

How to Mitre Mouldings

About Window and Door Mouldings

Mitre cuts are a basic operation in most moulding installation. Mitre cuts are typically 45 degree angles, however many installations require minor adjustments to achieve a perfect fit. Mitre cut procedures are also discussed in other documents in this series that discuss door and window moulding installations, crown and ceiling mouldings, etc.

Tools for Mitred Cuts

Making accurate mitre cuts requires a manual or powered mitre saw or chop saw.

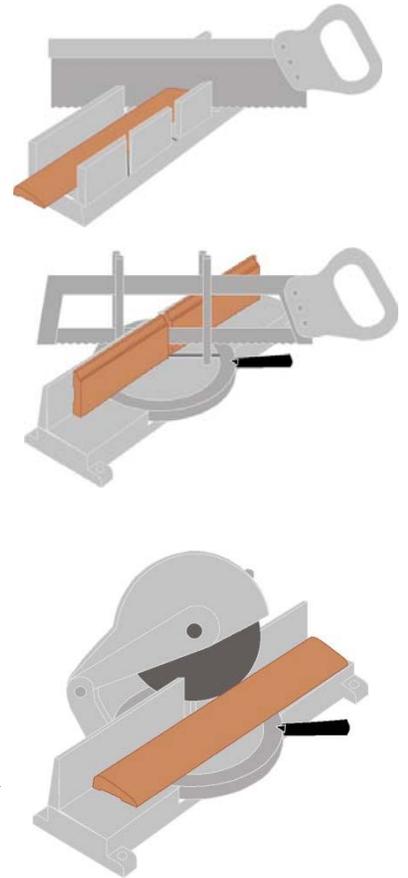
A simple mitre box and mitre saw is effective and inexpensive, however you can only make cuts that are exactly 90 or 45 degrees.

Hand operated mitre saws are also available that allow you to make fine adjustments to the angle of your cuts. They are very useful for cutting smaller moulding and trim.

If you have a large moulding installation project, a powered mitre saw or chop saw fitted with a crosscut blade is highly recommended. A powered miter saw will provide far better results than a manual miter box and saw. A powered saw allows you to make fine adjustment and tapered cuts that are often necessary for perfect miter joints. It is also possible rent power miter saws by the day.

If you are not experienced using a particular power tool, obtain and read the tool's operator manual (often available from the manufacturers website) or consult a book on using such tools. If renting a tool, ask the dealer to explain safe operating procedures.

Safety: Always wear eye protection when using hand or power tools, especially while cutting, nailing, chiseling or demolition. Keep your work area safe at all times. To prevent injury, bend over or pull nails from any moulding that has been removed.



Preparing to Install Mouldings

The tools you need to install mouldings vary depending on the type of installation and finish wood treatment.

Tools & Equipment Required:

- **Finish hammer**
- **Hand plane:** for trimming jamb extensions
- **Measuring tape**
- **Carpenter's glue**
- **Sanding Block and 120-grit sandpaper**
- **Jigsaw:** for notching stool and profiling apron.
- **Combination Square:** for marking casing, stool, and apron
- **Compass:** for transferring marks and reveal lines
- **Pencil**
- **Utility knife, and Chisel:** for trimming drywall, adjusting fit of trim
- **Putty Knife**
- **Nail set:** to recess heads of hand-driven nails
- **Miter saw equipped with Cross-cut or combination blade:** for cutting trim pieces to length
- **Drill with 1/16-inch-diameter bit:** for making pilot holes

Optional:

- **Pneumatic nailer:** for attaching casing
- **Random-orbit sander**
- **Router :** for making stool profile (if making your own)
- **Table saw** for cutting rabbet in bottom of stool (if making your own)

Removing Existing Moulding

Existing casings will often have built-up paint or caulking where the casing meets the wall surface, and where the casing meets the door jamb or other trim pieces. If so, use a utility knife to score these seams.

