



Cutting Lumber the Right Way

Overview

This guide explains the basics of cutting lumber safely and accurately using homeowner tools.

Core Basics Covered

How a Circular Saw Works

A rotating blade cuts through wood. Proper depth and alignment improve cut quality.

How a Miter Saw Works

A miter saw lowers vertically to make straight or angled cuts.

Why Straight Cuts Matter

Straight cuts allow tight joints and stronger assemblies.

Simple Practical Example

A board drops mid-cut because it wasn't supported, causing tear-out. Proper support prevents this.

Where to Cut After You Mark the Line

After measuring and marking lumber, **where you cut matters just as much as where you measure**. Most mistakes happen not because the measurement was wrong — but because the cut removed wood from the wrong place.

What the Cut Line Represents

When you draw a pencil line on wood, that line represents the **finished size** of the piece — not the center of the cut.

Cutting directly through the middle of the line removes material from both sides, making the finished piece too short.

What Is Blade Kerf?

Kerf is the width of material removed by the saw blade during a cut.

- Most circular and miter saw blades remove about $\frac{1}{8}$ inch
- That removed material does not come back
- Kerf must be accounted for in every cut

Which Side of the Line Do You Cut?

Always cut on the **waste side of the line**, not through it.

- The **waste side** is the piece you are throwing away
- The **keep side** is the finished piece you want to keep

Your blade should just **touch the outside edge of the pencil line**, leaving the line on the finished piece.

Cutting to a Mark (Step-by-Step Logic)

1. Measure and mark your cut line
2. Identify which side of the line is the waste
3. Position the blade so the kerf removes only the waste
4. Cut so the pencil line remains on the finished piece

Using a Template or Pattern

When using a template, guide, or pattern to trace a cut:

- The traced line represents the **exact finished size**
- You must cut the line **completely away**
- Leaving the line makes the piece too large

This is especially important when cutting multiple identical pieces from a template.

Simple Practical Example

You measure and mark a board at **36 inches**.

If you cut **through the middle of the line**, the finished piece ends up short.

If you cut **on the waste side**, the finished piece stays true to length.

When using a template to trace a shape, cutting inside or leaving the line causes every piece to be oversized — even if the template was accurate.

Measure carefully, mark clearly, and let the saw remove only what you intend to throw away.