

I received some comments from staff and one of them was on section 6.2.5. After looking at it closely, I realized that I think there is an error in the section that needs to be addressed. I have outlined the corrections below and in the attached pages.

- 1) The green thicknesses shown in the lines that I have crossed out (in the attached pages) are no different than the green thicknesses shown in Table 3 of PS 20, therefore I don't see why they need to be listed. They are redundant (exception see #2 below). Unless there is a mistake in the sentence "For these three species, the following minimum dressed **green** thicknesses shall apply:" and the highlighted word "green" is really supposed to be "dry". If that's the case, then there is a difference. Either way, there is an issue: if the word "green" is correct than we can eliminate the lines that I've stricken. If the word "green" should be "dry", then this doesn't belong in the section called **Green Size Requirements**.
- 2) There is an anomaly in the metric and inch conversion between what's in Table 3 in the Boards section, 3/4 inch nominal line and what's in the text of Section 6.2.5. Table 3 shows 17 mm converted to 11/16 inch. The text (crossed out in the attachment) says 17 mm is 21/32 inch. That is the only size difference between the green thicknesses shown in Table 3 and the thicknesses shown in the text that I've crossed out, but as noted, I don't think we can have a difference in the conversion.
- 3) We think it would be easier to read and clearer if the text that I have circled in the attachment were replaced by a table that would fit in the column. See below for our suggestion.

Minimum Green, Dressed Widths for Redwood, Western Red Cedar, and Northern White Cedar		
Nominal	Minimum Dressed Green	
Inch	mm	inch
5	116	4-9/16
6	141	5-9/16
7	167	6-9/16
8	187	7-9/16
10	238	9-9/16
12	289	11-9/16
14	341	13-9/16
16	392	15-9/16

- 4) I believe the widths in 6.2.5 apply to Table 3, not Table 4 since Table 4 is for "worked" lumber and the widths change depending on the item type. Therefore I think the second sentence in 6.2.5 should be changed to "For these three species, the following minimum green dressed widths shall apply for boards, dimensions, and timbers (Table 3):" And then put the table above after this sentence.

appropriate. The restrictions on the moisture content of seasoned lumber shall apply at the time of shipment, at the time of dressing (if dressed lumber is involved), and at the time of any reinspection (if moisture content is involved in the reinspection), as provided in the applicable grading rules. Any piece exceeding the allowable moisture content of the applicable grade provisions shall be considered out of compliance.

6.2.2 Grading rules— The grading rules for each species or region shall include clear definitions for dry lumber under nominal 5-inch thickness [see 2.7]. The definitions shall be based on a maximum moisture content of 19 percent or less. The choice to grade and grade mark any item as green ALS program lumber or dry ALS program lumber shall be determined by each rules writing agency in accordance with its own conditions [see 2.7, 2.11, and 2.12].

6.2.3 Dry size requirements— The grading rules shall require lumber under nominal 5-inch thickness sold as dry to be 19 percent or less in moisture content at the time of dressing, and to be not less than ALS minimum dry dressed thickness and width at 19 percent moisture content, or at such lower maximum-moisture content as may be applicable to the lumber at the time of dressing. The minimum-dressed dry sizes are shown in tables 1, 2, 3 and 4.

6.2.3.1 Shrinkage or expansion from dry size— Shrinkage or expansion that occurs after dressing to standard dry size shall be recognized through the allowance of a tolerance below or above minimum standard dry sizes on a basis of 1 percent shrinkage or expansion for each four percentage points of moisture content change or 0.7 percent shrinkage or expansion for each four percentage points of moisture content change for Redwood, Western Red Cedar, and Northern White Cedar. The shrinkage or expansion percentages are average values. Shrinkage or ex-

pansion of individual pieces may vary.⁴ Shrinkage allowances are determined assuming maximum allowable moisture content at the time of surfacing. Expansion allowances are determined assuming a typical equilibrium moisture content or other suitable reference moisture content.

6.2.4 Size differentials— When the grading rules in any region permit lumber less than nominal 5-inch thickness to be dressed green, the rules shall require that the lumber be dressed to sizes specifically stated according to both thickness and width, as set forth in tables 3 and 4.