Use a pry bar or sturdy putty knife to separate the casing from the wall material. Then use a pry bar and a hammer to carefully separate the casing from the wall surface (place a piece of scrap wood or similar material on the wall material to avoid damage from your tools).

On doors and windows with stools, aprons, blocks or other trim, remove casings first, then aprons, then stools or other trim pieces.

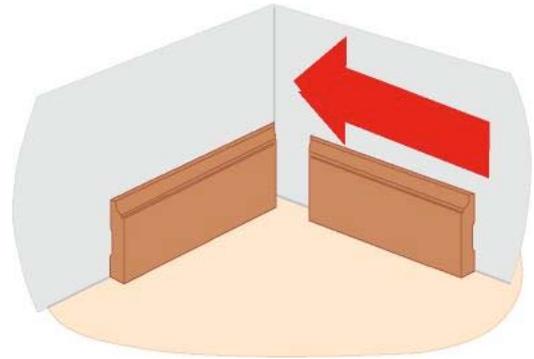
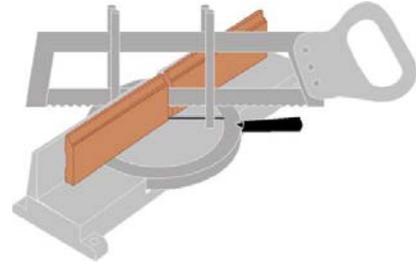
Basic Mitre Cuts

Inside and Outside Base Corners

One common place you may use basic mitre cuts are the inside and outside corners of the room. If the corners of the room form a perfect 90 degree angle, you might try 45 degree mitre cuts and slide them into the corner as shown. If you have an adjustable mitre saw, you might try adjusting the cutting angle slightly on one of the pieces to achieve a tighter fit.

Keep a sample piece of the moulding handy for test fitting. Be sure to press the moulding tightly against the wall when test fitting to simulate how the moulding may fit when nailed.

When measuring the length of your cuts, determine the actual length of the finished cut, making allowances for the angled portion left by the mitre cut.



Coping a Joint

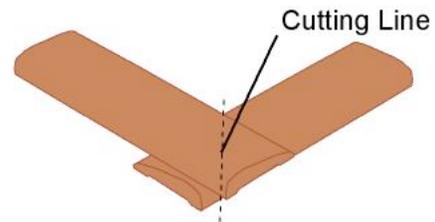
To make a tighter, more full proof joint, read the document in this series titled *How to Cope Mouldings*.

Casings

Casings are mouldings that are often used to trim windows, doors, and other wall openings. Mitred cuts on casings will often be determined by the opening they surround. (See the document in this series titled *Installing Door and Window Mouldings*.) In other situations the following procedures may be used to create square mitres.

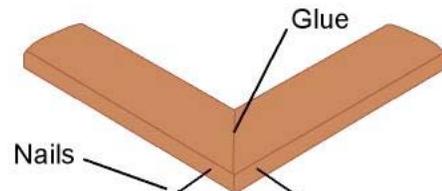
Overlap Casings

One way to create an accurately mitred corner is to overlap the casings and mark the cutting line as indicated below. Be sure to extend the line to both pieces, then use them as a guide for cutting on the mitre saw.



Tip: If you don't have a mitre saw available, you can nail the casings together at the desired angle, then cut through both pieces at the cutting line. The remaining pieces will fit together correctly. The nail holes can be filled and sanded smooth during finishing.

When installing casings, glue each face of the casing as shown, and use finishing nails to keep them from separating.

