

Product Evaluation

RC716 | 0523

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-716

Effective Date:

May 1, 2023

Re-evaluation Date:

May 2027

Product Name: Como Steel Roof Panels Installed Over Plywood Deck

Manufacturer: Worthouse, Inc.
2315 Landmeier Rd.
Elk Grove Village, IL 60007
(847) 621-2470

General Description:

The metal roof panels are 26-gauge galvanized steel with a paint finish. Illustrations of the panels are provided in Figures 1. The Como panel has a maximum coverage of 46.54" and a minimum yield strength of 33,000 psi.

This evaluation report is for metal roof panels that are secured directly to a plywood deck. Thicker plywood may be used; however, the design pressure rating for the metal panels will be as specified in this evaluation report.

Limitations:

Design Wind Pressures: The design wind pressure uplift resistance is specified in Tables 1.

Roof Framing: Roof framing (rafters or trusses) must not exceed 24" on center.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not permitted.

Roof Slope: The metal panels may be installed on roofs with a roof slope as low as 3:12.

Installation:

Direct-to-Deck: The metal roof panels must be secured to plywood deck in accordance with the manufacturer's installation instructions and Table 1.

Table 1 Design Wind Pressure and Attachment of Metal Roof Panels to Plywood Deck.

Minimum Plywood Deck	Fasteners Per Panel	Design Wind Uplift Pressure
15/32"	10 screws	-93.5 psf
	20 screws	-146.0 psf
19/32"	10 screws	-123.5 psf
	20 screws	-191.0 psf

Roof Deck Attachment: The roof deck must be secured to the roof framing to resist the required wind uplift design pressures.

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 felt must be installed with minimum 4" side laps and minimum 6" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions.

Attachment of Panels to Roof Deck: The panels must be secured to the roof deck with #12 x 1-1/2" WoodZip screws. The required number of fasteners per panel is specified in Table 1. The fastener pattern is illustrated in Figures 2 and 3. The fasteners must be long enough to penetrate completely through the wood deck.

Panel Laps: The panels must be stitched at the side lap in the predrilled hole location in the vertical leg using 1/4"-14 x 7/8" SteelZIP stich screws.

Panel Ends: As required by the manufacturer.

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Trim: Components such as eave trim, rake trim, hip trim, and valley trim must be installed as required by the manufacturer.

