



# Zilla® Zip Flashing

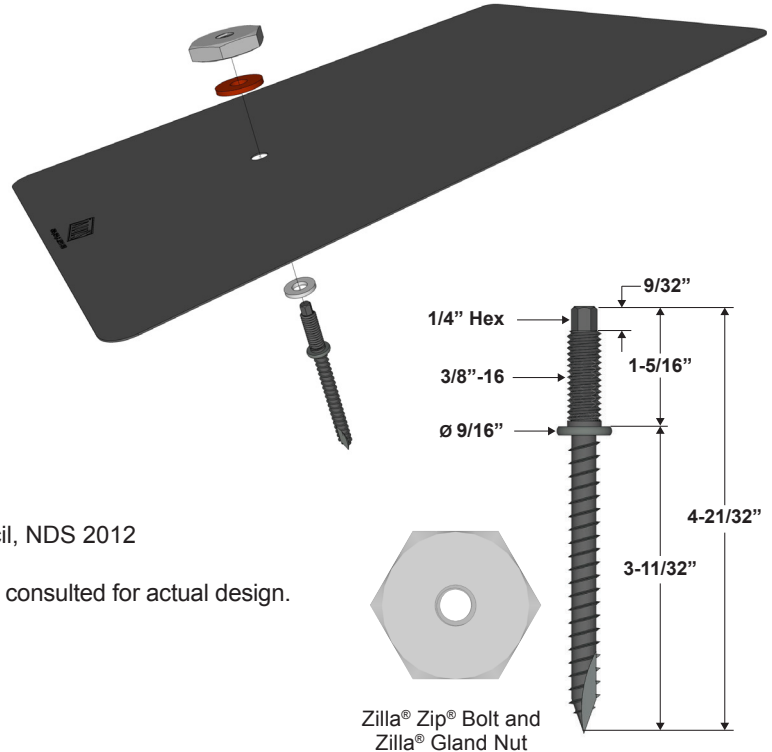
## Load Data

One or more patents apply to this product including without limitation: US Pat. 8,448,405; 8,707,654; 8,689,517; 8,707,655; and/or 8,752,338. ZZFA-AL BLK / ZZFA-AL MF

### Code Based Withdrawal:

Use the following chart and assumptions to calculate Withdrawal (Pull-Out) Capacities, measured in pounds per inch (lb/in) of thread penetration, for the Zilla® Zip® Flashing. Follow shingle manufacturer recommendations and AHJ requirements for exposure and proper coverage.

| LUMBER SPECIES                  | SPECIFIC GRAVITY | 3/8" LAG SCREW (lb/in) |
|---------------------------------|------------------|------------------------|
| Douglas Fir-Larch               | 0.5              | 342                    |
| Douglas Fir-South               | 0.46             | 301                    |
| Englemann Spruce-Lodgepole Pine | 0.46             | 301                    |
| Hem-Fir                         | 0.43             | 272                    |
| Hem-Fir (North)                 | 0.46             | 301                    |
| Southern Pine                   | 0.55             | 394                    |
| Spruce-Pine-Fir                 | 0.42             | 263                    |
| Spruce-Pine-Fir (South)         | 0.36             | 208                    |
| Western Cedars                  | 0.36             | 208                    |
| OSB/Plywood                     | 0.5              | 342                    |



### Assumptions:

- Tabulated values above based on American Wood Council, NDS 2012 Table 10.3.1 and Table 11.2A
- Information for reference only. Engineer of Record shall be consulted for actual design.
- Thread penetration does not include roofing thickness
- Wind Uplift Load Duration, 10 minutes: CD =1.6
- Values listed above for dry (MC < 19%) lumber
- Rooftop Temperature Range, 125° F < T ≤ 150° F: Ct =0.7
- Thread penetration into side grain of structural member

### Third Party Test Data\*:

**Project Summary:** Architectural Testing, Inc., a subsidiary of Intertek (Intertek-ATI), was contracted by Zilla Corporation to perform uplift and shear load evaluations on fasteners used in conjunction with flashing and connector products for the installation of roof mounted photovoltaic systems.

**Test Method:** the test specimens were evaluated in accordance with ICC-ES™ AC 13, Acceptance Criteria for Joist Hangers and Similar Devices (Approved 2010, Revised 2011) using the methodology of ASTM D 1761-12, *Standard Test Methods for Mechanical Fasteners in Wood*.

**Test Specimen Description:** Testing was performed in accordance with the loading methodology of ASTM D 1761 for shear or withdrawal (vertical) evaluation of the Zip® Flashing product. The Zilla® Zip® Bolt product was installed on a 12" length of 2x4" southern yellow pine (SYP) to simulate a roof truss. Each roof truss was capped with a layer of 1/2" plywood and one layer of asphalt fiberglass shingle. Fasteners were installed into the southern yellow pine roof truss.

| Load Orientation - Zilla® Zip® Bolt (Truss Attachment) |  |   |
|--|--|---|
| Ultimate Load in Tension (lb <sub>t</sub> )            | Ultimate Load in Shear Lateral Parallel to Beam (lb <sub>f</sub> ) | Ultimate Load in Shear Lateral Perpendicular to Beam (lb <sub>f</sub> ) |
| 3,549  | 3,398  | 1,319   |

\* Values shown are average ultimate values and do not include a factor of safety.

Zilla® So Simple It's Scary<sup>SM</sup>

77 Waneka Pkwy • Lafayette, CO 80026 • 720.880.6700 • fax 303.664.1268 • zillarac.com

MADE IN USA MADE WITH RECYCLED MATERIAL © 2016 Zilla Corporation. All rights reserved.