

**Commenter's Reason:** This proposal is consistent with ongoing discussions at AISC to modify AISC 341 in recognition that ordinary moment frames have minimal inelastic straining. Therefore, only demand critical welds are of concern with regard to potential flaws in complete joint penetration groove welds. The first exception was accepted by the ICC Structural Committee as a modification by the proponent. The added exception is the modification requested by this public comment to make IBC 2009 consistent with what has been proposed to AISC 341 update process. But, because IBC-09 will reference the older edition of AISC 341 (2005), this exception needs to be added here as well. This is intended to be a temporary solution until AISC 341-10 is completed and adopted by the IBC.

Final Action: AS AM AMPC\_\_\_\_ D

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## S141-07/08, Part I 1714.5

### *Proposed Change as Submitted:*

**Proponent:** John Woestman, The Kellen Company, representing Window and Door Manufacturers Association

### **PART I – IBC STRUCTURAL**

#### **Revise as follows:**

**1714.5 Exterior window and door assemblies.** The design pressure performance rating of exterior windows and doors in buildings shall be determined in accordance with Section 1714.5.1 or 1714.5.2.

**Exception:** Structural wind load design pressures for exterior window and door units smaller than the size tested in accordance with Section 1714.5.1 or 1714.5.2 shall be permitted to be higher than the design value of the tested unit provided such higher pressures are determined by accepted engineering analysis. All components of the small unit shall be the same as the tested unit. Where such calculated design pressures are used, they shall be validated by an additional test of the window unit having the highest allowable design pressure.

**1714.5.1 Exterior windows and doors.** Exterior windows, ~~and sliding doors, and side-hinged doors~~ shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440. The label shall state the name of the manufacturer, the approved labeling agency and the product designation as specified in AAMA/WDMA/CSA101/I.S.2/A440. ~~Exterior side-hinged doors shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440 or comply with Section 1714.5.2.~~ Products tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 shall not be subject to the requirements of Sections 2403.2 and 2403.3.

**1714.5.2 (Supp) Exterior windows and door assemblies not provided for in Section 1714.5.1.** Exterior window and door assemblies shall be tested in accordance with ASTM E 330. Structural performance of garage doors shall be determined in accordance with either ASTM E 330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108. Exterior window and door assemblies containing glass shall comply with Section 2403. The design pressure for testing shall be calculated in accordance with Chapter 16. Each assembly shall be tested for a minimum of 10 seconds at a load equal to 1.5 times the design pressure.

(IBC) This proposal adds testing and labeling requirements for side-hinged door assemblies that are included within the scope of AAMA/WDMA/CSA 101/I.S.2/A440. Starting with the 2000 IBC (and IRC), exterior windows and exterior sliding doors have been required to be tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 (or to the 1997 or 2002 versions of this standard) requiring window and sliding door assemblies to meet air infiltration, water infiltration, structural, operational, and forced entry performance requirements. This proposal adds side-hinged doors to the list of exterior fenestration products which will be required to meet air infiltration, water infiltration, operational, and forced entry performance requirements in addition to structural performance requirements currently required by the IBC and IRC.

It is important to note that the following products are not within the scope of AAMA/WDMA/CSA 101/I.S.2/A440, as listed in this industry consensus standard, and would not be affected by this proposal: curtain wall and storefront, storm doors, commercial entrance systems, revolving doors, site-built door systems, and commercial steel doors.

This proposal clarifies in the IBC that exterior window and door performance is not just design pressure. This clarification is important as exterior fenestration assemblies tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 are required by this industry consensus standard to meet numerous performance requirements in addition to design pressure performance.

There are several editorial changes which clarify the code.

This proposal will increase complexity and cost of manufacturing side-hinged door assemblies because it requires side-hinged door assemblies to be tested, and labeled, to performance requirements previously not required.

**Cost Impact:** The code change proposal will increase the cost of construction.

## **PART I – IBC STRUCTURAL**

### **Committee Action:**

**Disapproved**

**Committee Reason:** The committee's disapproval was based on the proponent's request.

### **Assembly Action:**

**None**

### *Individual Consideration Agenda*

**This item is on the agenda for individual consideration because public comments were submitted for Part I.**

#### *Public Comment 1:*

**Michael D. Fischer, The Kellen Company, representing The Window and Door Manufacturers Association (WDMA), requests Approval as Submitted for Part I.**

**Commenter's Reason:** The Window and Door Manufacturers Association (WDMA) recommends "Approval as Submitted."

All exterior components in a structure face the same exposure to weather. This proposal is a logical extension to apply the same requirements to side-hinged doors (within the scope of 101/I.S.2/A440) that are currently applied to windows and sliding doors. It is inconsistent for the code to require side-hinged door installation and flashing to prevent water infiltration while the door itself is exempted from any water testing requirements. Expanding the requirements for testing and labeling to 101/I.S.2/A440 to side-hinged doors addresses this inconsistency in the code.

