



TEXAS DEPARTMENT OF INSURANCE

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

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Submittal Requirements for Product Evaluation - Doors

The Texas Department of Insurance uses the information and product requirements below to develop a product evaluation report for exterior doors 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. There is no fee for the evaluation of the product by the TDI. 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 the TDI address shown 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 e-mail address.
- 1.3 The manufacturer's contact phone number for local sales information.
- 1.4 The name (model, series number, etc) of the product(s) that are to be listed.
- 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. Include 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 the Windstorm Inspections Program Product Evaluation 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 Products will be evaluated by the TDI 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 The exterior door product must have a minimum design pressure rating of 25 psf. 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 For construction in the Inland I Zone, either 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, either 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: Products should be tested as they would be installed in the field. Products should be tested 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.
- 3.3 If the door product is tested with fasteners penetrating through a nailing fin, such as for new construction doors and a frame installation option is desired (such as for replacement doors), then a fastener analysis may be submitted to the TDI. The fastener analysis must include the following:
 - The analysis must include the fastener type, size, and spacing along the doorframe.
 - The analysis must include the minimum species of lumber required for the wall framing.
 - The analysis must specify the minimum penetration of the fastener into the wall framing.
 - The analysis must utilize the NDS for withdrawal and shear.
 - A Texas licensed professional engineer must sign, seal, and date the analysis.
- 3.4 TDI will list door products tested as individual doors as individual doors. Door products tested as mulled assemblies will be listed in the TDI evaluation as mulled assemblies. If requesting a mulled assembly listing for a product tested as an individual product, then either test the product as a mulled assembly or submit a mullion analysis. All testing must comply with Section 4.0 of this document or AAMA 450-00. If submitting a mullion analysis, then the mullion analysis must include the following:
 - Conduct the analysis in accordance with Section R613.9 of the 2006 IRC.
 - The analysis must specify how the mullion is secured to the wall framing (include the fastener type, size, spacing, quantity and penetration distance into the wall framing. Also, specify the species required for the wall framing).
 - The analysis must specify how the doorframes are secured to the mullion (include the fastener type, size, location, and spacing).
 - A Texas licensed professional engineer must sign, seal, and date the analysis.
- 3.5 The evaluation report will specify the hardware used during the testing of the door.

4.0 Testing and Test Report Minimum Information Requirements

- 4.1 Testing facilities that develop test reports must 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 International Code Council Evaluation Service (ICC-ES) as specified in ICC-ES Acceptance Criteria AC85 must recognize the test facility;
 - 4.1.3 Either AAMA or WDMA must accredit the test facility;
 - 4.1.4 Miami-Dade County, Florida must recognize the test facility; or

4.1.5 TDI must accept the test facility. 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 The tested door products must bear a label indicating compliance with AAMA/WDMA/CSA 101/I.S.2/A440 as specified in Section R613.4 of the 2006 IRC and Section 1714.5.1 of the IBC. EXCEPTION: Test hinged doors in accordance with ASTM E 330. Such doors are not required to bear a label from an inspection agency. However, TDI will require the door to bear a label, which the product manufacturer may produce. The label shall include: the name of the product, the name of the product manufacturer; the design pressure rating for the door; the tested dimensions of the door; and compliance with ASTM E 330.
- 4.3 If requesting to list a door product as windborne debris resistant, then in addition to complying with Section 4.2 of this document, the door product must also be tested in accordance with ASTM E 1886 and ASTM E 1996 or in accordance with AAMA 506. It must 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. EXCEPTION: Test hinged doors in accordance with Dade County, Florida protocols TAS-201 and TAS-203. Such doors are not required to bear a label from an inspection agency. However, TDI will require the door bear a label, which the product manufacturer may produce. In addition to the requirements specified in Section 4.2, the label shall include: "Impact Resistant"; and the missile level.
- 4.4 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 (such as panel or slab sizes)
 - Size of the fixed daylight opening in the panels or slabs.
 - Description of the tested assembly.
 - Frame construction, including corner construction.
 - Mullion construction.
 - Sill (threshold) construction
 - Glass construction and glazing method.
 - Hardware description (hinges, lock assemblies, flush bolts, dead bolts, strike plates, roller assemblies, handles), quantity, method of attachment (fastener type, size, quantity), and locations
 - Reinforcement requirements (material, dimensions, and location in the assembly)

- The species of the lumber used for the test buck (the lumber that the door 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.
- 4.5 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 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 report in accordance with AAMA/WDMA/CSA 101/I.S.2/A440 or ASTM E 330 (hinged doors only)
- 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 or TAS-201 and TAS-203 (hinged doors only). Note: Information 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 or with the TAS-201 and TAS-203 test reports.
- Copy of the label that will be applied to the door product. The label shall be in accordance with Section R613.4 of the 2006 IRC or Section 1714.5.1 of the 2006 IBC. The label shall be from an inspection agency (AAMA, WDMA, NAMI, or Keystone). NOTE: For windborne debris products, the label shall also indicate compliance with either AAMA 506 or ASTM E 1886 and ASTM E 19896 and specify missile level. EXCEPTION: For hinged doors, refer to Sections 4.2 and 4.3 of this document.
- 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 Products Certified Through an Inspection agency (AAMA, WDMA, NAMI, or Keystone)

- Certification of the product by the inspection agency must be current.
- 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.
- TDI reserves the right to request verification from the product manufacturer that the product specified in the test report has not changed.
- If the test report's expiration date indicates the report is expired, then revise the test report to either remove the expiration date, change the expiration date, or add a record retention date.

- If the test report indicates an expiration date within six months, then TDI reserves the right to request a revised test report to either remove the expiration date, change the expiration date, or add a record retention date.
 - 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.
 - 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.
 - The evaluation report will expire four (4) 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.
 - TDI bases the expiration date for the evaluation report on the date the product was tested as indicated in the test report.
 - The evaluation report will indicate the month and year of the expiration date.
- 6.2 Products Not Certified Through an Inspection agency (An Option That Applies to Hinged Doors Only)
- 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.
 - TDI reserves the right to request verification from the product manufacturer that the product specified in the test report has not changed.
 - 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.
 - 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.
 - For an initial product evaluation, if the test report does not indicate an expiration date or if it specifies a record retention date, then 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.
 - 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.
 - The evaluation report will expire four years from the effective date of the evaluation.
 - TDI bases the expiration date for the evaluation report on the date the product was tested as indicated in the test report.
 - The evaluation report will indicate the month and year of the expiration date.