6.2.5 Green size requirements— The minimum dressed green sizes specifically stated in the rules shall be not less than the green sizes⁵ shown in tables 3 and 4, except for Redwood, Western Red Cedar, and Northern White Cedar. For these three species, ~~the following minimum dressed green thicknesses shall apply: 17 mm (21/32 inch) for corresponding nominal 3/4 inch dry, 20 mm (25/32 inch) for nominal 1-inch, 40 mm (1 9/16 inch) for nominal 2-inch, 52 mm (2-1/16 inch) for nominal 2-1/2 inch, 65 mm (2-9/16 inch) for nominal 3-inch, 78 mm (3-1/16 inch) for nominal 3-1/2 inch, 90 mm (3-9/16 inch) for nominal 4-inch, and 103 mm (4-1/16 inch) for nominal 4-1/2 inch.~~ The following minimum green dressed widths shall apply: 65 mm (2-9/16 inch) and 90 mm (3-9/16 inch) for nominal 3-inch and 4-inch, 116 mm (4-9/16 inch), 141 mm (5-9/16 inch), and 167 mm (6-9/16 inch) for nominal 5-inch, 6-inch, and 7-inch,

⁴ The range of shrinkage of individual pieces from experimental observation is from 2% to 7%. Variables that affect measurement and shrinkage of lumber are: density, species, grain orientation and allowable grade characteristics. See Forest Products Laboratory Research Reports 15 and 30.

⁵ The minimum green sizes are based on shrinkage factors of 2.35 percent in thickness and 2.80 percent in width from the fiber saturation point to a 19 percent maximum moisture content with recognition given to manufacturing practices and the differences in shrinkage characteristics between species of lumber or species groups of lumber.

Replace with table, width of the column

187 mm (7-3/8 inch), 238 mm (9-3/8 inch), 289 mm (11-3/8 inch) for nominal 8-inch, 10-inch, and 12-inch, 341 mm (13-7/16 inch) and 392 mm (15-7/16 inch) for nominal 14-inch and 16-inch.

6.2.5.1 Shrinkage or expansion from green size— Shrinkage that occurs after dressing to standard green size shall be recognized through the allowance of a tolerance below minimum standard green sizes on a basis of 1 percent shrinkage for each four percentage points of moisture content below 30 percent or 0.7 percent shrinkage for each four percentage points of moisture content below 30 percent for Redwood, Western Red Cedar, and Northern White Cedar. Expansion allowances are determined assuming a typical equilibrium moisture content or other suitable reference moisture content. The shrinkage or expansion percentages are average values. Shrinkage or expansion of individual pieces may vary.⁶

6.2.6 Grade marking (grade stamping)— Grading rules that provide for grade marking of lumber less than nominal 5-inch thickness shall contain a provision for standardized marking so as to indicate whether the lumber was green or dry at time of dressing. The standardized mark shall be S-GRN if surfaced green, S-DRY if surfaced dry, or KD if kiln dried to a maximum moisture content of 19 percent at time of surfacing. Moisture-content limits of less than 19 percent maximum moisture-content for dry or kiln dried shall only be specified if included in rules certified by the Board. For lumber of nominal 5-inch or greater thickness, other moisture-content limits shall be specified only if included in rules certified by the Board.

⁶ The range of shrinkage of individual pieces from experimental observation is from 2% to 7%. Variables that affect measurement and shrinkage of lumber are: density, species, grain orientation and allowable grade characteristics. See Forest Products Laboratory Research Reports 15 and 30.

6.3 Use classification provisions for visual grading

6.3.1 Yard lumber

6.3.1.1 Grade classifications— The grading of surfaced yard lumber is based upon the uses for which the particular grade is designed and is applied to each kind with reference to its size and length when graded without consideration to further manufacture. On the basis of quality, the basic grade classifications of yard lumber shall be as follows:

- (a) **Select:** Lumber for natural and paint finishes.
- (b) **Common:** Lumber for general construction and utility purposes.

6.3.1.2 Yard lumber sizes— The dressed thicknesses and widths of yard lumber as specified in 3.4, 5.1 and 5.2 shall be considered as minimum standards for the corresponding nominal sizes as shown.

Note: Lumber of standard size, rough or dressed, may be described by its nominal dimension providing dressed sizes are shown on invoices and other documents.

6.3.1.3 Bundled lumber— Each length of bundled lumber, except end-matched lumber, beveled siding, and bungalow siding shall be bundled separately unless otherwise specified.

6.3.1.4 Finish and boards— In shipments of rough finish/selects and boards, pieces 13 mm (1/2 inch) or greater than the nominal inch-unit thickness, such as are produced by uneven sawing, shall, at the option of the buyer, be rejected or be accepted as of the next lower grade.

6.3.1.5 Grading faces— Yard lumber other than timbers and dimension [see 6.3.2.3] shall be graded from the face or best side only unless otherwise specified.