

DIY: Nominal Lumber Size Versus Actual Lumber Size



Every so often a homeowner tackling a new project will reach out to ask why their lumber doesn't fit the connector. We sympathize. Lumber size can be confusing, especially when someone is first getting started with DIY woodworking. Nearly every single time this question comes up, it comes down to "nominal" dimensions of the purchased lumber.

What is meant by nominal lumber size?

The nominal size is determined before the lumber is surfaced, milled, or planed smooth. This finishing process gives lumber a uniform profile, so there's consistency when you go to the lumberyard. The finished size is the "actual lumber size" (sometimes referred to as the "dressed lumber size").

Why isn't a 2x4 actually a 2x4?

A 2x4 hasn't measured two inches by four inches for several decades. The lack of consistent sizing became an issue in the early part of the 20th century for stick-frame construction. So, in 1964, the American Lumber Congress addressed the lumber dimension issues by setting industry requirements for "size standards, maximum moisture content, and nomenclature."

What is the actual size of a 2x4?

The actual size of a 2x4 is 1½" x 3½".

Common lumber dimensions:

Nominal Size	Actual Size
1x2	¾" x 1½"
1x3	¾" x 2½"
1x4	¾" x 3½"
1x6	¾" x 5½"
1x8	¾" x 7¼"
1x10	¾" x 9¼"
1x12	¾" x 11¼"
2x2	1½" x 1½"
2x3	1½" x 2½"
2x4	1½" x 3½"
2x6	1½" x 5½"
2x8	1½" x 7¼"
2x10	1½" x 9¼"
2x12	1½" x 11¼"
4x4	3½" x 3½"
4x6	3½" x 5½"
6x6	5½" x 5½"