



TEXAS DEPARTMENT OF INSURANCE

Regulatory Policy Division - Engineering Services Program (103-3A)

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Submittal Requirements for Product Evaluation – Roof Vents

The Texas Department of Insurance (TDI) uses the information and product requirements requested below to develop a product evaluation report for roof vents for use in the designated catastrophe areas along the Texas Gulf Coast. The product evaluation report will identify the product, specify the maximum design pressure limitations, describe the tested assembly, specify the applicable installation methods, and specify the fastener specifications used. TDI does not charge a fee for the evaluation of the product. This evaluation is not intended to preclude a Texas licensed professional engineer from using testing information or ICC evaluation reports that have not been submitted to the TDI for certifying compliance with the building specifications adopted by the TDI.

1.0 Minimum Information Required for Evaluation

The information requested must be provided in the form of a complete and organized package. Mail the package to TDI at the address at the top of this document. The submittal must include a cover letter and the substantiating information specified in Section 5.0. The cover letter needs to include the following:

- 1.1 The manufacturer's full name and address
- 1.2 The manufacturer's engineering or technical representative contact, including telephone number, fax number, and/or e-mail address
- 1.3 The manufacturer's contact phone number for local sales information
- 1.4 The name of the product(s)
- 1.5 A description of the substantiating information as specified in Section 5.0 for each product included in the submittal
- 1.6 Optional: Provide an electronic version of draft TDI product evaluation report.
- 1.7 Optional: Electronic drawings that illustrate the construction and installation of the product(s) and are consistent with the submitted test data or evaluation information requested by the manufacturer. Drawings will be included in the evaluation to provide guidance and to clarify the use of the product in the field. Provide one hard copy of the drawings and one electronic copy (PDF) saved to a CD or DVD. TDI may use the electronic copy to post the drawings on the TDI Windstorm Inspections Program Product Evaluation Index website.
- 1.8 Indicate if the submitted information is regarding a new product evaluation or the revision of an existing evaluation. If the information is for a revision, please indicate the existing TDI evaluation number.

2.0 Building Code Requirements for Products

- 2.1 TDI will evaluate products according to the wind load criteria of Chapter 3 of the 2006 International Residential Code (IRC); the wind load criteria of Section 1609 of the 2006 International Building Code (IBC); test standards and performance criteria referenced in the IRC and the IBC and the Texas Revisions to the IRC and the IBC; and nationally recognized test standards or procedures.
- 2.2 Basic design wind speed requirements for construction in the designated catastrophe areas along the Texas Gulf Coast are as follows:
 - Inland II Zone: 110 mph, 3-second gust
 - Inland I Zone: 120 mph, 3-second gust
 - Seaward Zone: 130 mph, 3-second gust
- 2.3 Design Pressure Requirements: Refer to either Table R301.2(2) of the IRC or ASCE 7 for design wind pressure requirements. The manufacturer should consider that Exposure B and C conditions can occur in each wind zone.

3.0 Product Applicability and Limitations of Evaluation Report

- 3.1 Evaluation of a product does not constitute approval of the product for use on all structures. The design pressure rating of the product (as reported in the TDI evaluation) must exceed the required design pressure required for the specific structure.
- 3.2 TDI will develop the product evaluation report based on the manner in which the product was tested. This includes the attachment of the product to the roof deck or roof framing. NOTE: Test products as they would be installed in the field. Test products with a roof deck construction (framing members, wood structural panels) commonly used and should be attached to the roof deck construction with readily available, commonly used fasteners. Note: Minimum 7/16" OSB or 15/32 plywood is recommended for the roof deck construction.
- 3.3 Products tested that are mechanically attached (fasteners) to OSB will be acceptable on equal or greater thickness plywood at the design pressure rating of the tested assembly.
- 3.4 Roof Slope: The product evaluation report will specify roof slope limitations for the product.

