

Theatre Safety

Tools and Machines – Miter Saw

A miter saw is a saw used to make accurate crosscuts and miters in a long work piece. The miter saw makes cuts by pulling a spinning circular saw blade down onto the workpiece in a short, controlled motion. The workpiece is typically held against a fence, which provides a precise cutting angle between the plane of the blade and the plane of the longest workpiece edge. In standard position, this angle is fixed at 90°. A primary distinguishing feature of the miter saw is the miter index that allows the angle of the blade to be changed relative to the fence.

PPE Requirements:

Safety glasses

Pre-Inspection:

- Ensure that the machine has been unplugged before making any adjustments.
- Make sure all guards are in place and operating correctly.
- Ensure the blade rotates in the correct direction and that the teeth at the bottom of the blade are pointing to the rear of the miter saw.
- Ensure the blade moves freely and the kerf plate is in good condition. Use only sharp blades of the correct size and shape.
- It is best practice to clamp the workpiece to the table against the fence so hands can be kept free and away from the spinning saw blade.

Miter Saw Operation:

1. This miter saw is intended to be used with wood and wood products only.
2. All materials should be inspected for defects such as bows, warps, knots and foreign objects. Defects may cause unexpected behavior during cutting.
3. Establish good footing with a balanced posture. Stand to the side to keep your head and torso out of the plane of the saw blade.
4. Hold the stock firmly (or clamp securely) flat on the table and up against the fence keeping your fingers at least 150 mm (6") away from the blade at all times when power is ON.
5. Allow the blade to reach full operating speed before letting the blade enter into the stock.
6. Be aware that the saw moves up or down slightly upon start-up and stopping.
7. Return carriage (cutter head) to its full rear position after each cross-cut.
8. If the blade begins to bind while cutting, stop immediately.
9. When finished, turn off the miter saw and wait for the blade to come to a complete stop before retracting from the workpiece.