2003 Texas Revisions
to the 2003 International Residential Code

Chapter 3
Building Planning

Revise Section R301.2.1.2 to read as follows:

R301.2.1.2 ~~Internal pressure~~**Protection of openings.** For structures located in the Inland II area as adopted by the Texas Department of Insurance, protection of exterior openings from windborne debris is not required. For structures located in the Inland I area, as adopted by the Texas Department of Insurance, ~~Windows in~~ buildings ~~located in windborne debris regions~~ shall have glazed exterior openings protected from windborne debris ~~or the building shall be designed as a partially enclosed building in accordance with the *International Building Code*~~. For structures located in the Seaward area as adopted by the Texas Department of Insurance, buildings shall have all exterior openings protected from windborne debris. Exterior openings shall include exterior windows, exterior doors, garage doors and skylights. ~~Glazed~~ Exterior opening protection for windborne debris shall meet the requirements of the large missile test using either an approved impact-resisting standard or ~~of~~ ASTM E 1996 and of ASTM E 1886 referenced therein and shall be installed in accordance with the manufacturer's approved installation instructions for the manner in which they were tested for uniform static wind pressure resistance and for windborne debris resistance. Removable windborne debris protection shall have installation instructions provided.

Exceptions:

1. For structures located in the Inland I area, ~~W~~wood structural panels with a minimum thickness of 7/16 inch (11.1 mm) and a maximum span of 8 feet (2438 mm) shall be permitted for opening protection in one-and two-story buildings. Panels shall be precut so that they can be attached to the buildings framing surrounding the opening containing the product with the glazed opening. Panels shall be installed on the exterior side of the building. Panels shall be labeled or marked to identify the proper installation location on the building. Panels shall be secured ~~to cover the glazed openings~~ with the attachment hardware provided. Installation instructions shall be provided. Attachments shall be provided in accordance with Table R301.2.1.2 or shall be designed to resist the components and cladding loads determined in accordance with either Table R301.2(2), adjusted for height and exposure per Table R301.2(3), or the provisions of the *International Building Code*. If attachments are determined using components and cladding loads, then the following limitations shall apply:

   a) Panel span and fastener spacing shall be in accordance with Table R301.2.1.2.
   b) Attachment hardware shall comply with the footnotes of Table R301.2.1.2.
   c) Attachment hardware shall be secured to the wall framing only (wood or steel wall framing, concrete, or masonry block). Attachment hardware shall not be secured to exterior coverings or brick veneer unless the entire assembly is tested in accordance with R301.2.1.2.

TABLE R301.2.1.2
WINDBORNE DEBRIS PROTECTION FASTENING SCHEDULE
FOR WOOD STRUCTURAL PANELS USED IN THE INLAND I AREA[a,b,c,~~d~~]

FASTENER TYPE	FASTENER SPACING		
	Panel span ≤ 4 foot	**4 foot < panel span ≤ 6 foot**	**6 foot < panel span ≤ 8 foot**
2-1/2" #6 Wood screws	16”	12”	9”
2-1/2" #8 Wood screws	16”	16”	12”

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 0.454 kg, 1 mile per hour = 1.609 km/h.

a. This table is based on a maximum wind speed (3 second gust) of 130 mph and a 33-foot mean roof height.
b. Fasteners shall be installed at opposing ends of the wood structural panel. Fasteners shall be located a minimum of 1” from the edge of the panel.
c. Fasteners shall be long enough to penetrate through the exterior wall covering and a minimum of 1 ¼ ” into wood wall framing and a minimum of 1 ¼ ” into concrete block or concrete. Fasteners shall be located a minimum of 2 ½ ” from the edge of the concrete block or concrete.
~~c~~d. Where screws are attached to masonry or masonry/stucco, they shall be attached utilizing vibration-resistant anchors having a minimum ultimate withdrawal capacity of 490 pounds.

2. For structures located in the Seaward area, wood structural panels with a minimum thickness of 15/32 inch (11.9 mm) shall be permitted for exterior opening protection in one- and two-story buildings. Panels shall be precut so that they can be attached to the buildings framing surrounding the opening containing the exterior opening product. Panels shall be installed on the exterior side of the building. Panels shall be labeled or marked to identify proper installation location on the building. Panels shall be secured with the attachment hardware provided. Installation instructions shall be provided. The panels and their attachment to the structure shall meet the requirements of the large missile test using either an approved impact-resisting standard or ASTM E 1996 and ASTM E 1886 referenced therein. The panels shall be installed in accordance with the manner in which they were tested for uniform static wind pressure resistance and for windborne debris resistance.

