



TEXAS DEPARTMENT OF INSURANCE

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

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Submittal Requirements for Product Evaluation - Skylights

The Texas Department of Insurance (TDI) uses the information and product requirements requested below to develop a product evaluation report for skylights 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, specify the wind zones where windborne debris resistant products may be used (if applicable to the product), specify the applicable component dimensions, 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

Provide the requested information 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 Manufacturer's engineering or technical representative contact, including telephone number, fax number, and e-mail address
- 1.3 Manufacturer's contact phone number for local sales information
- 1.4 The name (model, series number, etc) of the product(s)
- 1.5 Indicate whether the products are impact resistant or non-impact resistant
- 1.6 A description of the substantiating information as specified in Section 5.0 for each product included in the submittal.
- 1.7 Optional: Provide an electronic version of a draft TDI product evaluation report
- 1.8 Optional: Electronic drawings (optional) 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. Provide drawings 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 TDI's Windstorm Inspections Program Product Evaluation Index website.
- 1.9 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; performance criteria; and labeling requirements 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.

- 2.4 Windborne Debris Requirements: For construction in the Inland I Zone, design glazed exterior opening products to resist windborne debris or provide protection from windborne debris by an impact protective system. For construction in the Seaward Zone, design all exterior opening products to resist windborne debris or provide protection from windborne debris by an impact protective system.

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. In addition, the windborne debris resistance rating for the product (as reported in the TDI evaluation) must comply with the required windborne debris criteria for the specific structure.
- 3.2 The 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 test buck and the material used for the test buck. NOTE: *Test products as installed in the field. Test products with a test buck or framing utilizing common framing materials and be attached to the test buck or framing with readily available, commonly used fasteners.*

4.0 Testing and Test Report Minimum Information Requirements

- 4.1 Develop test reports by testing facilities that comply with one of the following:
- 4.1.1 The test facility shall be either UL (Underwriters Laboratories) or FM (Factory Mutual)
 - 4.1.2 The test facility shall 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 shall be accredited by either AAMA or WDMA
 - 4.1.4 The test facility shall be recognized by Miami-Dade County, Florida; or
 - 4.1.5 The test facility shall 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 4.1.5. 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 4.1.5.

- 4.2 Skylight products shall be tested and bear a label indicating compliance with AAMA/WDMA/CSA 101/I.S.2/A440 as specified in Section R308.6.10 of the 2006 Texas Revisions to the IRC and Section 2405.5 of the IBC.
- 4.3 Skylight products that are not within the scope of Section R308.6.10 of the Texas Revisions to the 2006 IRC or Section 2405.5 of the 2006 IBC shall be tested in accordance ASTM E 330 and shall bear a label produced by the product manufacturer which indicates the product was tested in accordance with ASTM E 330.
- 4.4 Windborne Debris Testing: If listing a skylight product as windborne debris resistant, then in addition to complying with Section 4.2 or Section 4.3 of this document, also test the skylight product in accordance with ASTM E 1886 and ASTM E 1996 or in accordance with AAMA 506 and bear a label indicating compliance with either AAMA 506 or ASTM E 1886 and ASTM E 1996 and indicate the missile level and design pressure rating.
- 4.5 An independent test laboratory must develop the test report. The test report must include the following minimum information:
- Date of testing
 - Date of report

- Test standards for which the product was tested
- Description of the product to include model, series, or product name.
- Overall dimensions of the tested assembly
- Component dimensions of the tested assembly
- Description of the tested assembly
- Frame construction
- Glass construction and glazing method
- The species of the lumber used for the test buck (the lumber that the window was secured to during testing)
- Description of fasteners used during testing to secure the product to the test buck. Include fastener type, size, length, and spacing
- Test result criteria as required by the applicable test standard

4.6 Safety Factor: The TDI will apply an appropriate safety factor to the test loads specified in the test reports.

5.0 Substantiating Information

5.1 Include the following information as part of the submittal package for each product:

- Cover letter as described in Section 1.0.
- Test report in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 or ASTM E 330 (if applicable).
- Optional: Lab stamped drawings that go with the AAMA/WDMA/CSA 101/I.S.2/A440 or ASTM E 330 test report.
- Test report in accordance with either AAMA 506 or ASTM E 1886 and ASTM E 1996 (required for windborne debris resistant products).
- Optional: Lab stamped drawings that go with the AAMA 506 or ASTM E 1886 and ASTM E 1996 test report.
- Copy of the window product's label. The label should comply with Section R308.6.10 of the 2006 Texas Revisions to IRC or Section 2405.5 of the 2006 IBC. An inspection agency (AAMA, WDMA, NAMI, or Keystone) must issue the sticker. NOTE: For windborne debris products, the label must also indicate compliance with either AAMA 506 or ASTM E 1886 and ASTM E 19896 and specify missile level.
 - EXCEPTION: For skylight products that are not within the scope of Section R308.6.10 of the Texas Revisions to the 2006 IRC or Section 2405.5 of the 2006 IBC, provide a copy of the label that indicates product manufacturer; product model, series, or name; and ASTM E 330. If the product is tested for windborne debris resistance, also include ASTM E 1886 and ASTM E 1996 on the label.
- Copy of the certification document from the inspection agency for the tested product. Examples include the following:
 - Authorization for Product Certification (AAMA)
 - Notice of Product Certification (NAMI)
 - Hallmark Certificate of Conformance and License (CCL) (WDMA)
 - Certification Authorization Report (CAR) (Keystone)
 NOTE: The label provided must match the criteria specified on the certification document.
- Installation instructions.

6.0 Expiration and Renewal of Evaluation Reports

- 6.1 Provide a current certification of the product by the inspection agency.
- 6.2 The 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 the TDI have not changed, the product specified in the test report has not changed and, the product is certified by the inspection agency.
- 6.3 The TDI reserves the right to request verification from the product manufacturer that the product specified in the test report has not changed.

- 6.4 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.
- 6.5 If the test report indicates an expiration date within six months of expiring, then TDI reserves the right to request revision to the test report to either remove the expiration date, change the expiration date, or add a record retention date.
- 6.6 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.
- 6.7 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 TDI may continue to utilize the test report if no changes have occurred in the product.
- 6.8 The evaluation report will expire four years from the effective date of the evaluation report or when the certification from the inspection agency (AAMA, WDMA, NAMI, or Keystone) of the products listed in the evaluation report expires, whichever is less time.
- 6.9 TDI bases the expiration date for the evaluation report on the date the product was tested as indicated in the test report.
- 6.10 The evaluation report will indicate the month and year of the expiration date.