#### *Public Comment 2:*

**The following list of individuals request Disapproval for Part I.**

**Commenters' Reason:** Standard does not reflect industry consensus on proper protocols for testing of exterior side hinged doors. According to ICC code development guidelines a need must exist, in this case no factual data or analysis has been presented to support S141's intentions.

**Commenter's Reason: (Blosser)** As a pre-hanger of side hinged door units this S141 would be cost prohibitive as it is currently proposed. The monumental testing costs plus capital and man power resources would render an operation such as ours as a non-feasible entity. Also the end consumer would have to ultimately pay for the additional costs which in my mind do nothing for the added value or performance of the end product. Simply put, S141 as written would create unnecessary regulation for pre-hangers, a virtual windfall for the testing agency, added cost to the consumer with little or no value added.

A more reasonable approach would be to have component manufacturers test their products, which many already do, and issue an umbrella authorization for their customers such as Bailey Millwork and establish a governing audit body by a testing lab to verify that tested products supplied by the manufacturer are being used in accordance with the manufacturer's specification. This approach allows testing costs to be spread over millions of tested components by manufacturers thus lessening the impact on pre-hangers and giving the end user an added value product at an affordable price. It should be noted that several vinyl window extruders are allowed a similar format in meeting or exceeding all national and international thermal, water, structural impact testing requirements.

**Commenter's Reason: (Lamont)** This is not needed and is harmful to trade and places undue burden on smaller businesses.

**Commenter's Reason: (Pixley)** The majority of pre-hung doors used in our market are built by pre-hangers similar to us. Like most pre-hangers, we source our components from multiple providers. Testing and certification of the thousands of combinations of door types (wood, steel, fiberglass), frame components (sills, weatherstripping, mulls, astragals), swing direction (outswing, inswing), door heights, door widths, configurations (single, side-hinged double, center-hinged doubles, transoms, with sidelights one or both sides), and glass inserts types will be astronomical and unaffordable.

The housing industry already is dealing with highly depressed market opportunities and the cost to comply with the proposed testing requirements simply will make things worse for those of us who create jobs and contribute positively to our nation's economy.

**Commenter's Reason: (Georgia Smith/Carolyn Stewart)** As stated by the committee in Palm Springs.

**William Bauman, Merrill Millwork, Inc., Merrill, WI**  
**Joseph Bayer, President & CEO, Bayer Built Woodwork, Inc.**  
**Tarry Beasley, Welsh Forest Products**  
**Don Bell, Southwest Moulding Company**  
**Jay M. Bjorndahl, Capitol Hardware, Inc.**  
**Dennis H. Blosser, Bailey Millwork & Specialty Products**  
**Chris Bougie, Scherer Bros. Lumber Company Millwork Solutions**  
**James W. Bounds, Delmarva Millwork Corporation**  
**Michael Brannon, Stock Building Supply**  
**Ray Breedlove, Dealers Choice Millwork**  
**Nathan Brown, Scherer Bros. Lumber Company Millwork Solutions**  
**Kevin R. Bulow, Taylor Building Products, Inc.**

