ANSI/APA PRR 410-2016 (Ballot 2016-1)

**Ballot issue date: 02/23/2016 Ballot closing date: 03/24/2016**

**Ballot Instructions:**

1. All members are required to return the letter ballot. Failure to return 3 consecutive letter ballots will lead to the termination of the membership from this committee.
2. All votes shall be cast by marking the appropriate column of each ballot item.
3. Ballot items marked Negative or Affirmative-with-Comment shall be accompanied by a written explanation and proposed resolution that would address the negative using the comment form at the end of this ballot form.

Exception: A written explanation and proposed resolution is not required for a ballot item to find a negative non-persuasive.

1. Return ballot by e-mail to borjen.yeh@apawood.org. Please attach the completed ballot and comments as a word processor file (e.g., Microsoft Word) to facilitate the collection of comments for committee actions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| Committee Member Name | Signature (not required with e-mail) | Date |

**Ballot** (Aff = affirmative; Aw/C = affirmative with comment; Neg = negative; Abst = abstention)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Description | Aff | Aw/C | Neg | Abst |
| 2016-1-01 | Revise Section 2 |  |  |  |  |
| 2016-1-02 | Revise Table 2 |  |  |  |  |
| 2016-1-03 | Revise Figure 2 |  |  |  |  |
| 2016-1-04 | Revise Section 8.2.2 |  |  |  |  |
| 2016-1-05 | Revise Table A1 |  |  |  |  |
| 2016-1-06 | Revise Table A1A |  |  |  |  |

**Ballot Comment Form for ANSI/APA PRR 410-2016 (Ballot 2016-1)**

Required only for Negative or Affirmative-with-Comment

**Please attach this page to the e-mail ballot return**

|  |  |
| --- | --- |
| Item | Comments |
| 2016-1-01 |  |
| 2016-1-02 |  |
| 2016-1-03 |  |
| 2016-1-04 |  |
| 2016-1-05 |  |
| 2016-1-06 |  |

**Ballot Item 2016-1-01:** Revise Section 2 as proposed

**Rationale:** Update references

**Ballot:**

# **Referenced Documents**

This standard incorporates dated references. These normative references are cited at the appropriate places in the text. Subsequent amendments or revisions to these references apply to this standard only when incorporated into this standard by amendments or revisions.

## **ASTM Standards:**

*D9-12* Standard Terminology Relating to Wood and Wood-Based Products

## *D198-15* Standard Test Methods of Static Tests of Lumber in Structural Sizes

*D1037-12* Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials

*D2395-14e1* Standard Test Methods for Specific Gravity of Wood and Wood-Base Materials

*D2915-10* Sampling and Data-Analysis for Structural Wood and Wood-Based Products

*D3501-05a(2011)* Standard Test Methods for Wood-Based Structural Panels in Compression

*D3737-12* Standard Practice for Establishing Stresses for Structural Glued Laminated Timber (Glulam)

*D4761-13* Standard Test Methods for Mechanical Properties of Lumber and Wood-Based Structural Material

*D5456-14b* Standard Specification for Evaluation of Structural Composite Lumber Products

*D7672-11* Standard Specification for Evaluating Structural Capacities of Rim Board Products and Assemblies

*F1667-15* Standard Specification for Driven Fasteners: Nails, Spikes, and Staples

## **Other Standards:**

*ANSI/AWC NDS-2015* National Design Specification for Wood Construction

*ANSI/AWC SDPWS-2015* Special Design Provisions for Wind and Seismic

*ANSI A190.1-2012* Structural Glued Laminated Timber

*ANSI/ASME Standard B18.2.1-2012* Square and Hex Bolts and Screws (Inch Series)

*APA D510-2012* Panel Design Specification

*APA Y510-1997* Plywood Design Specification

*CSA B111-1974 (R2003)* Wire Nails, Spikes and Staples

*CSA O86-14* Engineering Design in Wood

*CSA O121-08* (R2013) Canadian Douglas Fir Plywood

*CSA O122-06* Structural Glued-Laminated Timber

*CSA O151-09 (R2014)* Canadian Softwood Plywood

*CAN/CSA O325-07 (R2012)* *Construction Sheathing*

*US Product Standard PS 1-09* Structural Plywood

*US Product Standard PS 2-10* Performance Standard for Wood-Based Structural-Use Panels

**Ballot Item 2016-1-02:** Revise Table 2 as proposed

**Rationale:** The concentrated vertical load capacity can be applied to rim board depth of no more than 24 inches.

## **Ballot:**

Table 2. Required Mean Test Values (a) at As-Received Moisture Conditions for Engineered Wood Rim Boards

