

## Board Dimensions

There is a difference in what we call a board and its actual size. For example, a rough cut 2"x4" is actually only 1½"x 3½" when dried and planed. Sometimes only a ¼" of an inch is lost on a given dimension while ¾" is lost on the other in these finishing operations. Look over the following table and you will see patterns start to emerge.

Nominal	Actual	Actual - Metric
1" x 2"	¾" x 1½"	19 x 38 mm
1" x 3"	¾" x 2½"	19 x 64 mm
1" x 4"	¾" x 3½"	19 x 89 mm
1" x 6"	¾" x 5½"	19 x 140 mm
1" x 8"	¾" x 7¼"	19 x 184 mm
1" x 10"	¾" x 9¼"	19 x 235 mm
1" x 12"	¾" x 11¼"	19 x 286 mm
1½" x 4"	1¼" x 3½"	32 x 89 mm
1½" x 6"	1¼" x 5½"	32 x 140 mm
1½" x 8"	1¼" x 7¼"	32 x 184 mm
1½" x 10"	1¼" x 9¼"	32 x 235 mm
1½" x 12"	1¼" x 11¼"	32 x 286 mm
2" x 4"	1½" x 3½"	38 x 89 mm
2" x 6"	1½" x 5½"	38 x 140 mm
2" x 8"	1½" x 7¼"	38 x 184 mm
2" x 10"	1½" x 9¼"	38 x 235 mm
2" x 12"	1½" x 11¼"	38 x 286 mm
3" x 6"	2½" x 5½"	64 x 140 mm
4" x 4"	3½" x 3½"	89 x 89 mm
4" x 6"	3½" x 5½"	89 x 140 mm
4" x 10"	3½" x 9¼"	89 x 235 mm
4" x 12"	3½" x 11¼"	89 x 286 mm

## Plywood Grades

**Plywood Grades:** The normal grading system uses the letters A, B, C & D, where A is the best quality, with virtually no blemishes and very well sanded. Grade D typically contains up to the maximum number of blemishes (holes and knots) allowed.

The letter grades come in pairs, where one letter refers to the "face" or better side and the other letter to the back side. A sheet of A-C plywood will be very well finished on the face with a relatively unfinished back. Conversely, construction grade plywood would be C-D (commonly referred to as CDX plywood), is for structural use only.

**Plywood Bonding Types:** In addition to the plywood grades, there are four common plywood bonding types. The difference is in the glues that are used to bind the layers of the plywood.

- **Interior Plywood:** Plywoods for interior use only are made from various hardwood and softwood species, and can be used only in interior applications such as wall sheathing, furniture and cabinetry. Interior plywood is available in most grades, as well as a number of hardwood species such as birch, oak, mahogany and cherry.
- **Exterior Plywood:** The most common type of plywood, readily available at home centers. The glues used in exterior plywoods are much more resistant to moisture than interior plywoods. Once again, nearly all grades are available, with A-C, B-C and CDX the most common. Numerous hardwood species are also available in exterior varieties.
- **Marine Plywood:** When moisture resistance is a priority, look into marine plywood. This type uses the best adhesives and is manufactured to the highest standards. It also is most commonly graded as A-A, with two top grade faces, but is limited in the hardwood choices that are practical for use in marine settings.
- **Structural Plywood:** When the appearance of the face is of lesser concern than the strength and stability of the material, structural plywood will typically be the choice. The resins used to adhere the layers are designed for extra strength to avoid separation. Structural plywood is seldom found in a grade higher than C-D. It is commonly used in concrete forms.

Plywood used to come in common thicknesses;  $\frac{1}{4}$ ,  $\frac{1}{2}$  or  $\frac{3}{4}$  inches. Then there came OSB (Oriented Strand Boards) with odd thickness like  $\frac{5}{8}$ " and  $\frac{7}{8}$ ". Now there is a whole new world of plywood thicknesses used to approximate metric sizes; the  $\frac{11}{32}$ ,  $\frac{15}{32}$ ,  $\frac{19}{32}$  and the  $\frac{23}{32}$ . The following table will help you in comparing these confusing thicknesses.

Fractional Inch	Decimal Inch	Millimeters
$\frac{1}{4}$	.250	6.350
$\frac{11}{32}$	.3437	8.731
$\frac{15}{32}$	.4687	11.906
$\frac{1}{2}$	.500	12.700
$\frac{19}{32}$	.5937	15.081
$\frac{5}{8}$	.625	15.875
$\frac{23}{32}$	.7187	18.256
$\frac{3}{4}$	.750	19.050
$\frac{7}{8}$	.875	22.225