



Miter Cuts and Bevel Cuts

The Miter Saw has the ability to cut at different angles in both horizontal and vertical directions.

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Introduction

Miter Cuts and Bevel Cuts are both commonly used in many woodworking projects. A typical example of a miter cut is seen in wood picture frames, where the cut is relative to the square side of the material, and a bevel cut is when the angled cut is along the entire face of the material.

Step 1 — Getting Started



- Ensure all proper PPE is worn

- Goggles

- Ear Protection (optional but **HIGHLY** recommended)

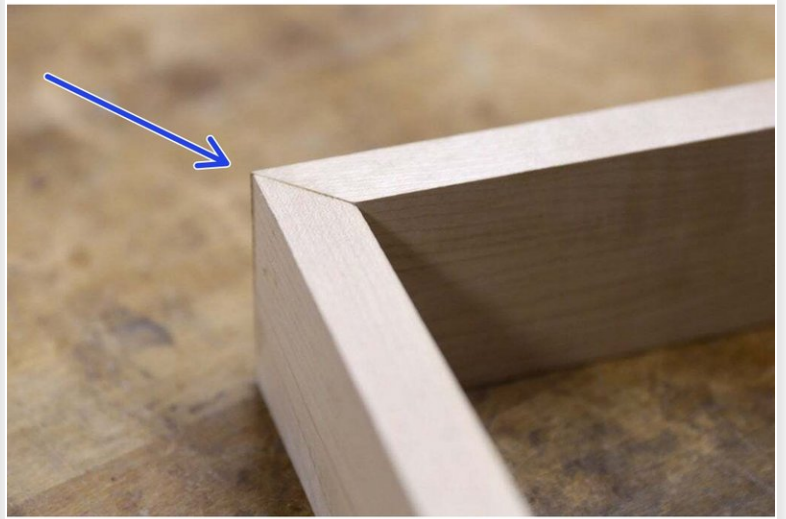
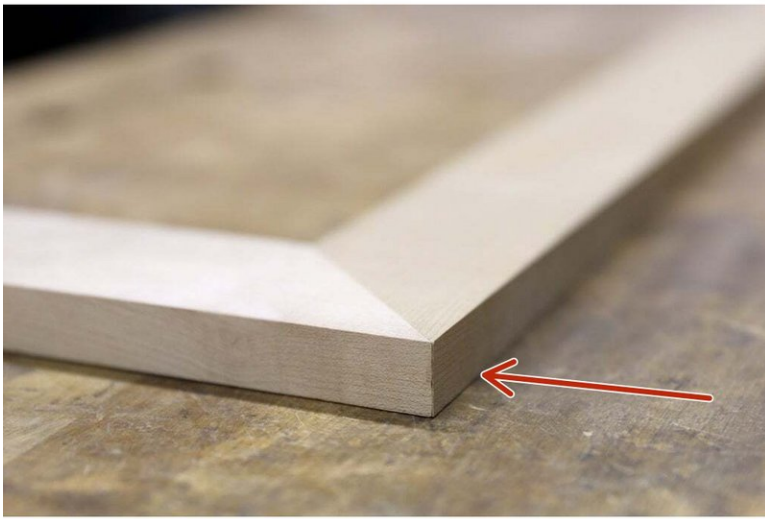
⚠ Gloves should not be used around the miter saw.

Step 2 — Prepping Yourself



- Make sure to do the following:
 - Tied back any loose hair
 - Removed any jewelry from the wrists or hands
 - Rolled back any long sleeves
 - Wore closed toed shoes
 - Secured any and all loose and baggy clothing

Step 3 — Typical examples of bevel and miter cuts



- Miter cuts are when the cut is relative to the square side of the material.
- Bevel cuts are when the angle is relative to the face of the material.
- Compound cuts are when both a miter and a bevel is used.

Step 4 — Bevel cut angling



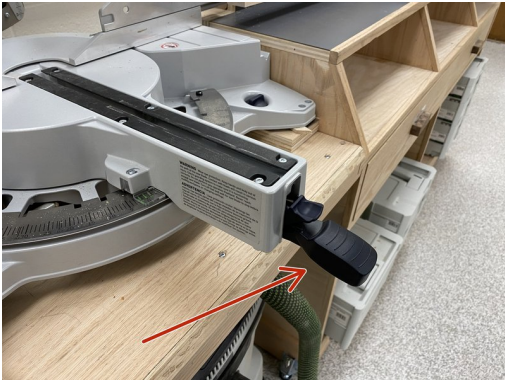
- The miter saw is locked into place at a 0 degree angle when not beveled.
- To angle the miter saw, flip up the cover on the back of the saw.
- Then twist the handle on the front of the saw to move the saw to the desired direction and angle.
- Angle readouts are seen on the protractor on the back mount of the miter saw.

Step 5 — Setting a specific angle



- Once the cover on the back is flipped up, the saw will move freely.
- To set it into place, just flip the cover back down.
- The green knob with the different angle readouts gives the ability to preset where the miter saw will automatically stick.
 - In its usual position, (0-45) the 0 degree mark is where the miter saw will stay at automatically.
 - Turning this knob to 45 or 47 allows the saw to "stick" at those angles once they are reached, similar to how it "sticks" at the 0 degree mark in the usual position.

Step 6 — Miter cut angling



- Similar to bevel angles, the miter saw is locked at a 0 degree angle when not angled for miter cuts.
 - To angle the miter saw, push up on the black handle.
 - Then while holding the handle and thumb hold together, slide the miter saw to the desired angle.
 - ① If the thumb hold is not pushed down, the saw will automatically click into place at the first common angle stop at 15 degrees.
 - Angle readouts are seen on the giant protractor on the base of the saw, and are read on the left side of the saw well.
- To set a specific angle, push down on the black handle.
 - Some common angles have stops set in the miter saw already. They are at: 0, 15, 22.5, 30, and 45 degrees.
 - ① Due to the constraints of the miter saw bench, any angle past 47 degrees is currently impossible.

Step 7 — Bevel Scale



- Despite the name, this tool is technically used for miter cuts.
- When lined up correctly, it sits on the saw well fairly snugly to show that the angle is correct for the saw.
- The most common use for the bevel scale is molding and trim in a house.
- Attached is a video from FESTOOL that shows a common use case for this tool:
<https://www.youtube.com/watch?v=tptROppS...>

Step 8 — Finishing Up



- Once done cutting, please:
 - Return the miter saw to the original angle, 0 degrees for both beveling and mitering
 - Clean any scrap pieces from the miter saw bench to either a scrap bin or keep for personal use.
 - Scrap bins are located in the back of the woodshop by the brown metal doors and by the DEWALT power tool wall.