

Building Code Requirements for Wood-Based Structural Panels in the United States

When building with plywood, oriented strand board (OSB), or waferboard, the panels must meet the requirements of the building code(s) enforced in your jurisdiction (city, state, etc.).

In the U.S., the International Residential Code® (IRC®) governs construction of one- and twofamily dwellings while the International Building Code® (IBC®) applies to the construction of all buildings except detached one- and two-family dwellings and townhouses up to three stories. These codes are adopted at the state or local level, in whole or sometimes with local variations, by all fifty states plus the District of Columbia (Washington DC), Guam, Puerto Rico, the U.S. Virgin Islands, and the Northern Marianas Islands. The most current codes are the 2015 IRC and 2015 IBC, although due to lagging adoption schedules not all jurisdictions are currently using the 2015 edition(s)—some still utilize the 2012 and even earlier editions. The International Code Council (ICC) is the group that oversees the family of I-Codes; follow this link to ICC's webpage on this topic to find current adoption information for your area.

Both the IBC and IRC require wood structural panels such as plywood and OSB, when used for structural purposes, to conform to U.S. Department of Commerce Voluntary Product Standards:1

- PS 1, Structural Plywood (PS 1), or
- PS 2, Performance Standard for Wood-Based Structural-Use Panels (PS 2),

and to be identified by the mark of an approved testing and grading agency. Architects, engineers and designers are advised to specify panels by grade or span rating in accordance with PS 1 or PS 2. Specifying panels that are certified by a particular third-party agency only serves to limit the buying options of builders and other users.

Panels that are certified by an accredited certification body like PFS TECO to these standards must be marked to include information that identifies the manufacturer, the certification body, and other panel-specific information like grade and thickness. Examples of grade stamps that are applied to panels for use in the US are explained in other TECH TIPs on the PFS TECO website.

¹ These requirements can be found in Chapter 23, Section 2303 of the 2015 IBC; and Chapter 5, Section R503; Chapter 6, Section R604; and Chapter 8, Section R803 of the 2015 IRC.