**J. Terry Bumgarner, King Sash & Door**  
**Matt Carl, Badger Corrugating**  
**Ed Chase, Smittys Millwork & Supply**  
**Marshall D. Christie, Christie's Wood and Glass**  
**Mark DeVol, Andersonville, TN, representing himself**  
**Kolby Dickover, Hass Wholesale Westfield LLC, representing Hass Wholesale Millwork, Inc.**  
**Glen Doke, McFarland Door Manufacturing Company, Inc.**  
**Bryan Duncan, Alpine Millwork Company**  
**Arthur M. Felder, Jr., Free Millwork Company, Inc.**  
**Mark Fortun, Endura Products, Inc.**  
**John D. Francis, Francis Schulze Company**  
**Barry V. French, Acadian Millwork & Supply Company, Inc.**  
**Don Hall, Don Hall & Associates, representing AMD**  
**Jack Harbaugh, Foremost Industries, Inc.**  
**James Hoxsie, Millwork Products, Inc.**  
**Jeff Johnson, Western Pacific**  
**Kevin P. Kavanagh, RSI, Inc.**  
**Chris Kelly, Tague Lumber of Phoenixville**  
**John Kerr, Kerr Millwork**  
**Brad King, Pacific Pine Products**  
**Noah Lamont, Lamont Glass, Window & Door**  
**Kirby Letham, McFarland Door Manufacturing Company, Inc.**  
**Richard Lowenthal, Lowenthal Sales Company**  
**Angelo M. Marasco, ODL, Inc.**  
**Lorn Marcellini, A Better Door,**  
**Greg McAllister, Polaris Technologies**  
**Peter McIlwee, J.J. McIlwee DBA McIlwee Millwork Company**  
**Anthony Mehlbauer, Young Manufacturing Company, Inc.**  
**Keith M. Milliken, Milliken Millwork, Inc.**  
**Allen M. Nash, Sellersville, PA, representing himself**  
**Bruce Norlie, Norfield Industries**  
**Paul Pixley, Pixley Lumber Company, representing himself**  
**Michael Pontremole, Fort Worth Sash and Door, representing AMD**  
**Frank Racanelli, Medieval Glass Industries Iowa, Inc.**  
**Tom Ringelberg, Quantum Sales and Marketing, representing Association of Millwork Distributors**  
**Chris Roberson, Mid-Atlantic Millwork Sales, representing ODC**  
**Daniel C. Rotchadl, Neubert Millwork Company**  
**William Sarbaugh, River City Millwork**  
**Randy Scarborough, Georgia Window Company**  
**Judith M. Schell, Kimal Lumber Company, Window & Door Division**  
**William Schmidt, Healdsburg Door & Sash**  
**Jay Schrock, Woodwork Manufacturing Supply**  
**Gary Smith, Coastal Door and Window**  
**Georgia Smith, American Pre-Hung Door Association**  
**Mark Sorenson, representing Scherer Brothers Lumber Company**  
**Dave Stammen, Stock Building Supply**  
**Sean Stevens, M&M Lumber Company**  
**William G. Stevens, Trimpac, Inc., representing Millwork Distribution Organizations**  
**Byron Stevenson, Dunn Lumber Company, Custom Door Shop**  
**Carolyn Stewart, Tree Court Builders Supply, Inc.**  
**Jim Stokes, Scherer Brothers Lumber Company Millwork Solutions**  
**O. Frank Storch, Summit Construction, Inc.**  
**Julie A. Sutton, Kimal Lumber Company, Window & Door Division**  
**Vincent J. Tague, Jr., Tague Lumber, Inc.**  
**Jeff VanWinkle, Dunagan Door Factory**  
**Steve Wagman, J.B. Wagman Sales, Inc.**  
**Lanie Wall, Jobbers, Inc.**  
**Paul Weller, Bayerbuilt Woodworks, representing Association of Millwork Distributors**  
**Kent C. Williams, Arrow Industries, Inc.**

Final Action:      AS            AM            AMPC\_\_\_\_\_      D

# S141-07/08, Part II

## IRC R613.4

### *Proposed Change as Submitted:*

**Proponent:** John Woestman, The Kellen Company, representing Window and Door Manufacturers Association

### **PART II – IRC B/E**

#### **Revise as follows:**

**R613.4 Testing and labeling.** Exterior windows, ~~and sliding doors, and side-hinged doors~~ shall be tested by an approved independent laboratory, and bear a label identifying manufacturer, performance characteristics and approved inspection agency to indicate compliance with AAMA/WDMA/CSA 101/I.S.2/A440. Exterior side-hinged doors shall be tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 ~~or comply with Section R613.6.~~ The label shall state the name of the manufacturer, the approved labeling agency and the product designation as specified in AAMA/WDMA/CSA 101/I.S.2/A440.

**Exception:** Decorative glazed openings.

**Reason: (IRC)** This proposal adds testing and labeling requirements for side-hinged door assemblies that are included within the scope of AAMA/WDMA/CSA 101/I.S.2/A440. Starting with the 2000 IRC (and IBC), exterior windows and exterior sliding doors have been required to be tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 (or to the 1997 or 2002 versions of this standard) requiring window and sliding door assemblies to meet air infiltration, water infiltration, structural, operational, and forced entry performance requirements. This proposal adds side-hinged doors to the list of exterior fenestration products which will be required to meet air infiltration, water infiltration, operational, and forced entry performance requirements in addition to structural performance requirements currently required by the IBC and IRC.

