



Wood Structural Panel Sizes

With the advancement of wood structural panel (WSP) manufacturing techniques, several APA members are producing and marketing extended length panels for wall sheathing markets. The advantage of extended length sheathing is that wall sheathing can be nailed off on both the bottom and top plates of the walls. It has been brought to our attention that some building officials are strictly interpreting the panel size listings in International Code Council Evaluation Service (ICC-ES) ESR-2586. This white paper is intended to explain APA's position on the panel sizes.

Wood structural panel length and width are typically not a structural concern when panel size and application meet the following minimum criteria:

- a. For floor and roof sheathing, the panel length should result in a minimum three-span application for panels thinner than 23/32 inch and two-span for panels of 23/32 inch or greater in thickness. Reductions in allowable loads may apply for fewer spans.
- b. For all panel applications, minimum cut down size is 24-inch width. Additional edge support or reductions in allowable loads may be required for less than 24-inch width.

Other than the conditions mentioned above, panel size does not affect the structural performance of the WSP. Note that other than thickness (or performance category) listings in load and span tables, model building codes do not establish WSP sizes. Nor do WSP product standards PS 1, *Structural Plywood*, and PS 2, *Performance Standard for Wood-Based Structural-Use Panels*, which are recognized in the model building codes.

ESR-2586 provides recognition for APA PRP-108, *Performance Standards and Qualification Policy for Structural-Use Panels*. Like PS 1 and PS 2, PRP-108 sets allowable tolerances on specified length and width. There are no limits to panel sizes within these standards.

Although Section 3.1.3.1 of ESR-2586 indicates that panels are produced in nominal sizes of 4 feet by 8 (96"), 9 (108") or 10 (120") feet, it should not be presumed that these are the only panel sizes available for structural applications. In fact, many APA member companies produce panels to other length and width specifications. For example, some panels intended for wall sheathing applications are available in various lengths, including 97-1/8, 109-1/8, 121-1/8, and 145-1/8 inches.

For recommendations on panel applications, design value adjustment criteria, and edge support requirements, refer to the following APA publications: (www.apawood.org)

- APA Engineered Wood Construction Guide, Form E30
- Panel Design Specification, Form D510
- Load-Span Tables for APA Structural-Use Panels, Form Q225
- Panel Edge Support For Narrow-Width Roof Sheathing, Form R275

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7011 South 19th Street • Tacoma, Washington 98466-5333 • Phone: (253) 565-6600 • Fax: (253) 565-7265 • www.apawood.org