Add the following new section:

SECTION R324
CORROSION RESISTANCE

R324.1 Corrosion resistance. Metal connectors and fasteners shall be corrosion resistant in accordance with the following:

R324.1.1 Seaward areas.

1. **Open Areas:** Metal connectors and fasteners located in open areas shall be either stainless steel and meet ASTM A167; hot-dip galvanized after fabrication and meet ASTM A123 or ASTM A153; or hot-dip galvanized or galvannealed prior to fabrication and meet ASTM A653. Open areas shall include porches, exterior coverings, roof coverings, and the underside of elevated structures.

2. **Vented or Enclosed Areas:** Metal connectors and fasteners located in vented or enclosed areas may meet the requirements of Item 1 above or shall be hot-dip galvanized or electrogalvanized in accordance with ASTM A641; mechanically deposited zinc coatings in accordance with ASTM B695; or electrodeposited zinc coatings in accordance with ASTM B633. Vented or enclosed areas shall include attics, exterior wall stud cavities, and crawl spaces. **Exception:** One-half inch diameter or greater steel bolts are not required to be corrosion resistant.

3. **Conditioned Areas:** Metal connectors and fasteners located in conditioned areas are not required to be corrosion resistant. Conditioned areas include heated and cooled living areas.

R324.1.2 Inland I and Inland II areas.

1. **Open Areas:** Metal connectors and fasteners located in open areas shall be either stainless steel and meet ASTM A167; hot-dip galvanized after fabrication and meet ASTM A123 or ASTM A153; hot-dip galvanized or galvannealed prior to fabrication and meet ASTM A653; hot-dip galvanized or electrogalvanized in accordance with ASTM A641; mechanically deposited zinc coatings in accordance with ASTM B695; or electrodeposited zinc coatings in accordance with ASTM B633. **Exception:** One-half inch diameter or greater steel bolts are not required to be corrosion resistant. Open areas shall include porches, exterior coverings, roof coverings, and the underside of elevated structures.

2. **Vented or Enclosed Areas:** Metal connectors and fasteners located in vented or enclosed areas may meet the requirements of Item 1 above or shall be epoxy-coated in accordance with ASTM A899. **Exception:** One-half inch diameter or greater steel bolts are not required to be corrosion resistant. Vented or enclosed areas shall include attics, exterior wall stud cavities, and crawl spaces.

3. **Conditioned Areas:** Metal connectors and fasteners located in conditioned areas are not required to be corrosion resistant. Conditioned areas include heated and cooled living areas.

Chapter 6
Wall Construction

Add Section R613.4.1 as follows:

R613.4.1 Fenestration testing and labeling. Fenestration, used as windborne debris protection, 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 specifications:

ASTM E 1886 and ASTM E 1996 or AAMA 506

Revise Section R613.6.1 to read as follows:

R613.6.1 Mullions. Mullions shall be tested by an approved testing laboratory in accordance with AAMA 450 or be engineered in accordance with accepted engineering practice~~. Both methods shall use~~ to the performance criteria cited in Sections R613.6.2, R613.6.3 and R613.6.4.

(Remainder of section unchanged)

Chapter 43
Referenced Standards

Add the following standards:

AAMA

AAMA American Architectural Manufacturing Association
1827 Walden Office Square, Suite 550
Schaumburg, IL 60173

Standard Reference Number	Title	Referenced in code section number
450 – 00	Voluntary Performance Rating Method for Mulled Fenestration Assemblies	R613.6.1
506-00	Voluntary Specifications for Hurricane Impact and Cycle Testing of Fenestration Products	R613.4.1

ASTM

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428

Standard Reference Number	Title	Referenced in code section number
A 123/A 123M – 97e1	Specification for Zinc (Hot-Dip Galvanized) Coating on Iron and Steel Products	R324
A 899-91(1999)	Specification for Steel Wire Epoxy - Coated	R324
B 695-00	Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel	R324