB. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 24-gauge steel. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 30" on center. Two No. 10-12 x 1-1/2" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	180-degree mechanical lock

Assembly No. 2	
Design Pressure:	-52.5 psf
Deck:	Minimum 19/32" APA rated plywood. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 24-gauge steel. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 36" on center. Two No. 12-11 x 1" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	Seamed together with an electric seamer.

Assembly No. 3	
Design Pressure:	-60.0 psf
Deck:	Minimum 7/16" APA rated OSB. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 24-gauge steel. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 24" on center. Two No. 10-12 x 1-1/2" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	180-degree mechanical lock

Assembly No. 4	
Design Pressure:	-45.0 psf
Deck:	Minimum 7/16" APA rated OSB. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 0.032" aluminum. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 30" on center. Two No. 10-12 x 1-1/2" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4″ below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	180-degree mechanical lock

Assembly No. 5	
Design Pressure:	-52.5 psf
Deck:	Minimum 19/32" APA rated plywood. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 0.032" aluminum. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 30" on center; Two No. 12-11 x 1" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	Seamed together with an electric seamer.

Assembly No. 6	
Design Pressure:	-52.5 psf
Deck:	Minimum 7/16" APA rated OSB. Attachment: Attached to roof framing spaced a maximum of 24" on center.
Panel:	Elevate UNA-CLAD UC-6 minimum 0.032" aluminum. Maximum 18" width. Attachment: Elevate UNA-CLAD UC-6 Low-Float clip. The base of the clip is 2" long and 1" wide and is fabricated from minimum 16-gauge coated steel. The interlocking upper tab is 4-5/16" wide and 2-3/8" long and is fabricated from 22-gauge coated steel. 24" on center. Two No. 10-12 x 1-1/2" pancake head wood screws. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck. Note: If the metal roof panels are installed over an existing roof covering, then the fastener length must be increased so that the fasteners are long enough to penetrate a minimum of 1/4" below the roof deck.
Panel Seam:	180-degree mechanical lock

Underlayment: Minimum of one layer of No. 30 (Type II) asphalt felt. Use underlayment that complies with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. Install the underlayment with minimum 4" side laps and 6" end laps. Apply the underlayment with corrosion resistant fasteners in accordance with the manufacturer's installation instructions. Space the fasteners in accordance with the high wind underlayment installation requirements in the IRC or IBC. Optional Underlayment: Holcim Solutions and Products Elevate CLAD-GARD Underlayment complying with ASTM D 1970 installed in accordance with the manufacturer's installation instructions.

Panel Ends and End Laps: As required by the manufacturer.

Panel Edges: As required by the manufacturer.

Trims, Closures, and Accessories: Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.