



September 20, 2009

Mr. Jason Smart
ICC-ES
900 Montclair Road, Suite A
Birmingham, AL 35213

Re: Acceptance Criteria for Structural Wood-Based Products; Subject AC47-1009-R1

Dear Jason:

I support of the proposed AC47 revision. However, I am sure you are aware that the heat durability requirements published in ASTM D 5456-09 are only applicable to LVL and PSL (see Section 4.2.1.1 of ASTM D 5456-09). This is because the binder systems used in SCL, other than LVL and PSL, may not be suitable for the test setup specified in ASTM D 7247. This needs to be clarified in the proposed AC47 revision.

If possible, I would recommend that the requirements for adhesive heat durability specified in Section 4.2.1 of ASTM D 5456-09 be directly referenced in AC47. I understand this version of ASTM D 5456-09 has not been adopted by the codes, but there are many precedents for other AC's to reference the latest version of ASTM standards. Besides, we (APA) have proposed the update of ASTM D 5456-09 to the 2012 IBC and IRC (see the monograph of the 2012 ICC code change proposals available from the ICC web site).

Thanks for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Borjen Yeh".

Borjen ("B.J.") Yeh, Ph.D., P.E.
Director
Technical Services Division
E-mail: borjen.yeh@apawood.org

REPRESENTING THE ENGINEERED WOOD INDUSTRY



September 17, 2009

Jason Smart
Senior Evaluation Specialist
ICC Evaluation Service
5360 Workman Mill Road
Whittier, CA 90601

**RE: Proposed Revisions to the Acceptance Criteria for Structural Wood-based products,
Subject AC 47-1009-R1**

Dear Mr. Smart:

Thank you for the opportunity to comment on the proposed revisions to AC 47. Our staff has reviewed the criteria and added some recommended revisions for the update to the 2009 I-codes, please see the attached document.

The initial revisions proposed by ICC ES are shown in Red while our additional revisions are shown in Blue. Most of the wording that we are deleting is redundant with the update to ASTM 5456-05a. We have also added wording consistent with ASTM D5456-09 concerning the heat durability requirements of SCL products.

Thank you for consideration of these comments. If you have any questions regarding these comments please don't hesitate to contact me at 208-429-3715 or at Daniel.Cheney2@Weyerhaeuser.com

Sincerely,

Daniel W. Cheney (sent via e-mail)

Daniel W. Cheney, P.E.
Director of Codes and Product Acceptance

3.1 General: Testing and analysis of data shall be in accordance with ASTM D 5456, ~~to determine design values for bending strength and stiffness, tensile strength parallel to grain, compressive strength perpendicular to grain, compression parallel to grain and longitudinal shear strength,~~ unless noted otherwise in this criteria.

3.2 Connections: Connection testing shall be in accordance with ASTM D5456, ~~and in addition to those required in Sections 3.2.1 and 3.2.2 of this criteria,~~ must be conducted on each ~~product having different~~ wood species. ~~In addition, and~~ each grade shall be tested unless recognition of fasteners is based on the ~~tests of most conservative wood species~~ and the lowest grade. Details of the test shall be discussed with the ICC-ES staff before the testing begins.

3.2.2 Lateral Load Capacity of Fasteners (Dowel Bearing Strength): For lateral load capacity of fasteners, dowel bearing strength tests shall be conducted in accordance with ~~this section and ASTM D 5764. The analysis of data shall be in accordance with~~ Annex A2 of ASTM D 5456

3.4 Structural Composite Lumber (SCL): Structural composite lumber shall comply with ASTM D 5456 and the applicable sections in this criteria.

3.4.1 The adhesive shall comply with Section 4.2 of ASTM D 5456, and adhesives used for LVL and PSL shall meet the heat durability requirements of Section 3.3 of this criteria.

3.5.1 Steam-pressed Scrim Lumber (SPSL): Steam-pressed scrim lumber evaluated under this criteria is defined as a composite of wood scrim (matts of wood strands) obtained through crushing small-diameter logs and glued together in a steam-injection press so that the wood fibers are primarily oriented along the length of the member. The least dimension of the strands in the scrim shall not exceed $\frac{3}{4}$ inch (19 mm). The average length of the strand shall be greater than 20 times their least dimension.

In addition to ~~the other information and data requirements noted in this criteria~~ testing per ASTM D 5456 and the applicable sections of this criteria, the following shall apply to OSL and SPSL:

~~**3.5.1.1** Creep and duration of load (DOL) testing shall be conducted in accordance with ASTM D 6815.~~

~~**3.5.1.4** Additional connection tests shall be conducted in accordance with Section 4.3 of AC 124. Lateral edge nail durability testing shall be conducted in accordance with Section 6.8.2 of ASTM D 5456.~~

3.5.1.5 The adhesive shall comply with [Section 4.2 of ASTM D 2559/5456](#), and [shall meet the heat durability requirements of Section 3.3 of this criteria.](#)

3.5.2.1 [Testing per ASTM D 5456 and the applicable sections of this criteria](#) [Compliance with the requirements noted in Section 2.1, 3.1, 3.2, 3.3, and 4.0 in this criteria is required.](#) ~~Creep and duration of load (DOL) testing shall be conducted in accordance with ASTM D 6815.~~

3.8 Laminated Veneer Bamboo (LVB): The product is made from ¼-inch-thick (6.35 mm), ¾-inch-wide (19.1 mm) and 96-inches-long (2438 mm) bamboo strips bonded together to form a mat, which is laminated to other mats of the LVB product. In addition to [testing per ASTM D 5456 and the applicable sections of this criteria](#), ~~the provisions of Sections 2.0, 3.1, 3.2, and 3.3, and 3.4,~~ the following shall apply to LVB:

~~**3.8.1** Creep and duration of load (DOL) testing shall be conducted in accordance with ASTM D 6815.~~

3.8.5 [Adhesives shall](#) ~~In addition to complying~~ with [Section 4.2 of ASTM D 2559/5456 and Section 3.3 of this criteria](#), ~~the adhesives shall be tested in accordance with the alternative method noted in Section 4.32 of ASTM D 5456-05a.~~