

Buying Guide - Miter Saw



Mitre Saw: a powerful tool for fast and precise cuts

Whether you are a professional carpenter, a DIY adept, or a woodworker, a miter saw is one of the most indispensable stationary tools that you need to have in your workshop. Depending on the model, this polyvalent and powerful tool can cut through stud, cut moldings at multiple angles, and create beveled edges. But what are the different types of [miter saws](#)? What is the best type of miter saw for your specific needs?

Federated Tool is proud to provide you with this miter saw's buying, so that you can purchase a miter saw and complete your workshop with the best information.

Miter Saw Models

First, let's clearly define what exactly is a miter saw. A miter saw is mostly a circular saw with a round blade lowered vertically onto a cutting table to cut pieces of wood along straight line or at various angles. Three types of miter saws are available in the industry and they each have their specific features.



Mitre Saw: The "classic" miter saw can cut perpendicular to the face of the wood and at lateral angles up to 45°. It is perfect for straight pieces such as baseboards, door and window trim.

Examples:

[Milwaukee - 10" MITER SAW-KIT - 2734-21HD](#)

[Festool - KS120 EB Miter saw - 561287](#)

Compound Miter Saw: For this type of miter saw, because the blade can be tilted to one side, it can cut both a miter (perpendicular and lateral angle, up to 57° on certain high-end saws) and a bevel (tilted up to 45°) at the same time: a compound miter cut. This model makes it easier to cut decorative cornice moldings (Ogee moldings) and lowers the risk of errors.

Examples:

[Bosch 8" Bevel Compound Saw](#)

[DeWALT - 10" \(254mm\) Single Bevel Compound Miter Saw - DW713](#)





Sliding Compound Miter Saw: The sliding compound mite saw combines the miter angle cuts and tilting ability of the compound miter saw for bevel cuts with a sliding mount on the pivot arm for cutting flexibility. Because the blade slides back and forth (12" to 14") it can cut material wider than the saw blade. This model is best suited for larger width cuts, such as shelves. The sliding compound miter saw is very versatile and more complete than the preceding two models. However, it is more expensive than the two other models.

Examples:

DeWALT - 10" (254mm) Double-Bevel Sliding Compound Miter Saw - DW717

Hitachi - 12" Sliding Dual Compound Mitre Saw Featuring New Slide Technology - C12LSH

How to choose the right miter saw for your needs?

A sliding compound miter saw can do all the cuts the other two saws can do, and more. It constitutes the better choice for realizing diverse projects. However, for tasks that involves straight pieces of wood, like moldings, the miter saw or combined miter saw would both be excellent choices. More economical than the sliding saw, they are less cumbersome. Here is a chart where you can see each of the miter saw's types with their features, benefits and uses.

Type of saw	Bevel and miter options	Benefits	Uses
 <p>Miter Saw</p>	<p>Rotates left to right (mitres)</p>	<ul style="list-style-type: none"> • Economical • Easy to use • Light-weight • May be installed up against a wall 	<ul style="list-style-type: none"> • Perpendicular (crosscut) and lateral angle cut (mitre) on average-size stock (up to 5" for a straight perpendicular cut with a 10" blade) • Perfect for trim, mouldings and baseboards
 <p>Compound Miter Saw</p>	<ul style="list-style-type: none"> • Rotates left to right (mitres) • Tilts to one or to both sides (bevel) 	<ul style="list-style-type: none"> • Very polyvalent • Light-weight • Can do compound cuts (mitre and bevel) • Dual-bevel models allow bevel and compound cuts in both directions without having to flip the piece • Can be installed up against a wall 	<ul style="list-style-type: none"> • Perpendicular (crosscut) and lateral angle cut (mitre), bevelled and compound (mitre and bevel) on average-size stock (up to 5" for a straight perpendicular cut with a 10" blade) • Perfect for trim, mouldings, baseboards, planks, Ogee moulding, floor boards
 <p>Sliding Compound Miter Saw</p>	<ul style="list-style-type: none"> • Rotates left to right (miters) • Tilts to one or both sides (bevel) • Slides backwards and forwards 	<ul style="list-style-type: none"> • The most versatile of all models • Can do a compound cut (miter and bevel) • Comes in single bevel and dual bevel models • Dual-bevel models allow bevel and compound cuts in both directions without having to flip the piece • Cuts wider stock 	<ul style="list-style-type: none"> • Perpendicular (crosscut) and lateral angle cut (mitre), beveled and compound (mitre and bevel) on large, wide stock (from 12" to 14" for a straight cut) • Usually requires clearance space to the rear of the machine • Can make grooves • Perfect for trim, molding, baseboards, planks, Ogee molding, shelves, floating floor

Types of cuts

As you have seen above, miter saws are extremely versatile and can do an amazing range of cuts. Here are the most popular cuts you can make with each type of mitre saws.