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

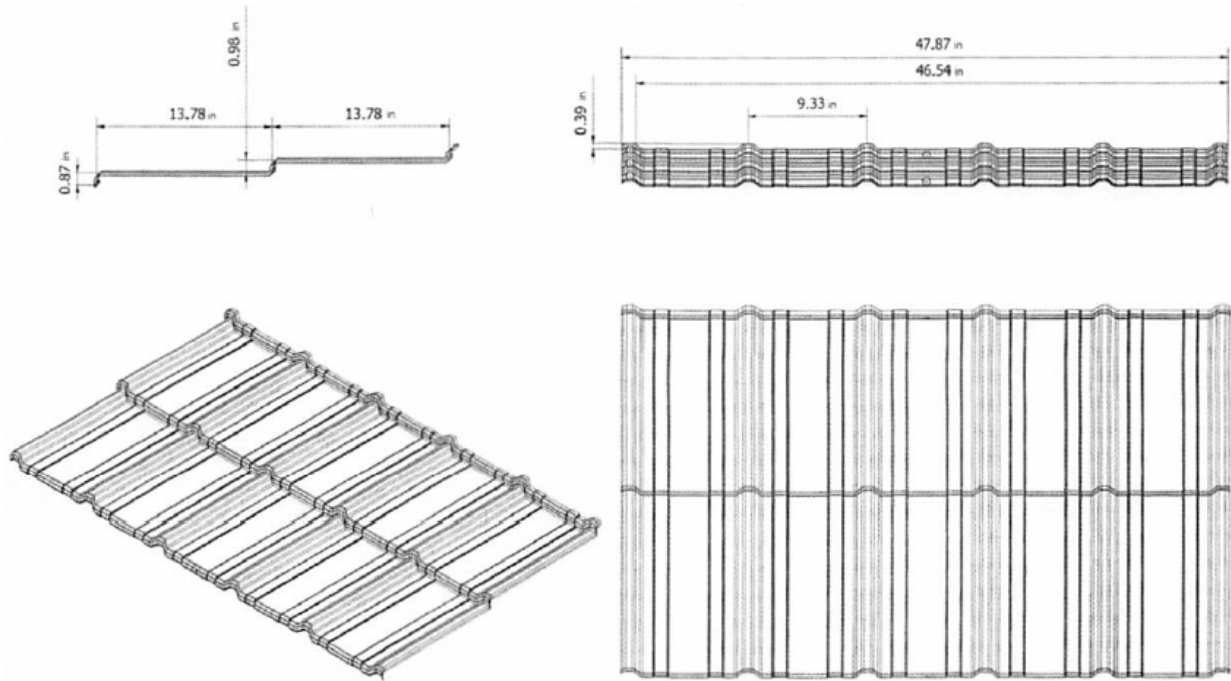


Figure 1. Como Panel Dimension and Profile

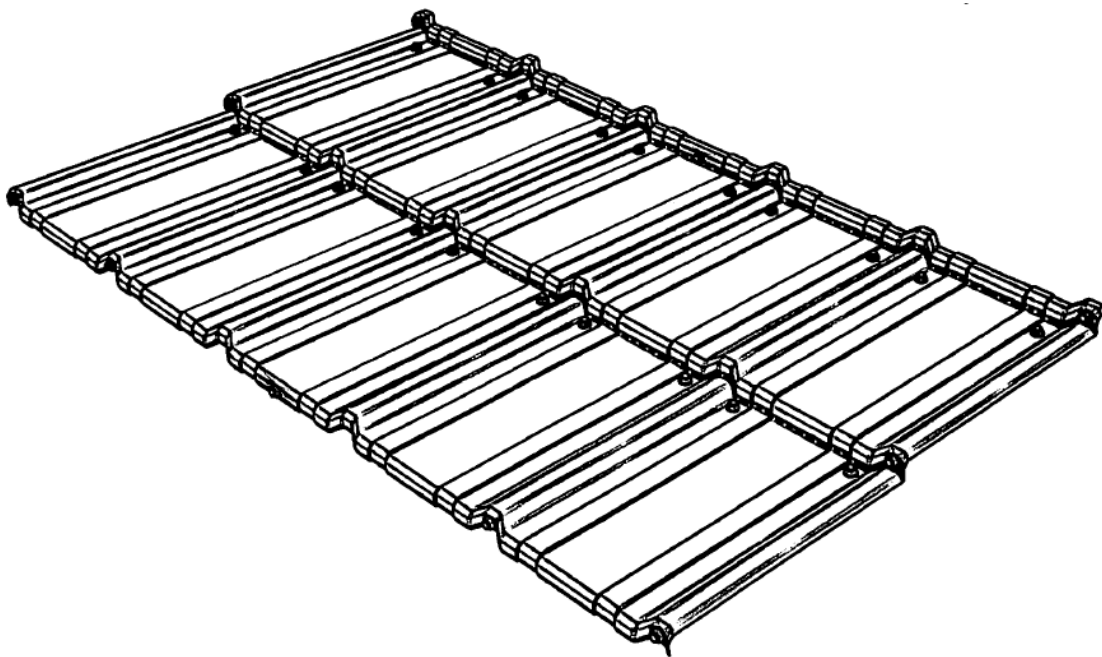
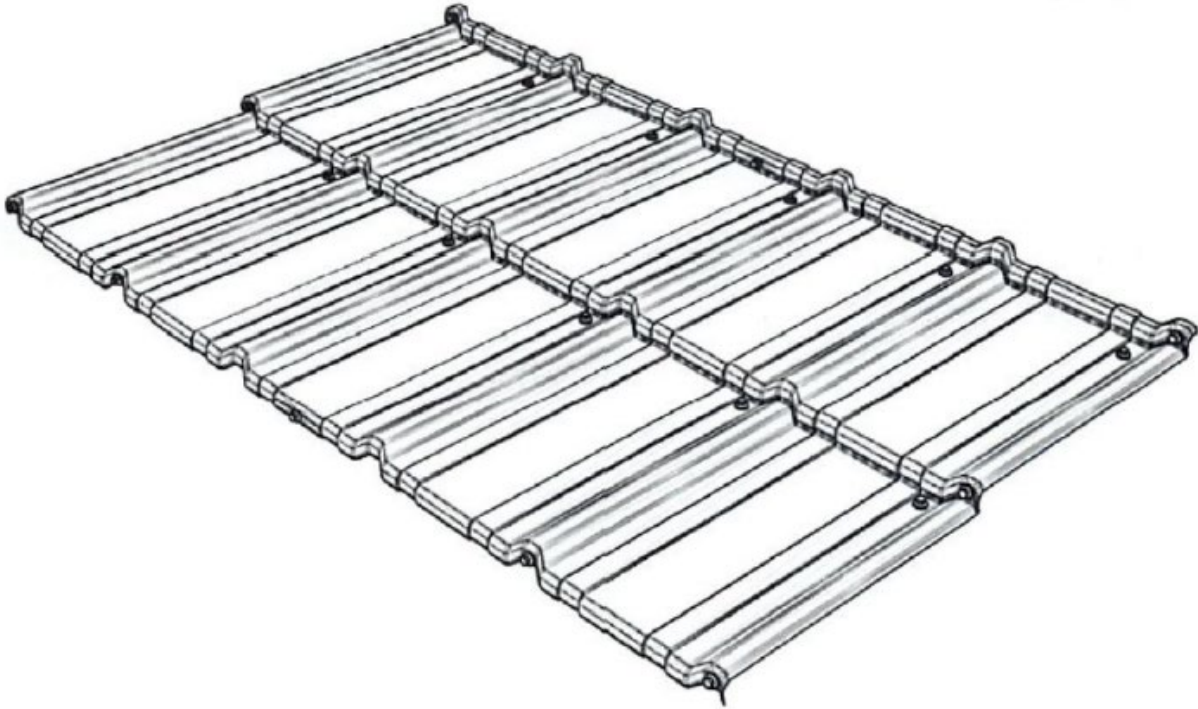