This proposal also revises the language describing labeling requirements in IRC Section R613.4 to be consistent with the IBC.

It is important to note that storm doors and site-built door systems are not within the scope of AAMA/WDMA/CSA 101/I.S.2/A440, as listed in this industry consensus standard, and would not be affected by this proposal.

This proposal will increase complexity and cost of manufacturing side-hinged door assemblies because it requires side-hinged door assemblies to be tested, and labeled, to performance requirements previously not required.

**Cost Impact:** The code change proposal will increase the cost of construction.

### **PART II – IRC B/E**

#### **Committee Action:**

**Disapproved**

**Committee Reason:** This proposal would create a hardship on the side-hinge door industry. This is an onerous requirement for an unproven need. There is no evidence that this is a big water intrusion problem. This proposal goes too far in trying to solve the inconsistency between flashing and water intrusion. The proponent should work with the door industry and bring this back.

#### **Assembly Action:**

**None**

### *Individual Consideration Agenda*

**This item is on the agenda for individual consideration because public comments were submitted for Part II.**

#### *Public Comment 1:*

**Michael D. Fischer, The Kellen Company, representing The Window and Door Manufacturers Association (WDMA), requests Approval as Submitted for Part II.**

**Commenter's Reason:** The Window and Door Manufacturers Association (WDMA) recommends "Approval as Submitted."

All exterior components in a structure face the same exposure to weather. This proposal is a logical extension to apply the same requirements to side-hinged doors (within the scope of 101/I.S.2/A440) that are currently applied to windows and sliding doors. It is inconsistent for the code to require side-hinged door installation and flashing to prevent water infiltration while the door itself is exempted from any water testing requirements. Expanding the requirements for testing and labeling to 101/I.S.2/A440 to side-hinged doors addresses this inconsistency in the code.

#### *Public Comment 2:*

**The following list of individuals request Disapproval for Part II.**

**Commenters' Reason:** Standard does not reflect industry consensus on proper protocols for testing of exterior side hinged doors. According to ICC code development guidelines a need must exist, in this case no factual data or analysis has been presented to support S141's intentions.

**Commenter's Reason:** (Blosser) As a pre-hanger of side hinged door units this S141 would be cost prohibitive as it is currently proposed. The monumental testing costs plus capital and man power resources would render an operation such as ours as a non-feasible entity. Also the end consumer would have to ultimately pay for the additional costs which in my mind do nothing for the added value or performance of the end product. Simply put, S141 as written would create unnecessary regulation for pre-hangers, a virtual windfall for the testing agency, added cost to the consumer with little or no value added.

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 Lanie Wall, Jobbers, Inc.  
 Paul Weller, Bayerbuilt Woodworks, representing Association of Millwork Distributors  
 Kent C. Williams, Arrow Industries, Inc.

Final Action: AS AM AMPC\_\_\_ D

## S142-07/08

### 1714.5.1

#### *Proposed Change as Submitted:*

**Proponent:** William E. Koffel, PE, Koffel Associates, Inc., representing Glazing Industry Code Committee

#### **Revise as follows:**

**1714.5.1 Exterior windows and doors.** Exterior windows and sliding doors shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440. The label shall state the name of the manufacturer, the approved labeling agency and the product designation as specified in AAMA/WDMA/CSA101/I.S.2/A440. Exterior side-hinged doors shall be tested and labeled as conforming to AAMA/WDMA/CSA101/I.S.2/A440 or comply with Section 1714.5.2. ~~Products tested and labeled as conforming to AAMA/WDMA/CSA 101/I.S.2/A440 shall not be subject to the requirements of Sections 2403.2 and 2403.3.~~

**Reason:** The purpose of this proposal is to remove the exemption that fenestration products labeled to AAMA/WDMA/CSA 101/I.S.2/A440 do not have to meet the requirements of sections 2403.2 and 2403.3, which ensure safe performance through proper support of glass. Specifically, section 2403.3 requires that the deflection of framing members supporting glass may not exceed 1/175 of the glass edge length (or ¼ inch, whichever is less) when subjected to the design load. Chapter 24 of the IBC relies on glass design curves that are contained in ASTM E 1300. This ASTM standard recognizes the importance of limiting edge deflection of the glass and also recommends a limitation of 1/175 of the glass edge length. Prior to the IBC, the legacy codes required deflection limitations of 1/175 of the span for glass holding members. It was not until the IBC was published that this exemption was allowed.