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DIVISION: 06—WOOD AND PLASTICS**Section: 06600—Plastic Fabrications****DIVISION: 07—THERMAL AND MOISTURE PROTECTION****Section: 07321—Roof Tile Accessories****REPORT HOLDER:**

BATTENS PLUS, INC.
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EVALUATION SUBJECT:**BATTENUP BATTENS****1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2006 *International Building Code®* (IBC)
- 2006 *International Residential Code®* (IRC)
- Legacy Codes (See Section 8.0)

Properties evaluated:

- Physical properties
- Weather resistance
- Roof covering fire classification
- Wind uplift resistance

2.0 USES

BattenUp Battens are plastic battens used in clay or concrete tile roof systems. The BattenUp Battens are alternatives to battens specified in IBC Table 1507.3.7 and IRC Table R905.3.7.

3.0 DESCRIPTION

3.1 Battens: The BattenUp Battens are made from extruded polypropylene and are 1 $\frac{1}{2}$ inches wide by $\frac{1}{2}$ inch thick by 48 inches long (38 by 12.7 by 1219 mm). The battens are manufactured with 0.044-inch-thick (1.12 mm) top and bottom flanges, and 0.038-inch-thick (0.97 mm) vertical stiffeners that form openings measuring 0.372 inch wide by 0.412 inch high (9.4 by 10.5 mm) between the top and bottom surfaces of the batten. See Figures 1 and 2.

3.2 Roof Tiles: The roof tiles must be conventional clay or concrete interlocking tiles with projecting anchor lugs and must be recognized in a current ICC-ES evaluation report.

4.0 INSTALLATION**4.1 Roof Slope:**

Minimum roof slope is 2 $\frac{1}{2}$:12 (21% slope). Maximum roof slope when used with high-profile S-tiles is 12:12 (100% slope).

4.2 Installation—New Construction:

The BattenUp Battens must be installed horizontally directly to solid sheathing, parallel to the eave and spaced in accordance with the roof tile manufacturer's installation instructions. The open section of the battens must be oriented to allow water to drain down the slope and pass through the batten openings. The battens must be fastened to the roof sheathing with minimum 1 $\frac{1}{4}$ -inch-long-by- $\frac{7}{16}$ -inch-crown (31.7 by 11.1 mm), No. 16 gage, corrosion-resistant staples spaced at 6 inches (152 mm) on center when used to install low- and medium-profile tiles. The staple crown must be installed parallel to the length of the batten (across the vertical stiffeners), starting and ending 1 inch (25.4 mm) from each end of the batten. The tiles must be installed with the projecting anchor lugs fully engaged with the batten. The tile must be attached through the batten to the roof sheathing and in accordance with IBC Table 1507.3.7 or IRC Table R905.3.7. See Figures 1 and 2.

4.3 Installation—Reroofing:

The existing roof covering must be completely removed and the BattenUp Battens installed in accordance with Sections 4.1 and 4.2 of this report when the requirements of IBC Section 1510 or IRC Section R907 are met.

4.4 Fire Classification:

The use of these battens in lieu of wood battens does not alter the roof classification of the clay or concrete tile roof covering for new construction or where the old roof covering has been removed and the roof construction is as described in this report.

4.5 Wind Resistance:

Wind resistance of the roof tiles is as noted in the evaluation report on the roof tiles. Under the IBC, use of the battens is limited to maximum basic wind speeds (3-second gust) of 100 mph (161 km/h) and to a maximum mean roof height of 60 feet (18 288 mm); and under the IRC, use is limited to maximum basic wind speeds (3-second gust) of 100 mph (161 km/h) and maximum mean roof height of 40 feet (12 192 mm), unless the evaluation report on the roof tile specifically recognizes use with the Batten-up Battens.

5.0 CONDITIONS OF USE

The BattenUp Battens described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

ES REPORTS™ are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.



