



Fastening Systems

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Mr. David Musselwhite
ICC-Evaluation Service, Inc.
900 Montclair Road, Suite A
Birmingham, AL 35213

RE: AC233

Dear Mr. Musselwhite;

The task group addressed the issues related to testing statistics and tangential to that is the presentation of the test results. Please consider these editorial comments.

In Section 4.6, the pull-through capacity of the fastener is being evaluated with alternate side members, which could be sawn wood, wood-based sheathing products, or presumably metal side members. The test method and example table imply that the side member is a wood product even though the scope of the acceptance criteria includes metal side members. The example table, Table 5, is laid out for a range of specific gravities. The design value recorded in the table is pounds of force per inch. However, the headings in the table cause one to question the design value recoded in the table. Is this pull-through resistance of the fastener as tested per inch of wood-based side member (at various specific gravities or per inch of wood structural panel)? The second column calls out side member thickness in inches, which implies that side members of same material and specific gravity but different thickness have different pull-through resistance per unit thickness. I believe the intent of this table is to show the pull-through resistance per unit thickness for different materials as calculated in Section 4.6, then the second column should be labeled "Side Member" as in type of side member material (e.g., OSB rated sheathing, 4-ply plywood rated sheathing, sawn wood) and the wording "Thickness (inch)" should be deleted. This revision to Table 5 column headings will resolve the ambiguity,

Fastener Designation	Side Member Thickness (inch)	P (lbf/in.) for <u>Side Member</u> Specific Gravities:						
		0.67	0.55	0.50	0.46	0.42	0.36	0.31

The suggested Table 5 revision also deletes the specific gravity 0.31 for two reasons: (1) the commercial wood resource below 0.36 is limited; (2) Herzog and Yeh (2006) showed that pull-through in structural panels is not a function of specific gravity. For wood structural panels, is pull-through recorded for actual or nominal specific gravity where the nominal specific gravity is assigned in NDS Table 11.3.2B?

In the other example tables, the 0.31 specific gravity could be deleted for the previously cited reason related to resource. In addition, it is assumed that the specific gravity of the column headers is the specific gravity of the main member. This ambiguity can be resolved by explicit wording, such as in the heading of Table 2,

W (lbf/in.) for main member specific gravities of:

I appreciate the opportunity to comment on this acceptance criteria on behalf of Stanley Fastening Systems.

Sincerely,

STANLEY FASTENING SYSTEMS, L.P.

[electronic]

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