From: Ping Cheng <<u>pcheng@icc-es.org</u>> Sent: Wednesday, September 20, 2023 4:48 PM To: Rioux, Nathalie M. (Fed) <<u>nathalie.rioux@nist.gov</u>> Cc: Ping Cheng <<u>pcheng@icc-es.org</u>> Subject: Comments on the Proposed Revisions to PS 1-22

Dear Ms. Rioux,

We have been informed on the following proposed revisions to PS 1-22:

- 1. Updated definitions to address Critical Section in Section 2.14.
- 2. For species classified by testing, Section 5.2.4 clarified that species listed in Table 1 but grown in a different geographic region shall be qualified for use by performance testing.
- 3. Clarified the adhesive bond requirements under Section 5.7.1 Exposure 1 and 5.7.2 Exterior.
- 4. Added calculations for planar shear strength in Section 6.2.4 and shear-through-the-thickness strength in Section 6.2.5.
- 5. Added Categories 5/16 and 11/16 to Table 10, Table D1, and Table D2.
- Updated Section 7 Marking and Certification. The updates include: 1) Revised Section 7.1 completely, 2) Added a new Section 7.2 for Accredited Certification Agency; 3) Revised the existing Section 7.2 by introducing two new sections for Accredited Inspection Agency (7.3) and Accredited Testing Laboratory (7.4).
- Added new Section 8 on Quality Assurance Requirements which included adding the following subsections: Manufacturing Quality Program (8.1), Inspection and Test Program (8.2), Sampling (8.3) and Corrective Action (8.4).

We have reviewed the proposed revisions and have no comments on above listed Items 1, 2, 4 through 6. The following comments on Item 3 and Item 7 are provided for your consideration:

- 1. Comment on Item 3. This comment is related to the pass/failed requirements given in Section 5.7.1 and Section 5.7.2. According to Requirement 1 under Exposure 1 in Section 5.7.1: "When at least 20 panels are tested, at least 95% of the individual panels represented by the test pieces shall have 30% wood failure or better, and at least 90% of the individual panels represented by the test pieces shall have 30% wood failure or better, and at least 90% of the individual panels represented by the test pieces shall have 60% wood failure or better. In addition, the average wood failure of all test specimens taken from all individual panels shall be not less than 80%." It is not sure as to how the three pass/fail requirements can be met at the same time. For an example, if each of 19 out of 20 test specimens has a wood failure from 31 % to 59%, then the tested panels have met the requirement of "When at least 20 panels are tested, at least 95% of the individual panels represented by the test pieces shall have 30% wood failure or better." However, the tested panels have failed to meet the other two requirements. It would be our recommendation to use one pass/fail requirement, such as "the average wood failure of all test specimens taken from all individual panels shall be not less than 80%", for adhesive bond evaluation.
- 2. Comment on Item 7. This comment is related to the specified frequencies of inspections in new Section 8.2. According to ISO/IEC 17007, specific conformity assessment

schemes, such as frequency of inspection, should not be included in a normative document. Also, ISO/IEC 17065 makes this statement: "When continuing use of a certification mark is authorized for placement on a product (or its packaging, or information accompanying it) (for process or service, see 7.9.4) of a type which has been certified, surveillance shall be established and shall include periodic surveillance of marked products to ensure ongoing validity of the demonstration of fulfilment of product requirements." As an ISO/IEC 17065 Accredited Certification Agency, ICC-ES suggests the following modifications to Section 8.2:

8.2 Inspection and Test Program

The Accredited Certification Agency shall establish and implement an Inspection and Test Program to verify ongoing manufacturer and product conformity to the mill specification and the requirements of this Standard. At a minimum, the Inspection and Test Program shall include the following:

8.2.1 At least annually (approximately every 12 calendar months):

8.2.1.1 8.2.1 Assessment that the mill specifications for each mill are appropriate for the product being certified.

8.2.1.2 8.2.2 A review of manufacturer's Quality Manual. Updates to the Quality Manual shall be prepared by the manufacturer and submitted to the Accredited Certification Agency for review and approval. If the manufacturer made no updates to the Quality Manual in that year the manufacturer needs to notify the Accredited Certification Agency that no updates were done.

8.2.2 At least semiannually (approximately every 6 calendar months):

8.2.2.1 8.2.3 Inspection of species, construction, panel grade, and thickness conformity with this Standard.

8.2.3 At least quarterly (approximately every 3 calendar months):

8.2.3.1 8.2.4 The production and quality system of each production facility producing plywood in accordance with this Standard shall undergo on-site audits by the Accredited Inspection Agency. The audits shall include, at a minimum:

8.2.3.1.1 8.2.4.1 Verification of the appropriate use and legibility of panel marks to include, if applicable, the appropriate use of panel voiding marks as specified in Section 7.6.

8.2.3.1.2 8.2.4.2 Review of the manufacturer's in-plant quality inspection and test data to verify on-going product conformity to the mill specification and the requirements of this Standard.

8.2.3.2 8.2.5 Verification sampling and inspection shall be conducted by the Accredited Inspection Agency at least (4) times per year, either in conjunction with or independent from the quarterly audits specified in Section 8.2.3.1. The sampling requirements in Section 8.3 shall apply. Verification testing of the sampling identified above shall be performed by the Accredited Testing Laboratory or by the manufacturer's testing laboratory if it has been approved by the Accredited Certification Agency.

We appreciate the opportunity to provide our comments on the proposed revisions to PS 1-22.

Sincerely,

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