| Voter | Vote | Comments | Responses |
| --- | --- | --- | --- |
| Item 1  Preface | Add the following sentence at the end of the 4th paragraph:  The design values for utility structures can be obtained by multiplying the reference design values provided in this Specification by the conversion factors specified in ANSI O5.2 (5).  **Rationale:** Glulam has been used for utility structures for years and should be recognized in this glulam standard. | | |
| Olson | Aw/C | Suggested edit: The design values of glued laminated timber used in ~~for~~ utility structures can be obtained by multiplying the reference design values provided in this Specification by the conversion factors specified in ANSI O5.2 (5). | PE. Will make the suggested change for clarification. |
| Item 2  Section 2.5 | Revise Section 2.5, as shown in **Attachment 1**.  **Rationale:** There have been confusions on the true (shear-free) E and apparent E for glulam. The proposed changes clarify this issue. | | |
| Cheung | Aw/C | Suggestion: Remove “approximately” from “…… based on a span to depth ration of approximately 21.” | PE. Will make the suggested change |
| Olson | Aw/C | Just a couple of spelling errors: Ey ture, Exapnded. | PE. Will make the corrections. |
| Item 3  Section 2.11 | Revise the 1st sentence of Section 2.11 as follows:  In lieu of specific data, the modulus of rigidity shall be taken as 1/16 of the long-span modulus of elasticity, as defined in ASTM D3737 (10), for the lowest grade lamination used in the lay-up.  **Rationale:** Clarification. | | |
| Douglas | Neg | Why is G being set as 1/16 on long-span E, rather than Etrue? Also, for stability, we typically assume Gmin = Emin. It seems overly complex to require that G be set to a different basis. | PE. Long-span E by virtue of the definition is a based on a span-to-depth ratio of approximately 100:1 and is the same as Etrue. For clarification, the revision will be made as follows:  In lieu of specific data, the modulus of rigidity shall be taken as 1/16 of the long-span modulus of elasticity, as defined in ASTM D3737 (10), or Etrue, for the lowest grade lamination used in the lay-up. |
| Item 4  Section 2.1.2 | Revise the 2nd sentence in the 3rd paragraph as follows:  The design values in Table A3 shall replace the corresponding design values in Table A1 or Table A1-Expanded for all such ~~field-~~tapered beams.  **Rationale:** “Field-tapered” implies that the taper is cut outside a factory environment. In fact, tapers that remove compression materials are often cut in the factory. | | |
| None |  |  |  |
| Item 5  Section 3.1 | Revise the Section as follows:  Lumber grades shall be in accordance with Section 4.3 – *Lumber for Laminating* of ANSI A190.1 (4). *AITC/WCLIB Grading Handbook for Laminating Lumber* (1) and *APA Grading Handbook for Laminating Lumber* (6) summarize ~~summarizes~~ the requirements for laminating grades of approved species and reference~~s~~ approved grading rules.  **Rationale:** This change recognizes proprietary grading handbooks published by both AITC/WCLIB and APA. | | |
| DeVisser | Neg | Standard Grading Rules No. 17 (Rules No. 17) contains most of the laminating grades in the “AITC Grading Handbook for Laminating Lumber” (AITC Rules) and the Bureau intends to submit a report to the Board of Review of the American Lumber Standard Committee (ALSC) to add the Southern Pine laminating grades in the AITC Rules to Rules No. 17. It is our intention to publish and maintain these grades as part of Rules No. 17. There are several good reasons for this. Published grading rules are recognized in the industry as the standard for lumber and laminations and are easily accessed. Multiple laminating rules maintained by multiple agencies have the potential to develop discrepancies between those rules. This is why it is our opinion that multiple sources for the laminating grades are not a good idea. We will continue to support and maintain the AITC Rules until such time as the various species-specific rules have been incorporated into Rules No. 17.    Fortunately, WCLIB and APA have a history of working cooperatively in areas of mutual interest to our respective members. The most recent example of this is the smooth transfer of the ANSI standards previously maintained by AITC to APA. We believe it is the mutual advantage to both agency’s members for the laminating grade rules to be in an ALSC-accredited grading rules. An APA representative participates in the AITC/WCLIB Technical Committee so we have a forum for joint conversations regarding laminating rules. | The negative was withdrawn by the voter with the understanding that the grading rules will be balloted as a mandatory annex to ANSI 117. |
| Item 6  Section 3.3 | Revise the 1st paragraph and 1st example in Section 3.3, as shown in **Attachment 2**.  **Rationale:** The revised example clarifies the calculation of the number of laminations in each zone in the layup tables. | | |
| None |  |  |  |
| Item 7  Section 3.6 | Revise the last sentence as follows:  Tudor arches (Figure 3.6-2) shall be laid up in accordance with *AITC/WCLIB 200* (2) or *APA QA Policy for Structural Glued Laminated Timber* (7), unless specified otherwise.  **Rationale:** This change recognizes proprietary QA policies published by both AITC/WCLIB and APA. | | |
| DeVisser | Neg | Same comment on Item 5. | The negative was withdrawn by the voter. |
| Item 8  Tables A1, A1-Expanded, A2, and A3 | Revise Table A1, A1-Expanded, A2, and A3, as shown in **Attachment 3**.  **Rationale:** Add clarification to true (shear-free) E and apparent E. | | |
| DeVisser | Aw/C | The rationale in Ballot 1 is that these additions will provide clarification. It’s our opinion that instead of providing clarification, they provide confusion for designers. Couldn’t the proposed wording in Attachment 1, third paragraph of Section 2.5 be sufficient? Adding a footnote to Tables A1, A1-Expanded, and A3 that directs designers who need assistance in estimating the Etrue to section 2.5 would also be helpful. As proposed, we believe there’s a good change a designer might use the wrong E from those tables. | NA, as agreed by the voter. |
| Item 9  Reference | Revise References, as shown in **Attachment 4**, and renumber the references in the text of the entire standard accordingly.  **Rationale:** Update the references in this standard. | | |
| DeVisser | Neg | Same comment on Item 5. | The negative was withdrawn by the voter. |

New Comments by DeVisser:

My other comment is to recommend moving Norway Pine (Pinus resinosa) and Sitka spruce (Picea sitchensis) from the Spruce-Pine-Fir species group to the Softwood Species. From a lumber perspective, Norway Pine, also called Red Pine, and Sitka Spruce are not included in the Spruce-Pine-Fir (S-P-F) species group as published in the National Lumber Grade Authority (NLGA) and referenced in the Supplement to the “National Design Specification (NDS) for Wood Construction.” The Rules No. 17 and the NDS Supplement have Red Pine and Sitka Spruce in the S-P-F (south) species group for the US and Northern Species group for Canada. The NLGA rules and NDS Supplement have Sitka Spruce from Canada in the Coast Species group. There are also some spelling errors in Attachment 1. The third and fourth full paragraphs show Ey true is spelled Ey ture, also the word “Expanded” is spelled wrong (Exapnded) in the fourth paragraph.

Secretariat notes: This item will be balloted as a new ballot item.