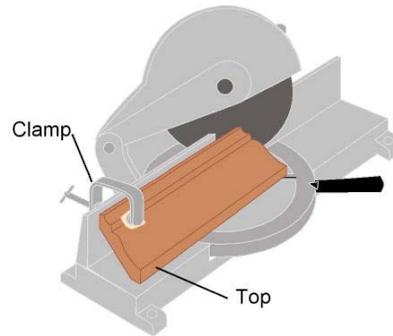
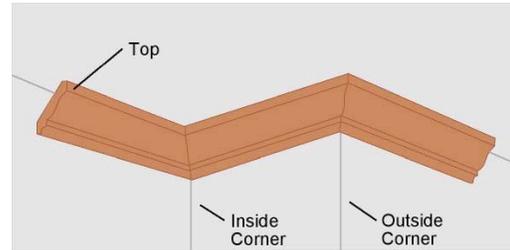


Crowns

Crowns mouldings used on ceilings can be challenging. They are often larger than other mouldings, and are designed to be installed at a 45 degree angle.

A power mitre saw is very helpful when installing crowns. Make your measurements along the bottom of the crown. Then cut your crowns with the top down against the base of the mitre saw as shown.

For more information, refer to other documents in this series regarding the installation of crown and ceiling mouldings.

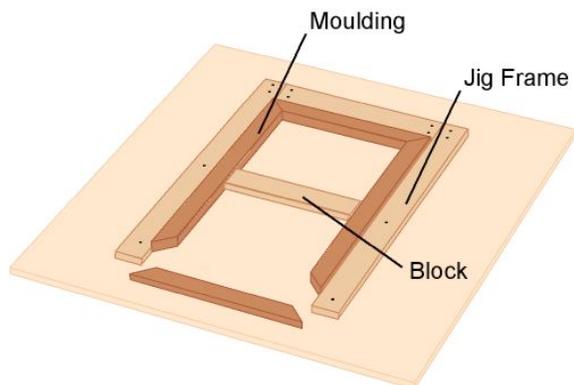
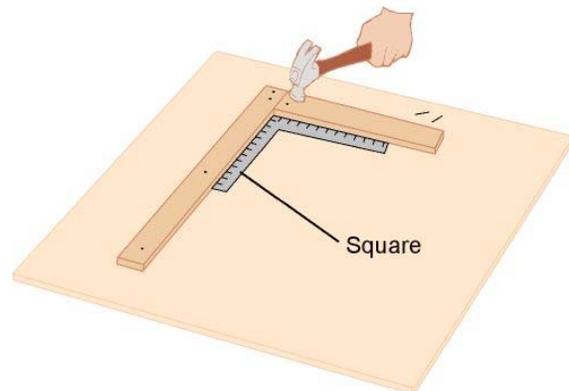


Picture Frame Mouldings

Some trim projects require a series of same size frames. One example is a repetitive series of *picture frame mouldings* or casings used to decorate wall panels. Such projects benefit from using a Jig.

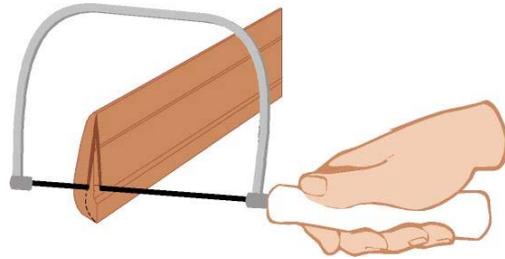
Construct a jig by using straight wood stock to form a frame. Square the wood frame as shown and nail to plywood or similar material. Cut the frame so the inside dimension is equal to the outside dimension of your picture frames.

To use the jig, place moulding pieces into the jig and mark for cutting. Cut the pieces using a mitre saw then place them back into the jig for assembly. Use a block cut to length to keep the moulding firmly against the side of the frame. Glue and nail as required.



Additional Installation Tips

Tip: Back-cutting your mouldings slightly will often result in a tighter fit – especially on inside corners where wall surfacing materials tend to build up. Use a coping saw and remove some of the material from the back of the moulding as shown. Do not cut past the cut finished edge of the mitre cut.



Tip: Make your cuts. Make a list of all the head and side lengths (plus 10%) that you will need to complete your project. Plan your cuts to maximize the best use of 8', 10' or 12' foot lengths that you are likely to buy.

Tip: To prevent splitting in this usually thin edge of the casing keep your nails back at least one inch from the ends of the molding.