

Product Evaluation

RC306 | 0820

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-306

Effective Date: August 1, 2020

Re-evaluation Date: August 2024

Product Name: Series 1300 Standing Seam Aluminum Roofing Panels installed over a Plywood Deck

Manufacturer: Englert, Inc.
1200 Amboy Ave.
Perth Amboy, NJ 08861
(732) 826-8614

General Description:

The Series 1300 aluminum roofing panels is a 0.032" thick aluminum architectural roof system that is mechanically seamed. The panel is fabricated from a 20" wide coil of 0.032" aluminum and has an effective area of 16" in width. Each finished roof panel is 120" long and has a male vertical leg that is 1-7/16" high and a female vertical leg that is 1-1/2" high.

Limitations:

Roof Decking: The Series 1300 metal roof panels must be installed over a minimum of 15/32" thick plywood decking.

New Roof Deck Attachment: The roof decking must meet or exceed the uplift requirements of the International Residential Code and International Building Code, and the decking must be installed in a manner to resist lateral loads.

Design Wind Pressures: Design wind pressure limitations are specified in Table 1.

Installation Over an Existing Roof Covering: Not permitted

Roof Slope: The roof panels may be installed on roofs with a roof slope as low as 1/4: 12.

Table 1. Series 1300 Aluminum Roofing Panels installed over a Plywood Deck

System	Design Wind Pressure	Panel Seam	Panel Clip	Clip Spacing	Clip Fastener
1	Field: With Adhesive -86.25 psf	90-degree	24-gauge, 3" long steel clip	12" o.c.	Two (2) No. 10 x 1" pancake head wood screws
2	Corner: With Adhesive -97.5 psf	90-degree	24-gauge, 3" long steel clip	8" o.c.	Four (4) No. 10 x 1" pancake head wood screws
3	Field: No Adhesive -101.5 psf	180-degree	3" stainless steel floating clip	16" o.c.	Two (2) No. 10 x 1" pancake head screws
4	Corner: No adhesive -142.5 psf	180-degree	3" stainless steel floating clip	8" o.c.	Two (2) No. 10 x 1" pancake head screws
5	Corner: With adhesive -180 psf	180-degree	3" stainless steel floating clip	8" o.c.	Two (2) No. 10 x 1" pancake head screws

Installation:

General: The aluminum roofing panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Roof Framing Members: The roof framing members must be spaced a maximum of 24" on center.

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed with 6" side laps and 3" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36" on center.

Anchorage to the Roof Decking: The metal roof panels must be fastened in accordance with Table 1.

System 1: The metal roofing panels must be secured to the roof deck with a 24-gauge formed steel clip, measuring 3" long by 1-5/8" high. The clips are located 4" from each end and spaced

12" on center. The clips are secured with two (2) No. 10 x 1" pancake head wood screws. The panels overlap at the seams and hand-crimped to 90 degrees with Bostik 70-05A sealant at the seams.

System 2: The metal roofing panels must be secured to the roof deck with a 24-gauge formed steel clip, measuring 3" long by 1-5/8" high. The clips are located 4" from each end and spaced 8" on center. The clips are secured with four (4) No. 10 x 1" pancake head wood screws. The panels overlap at the seams and hand-crimped to 90 degrees with Bostik 70-05A sealant at the seams.

System 3: The metal roofing panels must be secured to the roof deck with a stainless-steel floating clip, measuring 3" long by 1-1/2" high. The clips are located 4" from each end and spaced 16" on center. The clips are secured with two (2) No. 10 x 1" pancake head screws. The panels overlap at the seams and hand-crimped to 90 degrees and then double locked with an electric seamer.

System 4: The metal roofing panels must be secured to the roof deck with a stainless-steel floating clip, measuring 3" long by 1-1/2" high. The clips are located 4" from each end and spaced 8" on center. The clips are secured with two (2) No. 10 x 1" pancake head screws. The panels overlap at the seams and hand-crimped to 90 degrees and then double locked with an electric seamer.

System 5: The metal roofing panels must be secured to the roof deck with a stainless-steel floating clip, measuring 3" long by 1-1/2" high. The clips are located 4" from each end and spaced 8" on center. The clips are secured with two (2) No. 10 x 1" pancake head screws. The panels overlap at the seams and hand-crimped to 90 degrees and then double locked with an electric seamer. The interlock utilized Bostik 70-05A sealant.

Trims, closures, and accessories: Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim shall be installed as required by Englert Metal Roofing Installation Manual.

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.