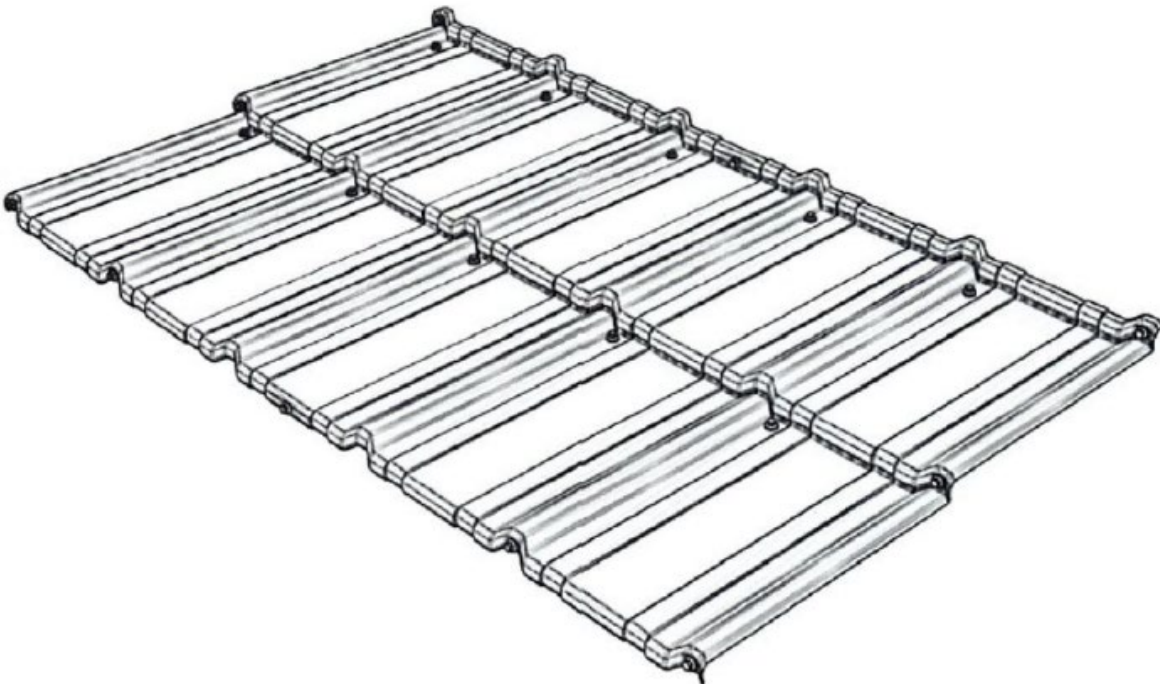


Figure 2. 20 Screws/Panel – Fastening Pattern



(1) 10 Screws/Panel – Fastening Pattern Right to Left



(2) 10 Screws/Panel – Fastening Pattern Left to Right

Figure 3.