## TEXAS DEPARTMENT OF INSURANCE

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### Proposed Change to Windstorm Building Requirements or Procedures in the Texas Windstorm Insurance Association Plan of Operation

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#### Please complete the following for <u>each</u> proposed change: (<u>A separate form must be submitted for each proposed change.</u>)

1. Proposed change to the following building requirement or procedure:

Refer to attached pages.

#### 2. Proposed change is to:

Document: 2006 International Building Code
Section: <u>2405.5</u>
Table
Figure
Appendix

#### 3. Please use the following format to present the proposed change:

LINE THROUGH LANGUAGE TO BE DELETED UNDERLINE NEW LANGUAGE TO BE ADDED

4. Proposed Change. Please specify change. Attach additional sheets if needed.

Refer to attached pages.

5. Reason for Change. Please state purpose and reason for change. Attach additional sheets if needed.

Refer to attached pages.

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6. Attach supporting written or printed information, including, but not limited to, test data, structural calculations, and/or documentation that the proposed change complies with the minimum wind load criteria and design standards specified in the building requirements adopted by the Texas Department of Insurance. Attach supporting written or printed information relating to the proposed changes to the building requirements or procedures contained in the Texas Windstorm Insurance Association Plan of Operation.

Pursuant to Article 21.49, §6C of the Insurance Code, this proposal form must be complete and submitted to the address specified above not later than the 30<sup>th</sup> day before the date of a scheduled advisory committee meeting for the proposal to be considered at that meeting.

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#### Proposal:

**2405.6 Other skylight assemblies.** Skylight assemblies not included within the scope of Section 2405.5 shall be tested in accordance with ASTM E 330.

**2405.7 Windborne Debris Protection.** Protection of skylights in buildings located in wind-borne debris regions shall be in accordance with Section 1609.1.2.

**2405.7.1 Testing and Labeling.** Skylights shall be tested by an approved independent laboratory, listed by an approved entity, and bear a label identifying manufacturer, performance characteristics, and approved inspection agency to indicate compliance with the requirements of the following specification:

1.ASTM E 1886 and ASTM E 1996, or

<u>2.AAMA 506</u>.

Skylights qualified in this section shall also meet the requirements of 2405.5 or 2405.6.

#### Reason for Texas Revision:

The purpose of the proposed code change is to provide better guidance in the code for skylights. The reasons for these proposed changes are as follows:

- Section 2405.5 of the 2005 IBC does not provide acceptability criteria regarding the testing and performance
  of certain skylight assemblies (examples include sun tunnels, tubular skylights or tubular day-lighting
  devises). These small skylights are popular yet they are not addressed by the IBC because they do not
  meet the minimum gateway test specimen sizes of AAMA/WDMA/CSA 101/I.S.2/A440. The proposed
  changes will clarify the code by providing an "other skylight assemblies section" (Section 2405.6) which
  clarifies testing and performance requirements for these type skylights.
- Section 2405.5 of the 2006 IBC does not address the need to protect skylights from windborne debris impact. The proposed changes clarify the code by providing a windborne debris section (Section 2405.7) which requires that skylights be protected from windborne debris. This added section will include a testing and labeling subsection (Section 2405.7.1) which specifies testing and labeling requirements for impactresistant skylights.
- The 2006 IBC requires revision because the skylight wind performance criteria and the testing and labeling requirements of Section 2405.5 are lacking specific, defined information. Skylight manufactures have difficulty interpreting codes and assessing the performance requirements and testing criteria for their products. Many skylight manufactures have, unfortunately, elected to forgo testing and labeling their products as required by the IBC. Unfortunately, the TDI is not able to develop evaluation reports for these products. Clarifying the code will help manufacturers understand the testing, labeling, and performance criteria and will enable more manufacturers to submit skylight product performance information to the TDI which meet the building code specifications. Consumers will benefit from having a greater selection of code-compliant skylight products.

The proposed changes can be substantiated based on the following logic:

Skylights are fenestration assemblies just as windows are fenestration assemblies. Skylights and windows contain similar parts and components. Skylights are subjected to similar adverse environmental conditions as windows. Skylights and windows should, therefore, be governed by similar building code requirements. These proposed changes incorporate sections which were taken from Section R613.3 of the 2006 IRC regarding "Exterior Windows and Glass Doors". The IRC provides clear and specific detailed requirements pertaining to the wind-resistance of windows. The IBC, should, likewise, provide similar clear and specific detailed requirements pertaining to the wind-resistance of skylights.

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