

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION RC-25

Effective Date: January 1, 2013

*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 shall be subject to reevaluation **January 2017**.*

*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.*

**Craftsman Series-Small Batten** manufactured by

**Metal Building Components, Inc. (MBCI)**  
**14031 West Hardy**  
**Houston, Texas 77060**  
**(281) 445-8555**

will be accepted for use in areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

Craftsman Series-Small Batten standing seam roof panels are either coated steel or aluminum panels. The steel panels are 24 MSG, and the aluminum panels are 20 MSG. Both types of roof panels are 12 or 16 ½ inches wide with 1 inch high standing stiffeners. The steel panel conforms to ASTM A 653 Grade E, 50,000 psi yield point and galvanized. The aluminum panels conform to Aluminum Type Certifications, 3003 alloy, the minimum yield point shall be 21,000 ksi.

## LIMITATIONS

**Design Wind Pressure:** -52.5 psf

**Roof Slope:** Do not install Craftsman Series-Small Batten roof panels on slopes less than 3:12.

**Installation Over an Existing Roof Covering:** Installation over an existing roof covering is not covered in this product evaluation report.

**Roof Framing Members:** The roof framing members shall be spaced a maximum of 24 inches on center.

## INSTALLATION INSTRUCTIONS

**General Installation Requirements:** All International Residential Code (IRC) and the International Building Code (IBC) requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**Roof deck:** The roof deck shall consist of wood structural panels with a minimum thickness of nominal  $\frac{5}{8}$  inch plywood roof decks

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

### **METHOD 1: (Steel Panels)**

**Fasteners:** Two-inch long by 0.02-inch thick galvanized steel clips and #10 x 1-inch long pancake head wood screws with a No. 2 Phillips head size, and #10 x  $1\frac{1}{2}$ -inch wood grip screws.

**Panels:** The panels shall be anchored with two-inch long by 0.02-inch thick galvanized steel clips. The anchor clips shall be located at 24 inches on center with one #10 x 1-inch long pancake head wood screws with a No. 2 Phillips head size. The rake and the ridge 'Z' closure shall be anchored with #10 x  $1\frac{1}{2}$ -inch long pancake head wood screws at 6 inches on center. The valley and eave shall be anchored with three #10 x  $1\frac{1}{2}$ -inch long wood grip screws at each panel. The joint formed by the panel vertical legs shall be covered with the SB Batten. The battens are 0.023-inch thick steel sheet metal. This batten is snapped in place and held by the lips of the anchor clip tab.

**Sealing of panel assembly:** Factory applied, hot-melt, non-curing mastic in the concave portion of the battens, which contacted the upstanding legs of the panels. A continuous field-applied  $\frac{7}{8}$ -inch x  $\frac{3}{16}$ -inch double-bead butyl tape near the ends of the panels below the screws. A field-applied urethane sealant at the ends of the battens.

**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 the manufacturer.

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

**Panel Edges:** As required by the manufacturer.

### **METHOD 2: (Steel or Aluminum Panels)**

**Fasteners:** Two-inch long by 0.019-inch thick Type 304 stainless steel clips (aluminum panels) or two-inch long by 0.020 inch thick galvanized steel clips (steel panels) secured with #10 x 1-inch long pancake head wood screws with a No. 2 Phillips head size.

**Panels:** Aluminum panels shall be anchored with two-inch long by 0.019 inch thick Type 304 stainless steel clips, and the steel panels shall be anchored with two-inch long by 0.020 galvanized steel clips. The anchor clips shall be located at 12 inches on center for aluminum panels and 24 inches on center for steel panels with one #10 x 1-inch long pancake head wood screw with a No. 2 Phillips head size. The rake closure shall be anchored with #10 x 1-inch long pancake head wood screws at 6 inches on center. A hook on detail may be used on the valley and eaves. This consists of field hemming the panels and "hooking" the panels onto an offset cleat (eave trim with a drip edge may be used at the eave). This offset cleat/drip trim is attached with #10 x 1-inch long pancake head wood screws with a No. 2 Phillips head at 6 inches on center (refer to manufacturer' installation instructions for further details). The ridge and hip 'Z' closures shall be anchored with three #10 x 1-inch long pancake head wood screws at each panel. The joint formed by the panel vertical legs shall be covered with the SB batten. The battens are 0.023 inch

thick steel sheet metal for steel panels or 0.032 inch aluminum sheet metal. This batten is snapped in place and held by the lips of the anchor clip tab.

**Sealing of panel assembly:** Factory applied hot-melt non-curing mastic in the concave portion of the battens, which contacted the upstanding legs of the panels. A continuous field-applied  $\frac{7}{8}$ -inch x  $\frac{3}{16}$ -inch double-bead butyl tape near the ends of the panels below the screws. A field-applied urethane sealant at the ends of the battens.

**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 the manufacturer.

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

**Panel Edges:** As required by the manufacturer.

**Note:** The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.