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PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

Product Evaluation

RC495 | 0821

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-495

Effective Date: August 1, 2021
Re-evaluation Date: August 2025

Product Name: Copper and Steel Roofing Panels Installed over a Plywood Roof Deck

Manufacturer: Roser Co., LTD
43 Nae-ri 19, Amnyang-myeon, Gyeongsan-si
Gyoengsangbuk-do, Korea
+82-53-817-5000

General Description:

Spany Copper Panels: Minimum thickness of 0.0197", conforming to ASTM B 370. The panel is 16.14" wide by 52.56" long. The panel has an exposure of 14.57".

Spany Steel Panels: Minimum thickness of 0.0157", aluminum-zinc coated alloy coated steel conforming to ASTM A 792 with an AZ50 coating designation. Stone granules are embedded into an acrylic resign adhesive on the exposed surface. The panel is 16.14" wide by 52.56" long. The panel has an exposure of 14.57".

Roser Bond, Tuscany Tile, Cleo Steel Panels: Minimum thickness of 0.0157", aluminum-zinc coated alloy coated steel conforming to ASTM A 792 with an AZ50 coating designation. Stone granules are embedded into an acrylic resign adhesive on the exposed surface. The panel is 16.14" wide by 53.15" long. The panel has an exposure of 14.57".

Rowood, Rowood-016, Rowood-035, and Stonewood Shake Steel Panels: Minimum thickness of 0.0157", aluminum-zinc coated alloy coated steel conforming to ASTM A 792 with an AZ50 coating designation. Stone granules are embedded into an acrylic resign adhesive on the exposed surface. The panel is 16.14" wide by 52.76" long. The panel has an exposure of 14.57".

Limitations:
New Roof Framing Attachment: The roof framing must meet or exceed the uplift requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure uplift load resistance must be as specified in each assembly.

Roof Slope: The metal roofing panels must be installed on roofs with a minimum on roof slopes of 3:12.

Roof Framing: The roof framing must be minimum Spruce-Pine-Fir dimension lumber with a maximum spacing of 24" on center.

Installation over an Existing Roof Covering: Not Permitted.

Installation:
General Installation Requirements: Manufacturer's installation instructions must be followed, unless otherwise specified by this product evaluation. Hip caps, ridge caps, rake caps, barge covers, and flashing must be installed according to the manufacturer's installation instructions. Valley flashing must be installed in accordance with IRC and IBC requirements. All fasteners must be corrosion resistance as specified in the IRC and the IBC.

Assembly No. 1
Spany Copper Panels

Design Wind Pressure: -60.0 psf

Deck: The roof deck must be solidly sheathed with minimum 15/32" plywood.

Underlayment: Minimum of one layer of Type II underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed in accordance with the IRC or IBC.

Battens: Minimum nominal 2x2 No. 2 Spruce-Pine-Fir construction battens. Installed perpendicular to roof framing members. Spaced a maximum of 14-1/2" on center. Secured to each roof framing member with one (1) No. 10 x 3-1/2" long wood screw. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the roof framing.

Panel Attachment: The panels are secured to the battens with minimum five (5) No. 8 x 1-1/2" long hex head screws per panel. The fasteners are evenly spaced across the panel. Use 300 series stainless steel fasteners.

Assembly No. 2
Spany, Roser Bond, Tuscany Tile, Cleo, Rowood, Rowood-016, Rowood-035, and Stonewood Shake Steel Panels

Design Wind Pressure: -53 psf

Deck: The roof deck must be solidly sheathed with minimum 15/32" plywood.

Underlayment: Minimum of one layer of Type II underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed in accordance with the IRC or IBC.

Battens: Minimum nominal 2x2 No. 2 Spruce-Pine-Fir construction battens. Installed perpendicular to roof framing members. Spaced a maximum of 14-1/2" on center. Secured to each roof framing member with one (1) 16d common wire nail. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the roof framing.

Panel Attachment: The panels are secured to the battens with minimum five (5) 8d common wire nails. The fasteners are evenly spaced across the panel.

Assembly No. 3
Spany, Roser Bond, Tuscany Tile, Cleo, Rowood, Rowood-016, Rowood-035, and Stonewood Shake Steel Panels

Design Wind Pressure: -63 psf

Deck: The roof deck must be solidly sheathed with minimum 15/32" plywood.

Underlayment: Minimum of one layer of Type II underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed in accordance with the IRC or IBC.

Battens: Minimum nominal 2x2 No. 2 Spruce-Pine-Fir construction battens. Installed perpendicular to roof framing members. Spaced a maximum of 14-1/2" on center. Secured to each roof framing member with one (1) No. 10 x 3-1/2" long wood screw. Fasteners must be long enough to penetrate a minimum of 1-1/2" into the roof framing.

Panel Attachment: The panels are secured to the battens with minimum five (5) No. 8 x 1-1/2" long hex head screws per panel. The fasteners are evenly spaced across the panel.

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.