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Submittal Requirements for Product Evaluation Exterior Coverings

The information and product requirements requested below will be used by the Texas Department of Insurance (TDI) to develop a product evaluation report for use in the designated catastrophe areas along the Texas Gulf Coast.

1.0 Building Code Requirements for Products

- 1.1 Products will be evaluated by TDI in accordance with the wind load criteria of Chapter 3 of the 2018 International Residential Code (IRC); the wind load criteria of Chapter 16 of the 2018 International Building Code (IBC); test standards and performance criteria specified in the IRC and the IBC; and nationally recognized test standards or procedures.
- 1.2 **Basic Design Wind Speed Requirements**: The basic windspeed requirements for the windstorm program area are as defined in the IRC and the IBC. Contact TDI for more information regarding the basic wind speed requirements.
- 1.3 **Design Pressure Requirements:** Refer to Chapter 3 of the IRC or to ASCE 7-16 for design wind pressure requirements based on the basic wind speeds that are required for the TDI windstorm program area. The manufacturer should consider that different Exposure conditions can occur for all structures that are located within the TDI windstorm program area. Contact TDI for more information regarding design pressure requirements.

2.0 Product Applicability and Limitations of Evaluation Report

- 2.1 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 report) must exceed the required design pressure required for the specific structure.
- 2.2 TDI will develop the product evaluation report based on the way the product was tested. This includes the attachment of the product to the substrate. **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. Note: Minimum 7/16" OSB or 15/32" plywood is recommended for products that are secured to wood structural panels.
- 2.3 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.

3.0 Testing and Test Reports

- 4.1 **Testing Facility**: Test reports must be developed by testing facilities that comply with one of the following:
 - 3.1.1 The test facility must be either UL (Underwriters Laboratories) or FM (Factory Mutual);

- 3.1.2 The test facility must be recognized by the International Code Council Evaluation Service (ICC-ES) as specified in ICC-ES Acceptance Criteria AC85;
- 3.1.3 The test facility must be recognized by Miami-Dade County, Florida; or
- 3.1.4 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 3.1.1 through 3.1.4. 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 3.1.1 through 3.1.4.

3.2 **Masonry and Stone Veneer Siding**: Proprietary masonry and stone veneer siding products shall be tested in accordance with ASTM E 330.

Exception: Conventional masonry and stone veneer is not required to be tested. Attachment of the ties to the wall substrate (tie spacing and fastener requirements) shall be designed to resist the required wind loads.

- 3.3 **Exterior Insulation and Finish System**: Exterior insulation and finish systems shall be tested in accordance with ASTM E 330.
- 3.4 **Vinyl Siding**: Vinyl siding shall be tested in accordance with ASTM D 5206. Allowable design pressures shall be determined in accordance with Annex A1 of ASTM D 3679.

The vinyl siding must be tested as it will be installed in the field, with fasteners penetrating into either wall sheathing (OSB or plywood) or into wall studs. If the fasteners penetrate into the wall studs, then the wall stud spacing will be specified in the evaluation report.

Soffits: Vinyl soffits shall be tested in accordance with ASTM D 5206. Allowable design pressures shall be determined in accordance with Annex A1 of ASTM D 3679.

3.5 **Polypropylene Siding**: Polypropylene siding shall be tested in accordance with ASTM D 7254 and ASTM D 5206. Allowable design pressures shall be determined in accordance with Annex A1 of ASTM D 7254.

The polypropylene siding must be tested as it will be installed in the field, with fasteners penetrating into either wall sheathing (OSB or plywood) or into wall studs. If the fasteners penetrate into the wall studs, then the wall stud spacing will be specified in the evaluation report.

3.6 **Fiber Cement Siding:**

3.6.1 **Horizontal Lap Siding:** Lap siding shall be tested in accordance with ASTM E 330.

3.6.2 **Panel Siding:** Panel siding shall be tested in accordance with ASTM E 330.

3.7 Lap and Panel Siding:

- 3.7.1 Lap Siding: Lap siding shall be tested in accordance with ASTM E 330.
- 3.7.2 **Panel Siding:** Panel siding shall be tested in accordance with ASTM E 330. Panel siding used for lateral load resistance shall also be tested in accordance with ASTM E 72.
- 3.8 **Stucco and Synthetic Stucco**: Proprietary stucco products shall be tested in accordance with ASTM E 330.

Exception: Conventional stucco is not required to be tested. Attachment of the metal lath to the wall substrate (fastener type, size, and spacing) shall be designed to resist the required wind loads.

- 3.9 **Formed Metal Panels**: Formed metal panels shall be tested in accordance with either UL 1897, UL 580, ASTM E 1592, or FM 4474.
- 3.10 Formed Shingles, Shakes, Slate, or Tiles (Metal or Polymer): Formed shingles, shakes, slate, or tiles shall be tested in accordance with either UL 1897, UL 580, FM 4474, ASTM E 330, or ASTM E 1592.
- 3.11 **Wood Shakes and Shingles**: Wood shakes and shingles shall be tested in accordance with either UL 1897, UL 580, FM 4470, or ASTM E 330.

3.12 Metal Composite Materials (MCM):

- 3.12.1 Aluminum Composite Materials (ACM): Aluminum Composite Materials shall be tested in accordance with UL 1897, UL 580, FM 4474, ASTM E 330, or ASTM E 1592.
- 3.12.2 **Insulated Metal Panels (IMP):** Insulated Metal Panels shall be tested in accordance with UL 1897, UL 580, FM 4474, ASTM E 330, or ASTM E 1592.
- 3.13 Safety Factor: TDI will apply an appropriate safety factor to the test loads specified in the test reports.

4.0 Substantiating Information

The following information must be included as part of the submittal package for each product to be listed:

- 4.1 **Cover Letter.** Cover letter as described in Section 1.0.
- 4.2 **Test Reports.** Copies of test reports in accordance with Section 4.0.
- 4.3 Lab Stamped Drawings. Copies that reference the test report number.
- 4.4 **Installation Instructions.** Provide one copy.
- 4.5 **Optional:** Provide an electronic WORD version of a draft TDI product evaluation report.
- 4.6 **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. It is not a requirement that the drawings be sealed by an engineer. Drawings will be included in the evaluation to provide guidance and to clarify the use of the product in the field. Provide one copy.

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TDI may use the electronic copy to post the drawings on the TDI Windstorm Inspection Program Product Evaluation Index website.

5.0 Expiration and Renewal of Product Evaluation Reports

- 5.1 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.
- 5.2 TDI reserves the right to request verification from the product manufacturer that the product specified in the test report has not changed.
- 5.3 If the test report indicates an expiration date and the test report is expired, then the test report shall be revised to either (1) remove the expiration date, (2) change the expiration date, or (3) add a record retention date.
- 5.4 If the test report indicates an expiration date and the test report is within six months of expiring, then TDI reserves the right to request that the test report be revised to either (1) remove the expiration date, (2) change the expiration date, or (3) add a record retention date.
- 5.5 For an initial product evaluation, if the test report does not indicate an expiration date or if it specifies a record retention date, then 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.
- 5.6 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 TDI may continue to utilize the test report if no changes have occurred in the product.
- 5.7 The evaluation report will be subject to re-evaluation a maximum of four years from the effective date of the evaluation report. The re-evaluation date in the evaluation report could be less than four years from the effective date of the evaluation report if the test report has an expiration date that is less than four years from the effective date of the evaluation report.
- 5.8 The evaluation report will indicate the month and year of the re-evaluation date.