



Softwood Lumber Sizes Explained

Lumber sizes can cause confusion for both customers and merchants because the nominal sizes are not the same as the actual or net sizes.

Understanding the proper way to legally represent lumber sizes can avoid costly conflicts between merchants, their customers and regulatory agencies. This pamphlet helps to explain the basics about softwood lumber sizes.



Nominal sizes are not the same as actual or net sizes. . .

Softwood lumber is customarily referred to by nominal sizes such as 1x6, 2x4, 4x4, and so forth. In these descriptions, the first number represents the thickness; the second number represents the width. It is important to note that what we call a 2x4 or 1x8 is usually a piece of lumber smaller than its nominal size. The American Softwood Lumber Standard (ALS) published by the U. S. Department of Commerce, establishes the standard sizes for most commonly used lumber products.*

ALS provides for dry and green dimensions. . .

The tables to the right list selected nominal lumber sizes and show the corresponding actual sizes for both dry (19% or less moisture content) and green (unseasoned) surfaced lumber.

Green sizes are slightly greater than dry sizes because lumber has a tendency to shrink as it dries. The green sizes are such that a piece of green lumber, surfaced to a standard green size, will shrink to approximately the standard dry size as it dries down to about 15% moisture content.

Lumber products may be produced to any size; however, products that do not conform to ALS standard sizes should have their actual sizes indicated on invoices, grade marks,

* Copies of the ALS can be obtained from the American Lumber Standard Committee or the U. S. Government Printing Office.

unit labels, end tags, and store signs. Failure to properly label lumber products can lead to fines and/or litigation. It is the manufacturer's and the merchants' responsibility to properly represent lumber sizes.

For example:

A nominal 2x2 with an actual dry, surfaced size of 1½x1½ can properly be labeled a 2x2. If this item is manufactured to an actual size of 1¾x1¾, it cannot factually be referred to as a 2x2; and it should be referred to by its actual size (1¾x1¾) on all labels, invoices, signs and advertisements.

Lumber surfaces can vary. . .

Lumber may be produced with a variety of surface textures. Smooth-surfaced lumber is planed on one or more sides. Saw-textured lumber is sawn to provide its textured appearance and may be the same size or slightly smaller than surfaced lumber.

Rough lumber has been sawn but not surfaced. It is greater in both thickness and width than surfaced lumber to allow for further manufacturing.

Many popular items, such as fence boards, posts and rails, are sawn to surfaced sizes yet have a saw-textured appearance. These products should not be confused with rough lumber.

Nominal and Actual Sizes for Dry and Green Surfaced Softwood Lumber (inches)

DRY LUMBER

Standard Thicknesses		Standard Widths	
Nominal	Actual	Nominal	Actual
¾	⅝	2	1½
½	⅞	3	2½
⅝	⅞	4	3½
¾	⅝	5	4½
1	¾	6	5½
1¼	1	8	7¼
1½	1¼	10	9¼
2	1½	12	11¼

GREEN (Unseasoned) LUMBER

Standard Thicknesses		Standard Widths	
Nominal	Actual	Nominal	Actual
¾	1¼	2	1⅞
1	2⅝	3	2⅞
1¼	1⅞	4	3⅞
1½	1⅞	5	4⅝
2	1⅞	6	5⅝
2½	2¼	8	7½
3	2⅞	10	9½
4	3⅞	12	11½

*Redwood and Cedar

For more information on softwood lumber sizes, contact the following:

**American Lumber Standard
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alsc@alsc.org

**California Redwood Association
(CRA)**

Telephone: 415 382-0662

Fax: 415 382-8531

www.calredwood.org

**Western Wood Products Association
(WWPA)**

Telephone: 503 224-3930

Fax: 503 224-3934

www.wwpa.org

**West Coast Lumber Inspection Bureau
(WCLIB)**

Telephone: 503 639-0651

Fax: 503 684-8928

www.wclib.org