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rim Board Grade | Performance Category(b) | H(c)(lbf/ft) | V(d)(lbf/ft) | Z(e)(lbf) | P(f)(lbf) |
| Depth (d) Limitation (in.) |
| d ≤ 24 | d ≤ 16 | 16 < d ≤ 24 | d ≤ 24 | d ≤ 24 |
| A | 1-1/4 or higher | 675 | 15,450 | 9,600 | 2,190 | 10,500 |
| B1 | 1-1/4 or higher | 560 | 15,450 | 9,600 | 2,190 | 10,500 |
| B2 | 1-1/8 or higher | 560 | 14,550 | 9,600 | 2,190 | 10,500 |
| C1 | 1-1/8 or higher | 505 | 13,200 | 9,000 | 2,190 | 10,500 |
| C2 | 1 or higher | 505 | 9,900 | 4,950 | 1,875 | 10,500 |

**Ballot Item 2016-1-03:** Revise Figure 2 as proposed

**Rationale:** PRR 410-2011 has been adopted by the 2015 International Building Code and International Residential Code. When the standard was adopted, ICC identified some wording in the standard as non-mandatory. This revision is intended to address this issue.

## **Ballot:**



Change Note (a) to “The dimension shall be permitted to be increased to avoid splitting….”

**Ballot Item 2016-1-04:** Revise Section 8.2.2 as proposed

**Rationale:** PRR 410-2011 has been adopted by the 2015 International Building Code and International Residential Code. When the standard was adopted, ICC identified some wording in the standard as non-mandatory. This revision is intended to address this issue.

## **Ballot:**

8.2.2 Engineered wood rim board quality assurance requirements shall be permitted to be considered satisfied when the requirements for the referenced standards in Section 2 and any additional requirements listed in Section 8.3 are met.

**Ballot Item 2016-1-05:** Revise Table A1 as proposed

**Rationale:** The concentrated vertical load capacity can be applied to rim board depth of no more than 24 inches.

## **Ballot:**

Table A1. **Allowable Design** Values (a) for Engineered Wood Rim Boards

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rim Board Grade | Performance Category(b) | H(c)(lbf/ft) | V(d)(lbf/ft) | Z(e)(lbf) | P(f)(lbf) |
| Depth (d) Limitation (in.) |
| d ≤ 24 | d ≤ 16 | 16 < d ≤ 24 | d ≤ 24 | d ≤ 24 |
| A | 1-1/4 or higher | 240 | 5,150 | 3,200 | 350 | 3,500 |
| B1 | 1-1/4 or higher | 200 | 5,150 | 3,200 | 350 | 3,500 |
| B2 | 1-1/8 or higher | 200 | 4,850 | 3,200 | 350 | 3,500 |
| C1 | 1-1/8 or higher | 180 | 4,400 | 3,000 | 350 | 3,500 |
| C2 | 1 or higher | 180 | 3,300 | 1,650 | 300 | 3,500 |

**Ballot Item 2016-1-06:** Revise Table A1A as proposed

**Rationale:** The concentrated vertical load capacity can be applied to rim board depth of no more than 24 inches. The symbols for factored resistances are updated for consistency with the Canadian Limit States Design. The factored uniform vertical load capacity for C1 grade at less than 16 inches in depth (7,739) contains a typo of 7,339 (i.e., 4,400 x 1.668 = 7,339).

## **Ballot:**

Table A1A. **Limit States Design** Values (a) for Engineered Wood Rim Boards

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rim Board Grade | Performance Category(b) | Hr(c)(lbf/ft) | Vr(d)(lbf/ft) | Zr(e)(lbf) | Pr(f)(lbf) |
| Depth (d) Limitation (in.) |
| d ≤ 24 | d ≤ 16 | 16 < d ≤ 24 | d ≤ 24 | d ≤ 24 |
| A | 1-1/4 or higher | 313 | 8,590 | 5,338 | 584 | 5,838 |
| B1 | 1-1/4 or higher | 261 | 8,590 | 5,338 | 584 | 5,838 |
| B2 | 1-1/8 or higher | 261 | 8,090 | 5,338 | 584 | 5,838 |
| C1 | 1-1/8 or higher | 235 | 7,339 | 5,004 | 584 | 5,838 |
| C2 | 1 or higher | 235 | 5,504 | 2,752 | 500 | 5,838 |

# For SI: 1 in. = 25.4 mm, 1 lbf/ft = 0.0146 N/mm, 1 lbf = 4.448 N

(a) These design values are applicable to standard-term load duration and permitted to be adjusted for other load durations in accordance with the applicable building code. Factors for ASD to LSD conversion are shown in Appendix B.

(b) Performance categories listed in this standard.

(c) Hr = Factored horizontal (shear) load transfer resistance based on the attachment schedule specified in this standard. This capacity represents the total of the lateral loads transferred through the rim board by both the floor sheathing and wall plate above the floor sheathing.

(d) Vr = Factored uniform vertical (compression) load resistance.

(e) Zr = Factored lateral resistance of a 1/2-inch (12.7-mm) diameter lag screw in compliance with the connection requirements tested in this standard.

(f) Pr = Factored concentrated vertical load resistance based on a 4-1/2-inch (114-mm) bearing length.