- 5.1 The battens must be manufactured, identified and installed in accordance with this report and the report holder's published installation instructions. The instructions within this report govern if there are any conflicts between the report holder's published installation instructions and this report.
- 5.2 Use of the battens must be approved by the building official.
- 5.3 The battens are manufactured in Lolita, Texas, under a quality control program with inspections by Ramtech Laboratories, Inc. (AA-655).

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Plastic Battens Used in Clay or Concrete Tile Roof Systems (AC200), dated June, 2007.

7.0 IDENTIFICATION

Bundled battens are labeled with the report holder's name (Battens Plus, Inc.) and address, the product name, the product code, the job number, the name of the inspection agency (Ramtech Laboratories, Inc.) and the evaluation report number (ESR-2482).

8.0 LEGACY CODES

8.1 1997 Uniform Building Code (UBC):

The BattenUp Battens described in Sections 2.0 through 7.0 of this report comply with the UBC, under the conditions noted below:

- **Section 2.0, Uses:** The BattenUp Battens are alternatives to battens specified in UBC Table 15-D-2.
- **Section 4.1, Roof Slope:**
Minimum roof slope is 4:12 (33% slope).
- **Section 4.2, Installation – New Construction:**
The tile must be attached through the batten to the roof sheathing and in accordance with UBC Table 15-D-2.
- **Section 4.3, Installation – Reroofing:**

The BattenUp Battens must be fastened to the roof sheathing in accordance with Section 4.2 after the existing roof covering is completely removed when the requirements of UBC Appendix Section 1518 are met.

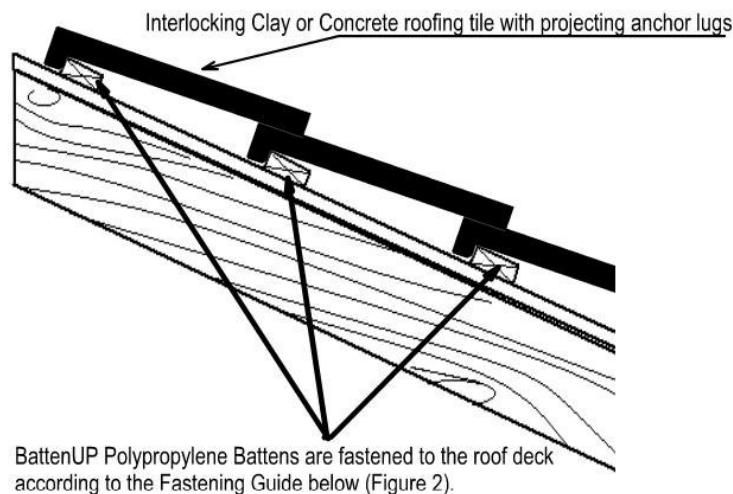


FIGURE 1—TYPICAL INSTALLATION DETAIL

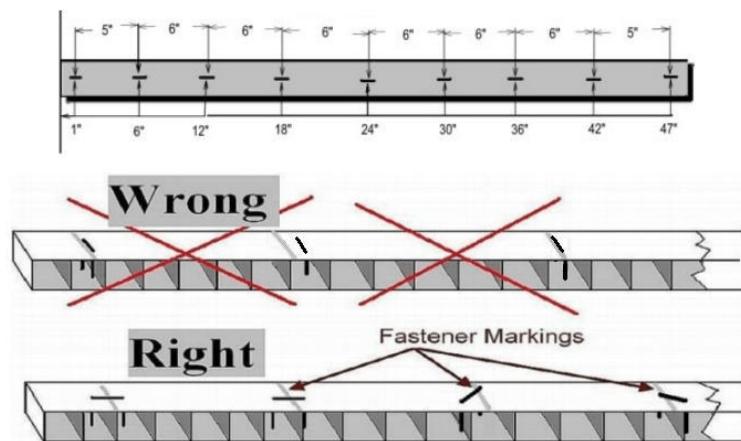


FIGURE 2—FASTENING GUIDE, BATTENUP POLYPROPYLENE BATTEN