4.0 Testing and Test Report Minimum Information Requirements

- 4.1 Testing facilities that comply with one of the following must develop the test reports:
 - 4.1.1 The test facility must be either UL (Underwriters Laboratories) or FM (Factory Mutual);
 - 4.1.2 The test facility must be recognized by the International Code Council Evaluation Service (ICC-ES) as specified in ICC-ES Acceptance Criteria AC85;
 - 4.1.3 The test facility must be recognized by Miami-Dade County, Florida; or
 - 4.1.4 The test facility must be accepted by TDI. TDI will accept test facilities that are accredited as complying with ISO/IEC Standard 17025 by the International Accreditation Service (IAS) or by any other accreditation body recognized by the International Laboratory Accreditation Cooperative (ILAC) Mutual Recognition Agreement (MRA). The scope of the accreditation shall include the type of testing covered in the submitted test reports.

Manufacturer's test facility: If the manufacturer performs in-house testing, then the manufacturer shall have the testing conducted under the supervision of an independent testing facility that qualifies under Sections 4.1.1 through 4.1.4. The test report shall be prepared by and issued by the supervising party.

TDI reserves the right to request that the testing facility provide documentation to verify compliance with Sections 4.1.1 through 4.1.4.

- 4.2 **Uniform Static Load Resistance:** Test roof vents in accordance with ASTM E 330.
- 4.3 **Test Reports:** An independent test laboratory must develop the test report. The test report shall include the following minimum information:
 - Date of testing
 - Date of report
 - Test standards for which the product was tested
 - Description of the product (include product name)
 - Description of each component of the roof vent (include dimensions, thickness, material)
 - Thickness of roof deck (if the product is secured to the roof deck)
 - Type of roof deck (plywood or OSB) if the product is secured to the roof deck
 - Species of roof framing (if the product is secured to the roof framing)
 - Description of fasteners used during testing to secure the roof vent to the roof sheathing or to the roof framing. Include the type, size, length, and spacing of the fasteners
 - Test result criteria as required by the applicable test standard
- 4.4 **Roof Slope:** Provide the minimum and the maximum roof slope limitations for the product.
- 4.5 **Safety Factor:** TDI will apply an appropriate safety factor to the test loads specified in the test reports.

5.0 Substantiating Information

- 5.1 The following information must be included as part of the submittal package for each product to be listed:
- Cover letter as described in Section 1.0
 - Test reports and other information in accordance with Section 4.0
 - Lab stamped drawings that go with test reports
 - Installation instructions
 - Design drawings (optional)
 - Allowable roof slopes for installing the product

6.0 Expiration and Renewal of Product Evaluation Reports

- 6.1 TDI will utilize a test report as long as the test report is current, the test standards that the product was tested to have not changed, the test standards for the product required by the building specifications adopted by TDI have not changed and, the product specified in the test report has not changed.
- 6.2 TDI reserves the right to request verification from the product manufacturer that the product specified in the test report has not changed.
- 6.3 If the test report indicates an expired expiration date, then revise the test report to either remove the expiration date, change the expiration date, or add a record retention date.
- 6.4 If the test report indicates an expiration date within six months of expiring, then TDI reserves the right to request that you revise the test report to either remove the expiration date, change the expiration date, or add a record retention date.
- 6.5 For an initial product evaluation, if the test report does not indicate an expiration date or if it specifies a record retention date, then the TDI reserves the right to refuse to utilize the test report if the test laboratory is not able to provide information relative to the testing of the product specified in the test report.
- 6.6 For the renewal of an existing product evaluation, if the test report does not indicate an expiration date or if it specifies a record retention date, then the TDI may continue to utilize the test report if no changes have occurred in the product.
- 6.7 The evaluation report will be subject to reevaluation a maximum of four years from the effective date of the evaluation report. The reevaluation date in the evaluation report could be less than four years from the effective date of the evaluation report, depending on the date of test specified in the test report or if the test report has an expiration date.
- 6.8 The evaluation report will indicate the month and year of the reevaluation date.