With a mitre saw, you will be able to make the following cuts:

Straight Cross Cut

- 90° angles, mitre table set at the 0° position
- You can use for moldings on door or window frames or directly on the wall (perfect for decking and framing boards).

Mitre Cross Cut

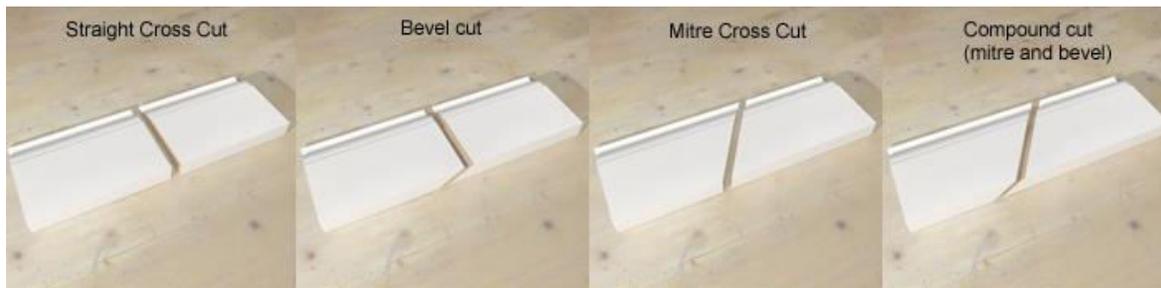
- Blade are set at an angle other than 90°, left or right mitre, mitre table set at some angle other than 0°
- For door and window frame corners (45°)
- To close baseboard corners (45°)
- For creating joints (30° or 45°), small pieces to close ends, inside and outside baseboard corners and chair rail corners (45°)

Bevel cut

- When using the bevel cut, the blade can tilt. On single bevel, the blade will tilt to the left and on dual bevel the blade will tilt to the left or right
- Angled cuts less than 90° (single bevel) and greater than 90° (dual bevel)
- For making joints (30° or 45°), inside and outside corners for baseboards, chair rails (45°)

Compound cut (mitre and bevel)

- This model can do a miter angle and a bevel angle at the same time. Both length and width are cut at angles other than 90°
- Compound cut is perfect for decorative cornice molding, chair rails, rail and stile joints



Features

As they can accomplish a variety of cuts for projects of all levels, miter saws also come with extra features to increase your productivity and make your work easier

- **Blade Size:** The blade is one of the most important features to consider when selecting a miter saw. The most common miter saw sizes are 8", 10", and 12". Keep in mind that larger diameter blades can make longer cuts.
- **Positive Stops:** These features are factory set points that allow precise cuts on specific angles. More positive stops mean less setup time and more time for your actual project
- **Self-Retracting Blade Guards:** These will keep the guard clear of the stock, so that you can have a better view of the cutting line. When the saw is raised, the guard is lowered to completely cover the blade.

- **Electric Brakes:** They reverse the flow of electricity in the saw motor when the trigger is released. Reversing the current stops the blade's momentum quickly. Electric brakes can stop the blade in as little as two seconds, compared to up to twelve seconds for a saw without this feature.
- **Shaft Locks:** The shaft locks stop the shaft and blade, making it much easier to change the blade.
- **Dust Bags:** Dust bags mount directly to the saw and collect sawdust to make you save time on cleansing.
- **Table Extensions:** These parts are mount on the sides of the saw and balance longer stock to give an accurate cut.
- **Sliding Fences:** They give extra support to tall stock during regular mitre cuts and slide out of the way for bevel cuts.
- **Portable Stands:** They give the saw a robust base and increase operational safety in almost any environment (garage, workshop, jobsite)

Blades

As mentioned earlier, the blades are the most important components of the miter saw. However, there are many available blades for different applications and cuts. Here is an overview of the most common [miter saw blades](#) you can get for your miter saw.

- **Steel Blades:** They are inexpensive and work well for cutting softwood but dull quickly in hardwood.
- **High-Speed Steel Blades:** They are harder than steel blades and stay sharper longer.
- **Carbide-Tipped Blades:** They are more expensive than other blades, but they stay sharper much longer than steel or high-speed steel.

Questions?

If you have questions about miter saws and their components, or if you can't find the information that you have been looking for, you can [contact us](#) by phone or email, or come visit us to our hardware and tool shop at the address below. You can also buy your tools online and get fast shipping everywhere in Canada or free in-store pickup at our store location.

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