

# **How to Cut and Install Moulding**

#### Start with the Right Tools for the Job

Some of the tools needed are:

- Safety glasses
- Power miter saw We recommend using carbide saw blade with 80 teeth or more.
- Miter box and hand saw – They have limited angle adjustment (not recommended for crown).



- Coping saw Only needed if you choose the coping technique to install the moulding.
- Angle gage To create the correct miter, you must determine the wall corner angle.
- Glue To adhere the miter joints (we strongly recommend gluing all joints).
- Hammer & nails or a pneumatic nail gun.
- Other tools may include a tape measure, pencil, C-clamp, putty and caulk.

## Determine the Amount of Moulding to Buy

You must decide where the mouldings are to be used and measure the distances. Make a list of specific lengths and round your measurements up to the next largest foot to allow for cutting and trimming.



#### Wall Angles

It will also benefit you to measure the wall angles on each corner. This will help you calculate the correct miter angle. NOTE: It is not uncommon for corner angles in most homes to be off as much as 3°. If you were installing 5" crown moulding the 3° difference would result in a 3/8" gap in the miter joint. To help you calculate the proper angle we have an angle calculator listed on our web site.

#### **Calibrate Your Saw**

The same principle  $3^{\circ}$  scenario listed above applies to the saw. Make sure the saw is square and the table angle gage is accurate.

# **Trim Positions** –

The way the trim sets on the saw table and fence.

**Vertical position** – back of trim is against the fence.

Horizontal position – back of trim is resting on saw table.

**Compound position** – back of trim is suspended between saw fence and saw table.





**Left and Right hand positioning** – the side of the trim you are cutting is as important as its position on the saw table. The positions are illustrated above.

## **Vertical Position Miters**

Use this technique for cutting baseboard, chair rail, quarter round, and splice miters. Inside corners - A left hand inside corner is shown in the photo.

Step 1 - To accomplish this, place the trim on the saw table in the left hand vertical position and rotate the angle gage "clock wise" to 45°, or the desired angle setting, and make the cut. Step 2 - To cut the mating piece simply rotate the table angle



gage to the opposite 45° or desired angle, and place the next piece of trim on the saw table in the **right hand verti**cal position and cut the trim.

#### **Outside Corners**

A Right Hand outside corner is shown in the photo. Step 1 - To complete this, place the trim on the saw table in the right hand vertical position and rotate the angle gage "clock wise" to 45°, or preferred angle setting, and make the cut. Step 2 - To cut the mating piece simply rotate the table angle gage to the opposite 45° or desired angle, and place the next piece of trim on the saw table in the left hand vertical position.



# **Horizontal Position Miters**

Use this technique for cutting window and door casings. Step 1 - A left hand miter is shown in the photo to the right. To get the setup in the photo, adjust the saw table angle to the "clock wise" 45° or predetermined angle. Then lay the trim on the table in the left hand horizontal position and proceed to cut.

**Step 2** - To cut the mating piece simply rotate the table angle to the opposite 45° or preferred angle, and place the next piece of trim on the saw table in the **right hand horizontal position**. After the cut is made the miter joints are ready for assembling.



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#### **Compound Position Miters**

Use this technique for cutting Crown moulding. This is the most complicated of all the mitering cuts. Note: When cutting Crown Mouldings in the compound position, remember "upside down & backwards". This term is used because the

"TOP" of the trim that is positioned against the ceiling after installation rests on the saw table during the mitering process, and the "BACK" of the trim that is placed against the wall, after installation, is set against the fence during the cutting procedure.



#### **Compound Inside Corner Miters**

A Left Hand inside corner miter is illustrated in this photo. Step 1 - Place the top of the profile against the saw table and the back of the profile against the fence in a left hand compound position. Then adjust the table angle gage "clock wise" to 45° or calculated angle, and cut.



**Step 2** - Place the top of the profile against the saw table and the back of the profile against the fence in a **right hand compound position**. Then move the table angle gage the opposite calculated angle, and cut.

#### **Compound Outside Corner Miters**

A Left Hand outside corner miter is shown in this photo. Step 1 - The trim should lie on the saw table in a left hand compound position. The saw is to be adjusted "counter clock wise" to the calculated angle before cutting. Step 2 – Put the mating piece of trim on the saw in the right hand compound position. Then move the table angle gage to the opposite calculated angle, and cut. The miter joint is ready to be put together.



## **Splice Miters**

This technique is used to join mouldings together in a linear run or when a wall is longer than the trim you are installing. Most

splice cuts are made in the vertical position. In the photo below, of a splice miter, note the only change made in producing the joint is the right hand & left hand positions. The saw angle should remain at the same 45° setting.



#### **Return Miters**

This technique is utilized when moulding ends with an exposed, unfinished end that would require finishing "paint, stain, etc." This miter joint will create a finished edge. **Step 1** – To produce this miter, cut the trim as though you were turning an outside corner (45° saw setting). **Step 2** – Rotate the saw to the opposite 45° and cut a short piece to mate to the first cut. Glue miter joint together before attaching trim to wall. See photo below.





# Coping Joints

Coping is simply transferring the contour "profile" of one piece of trim to the end of another piece of trim, then cutting the profile line so that, when finished, the second piece of trim will mate with the first with a nice joint. **Step 1** – Cut the first piece of trim to length and position it on the wall. Use straight cuts, no angles.

**Step 2** – To create the profile line, cut the second piece of moulding at a 45° as though you were cutting an

inside corner. **Step 3** – Following the profile line as a guide cut the trim with a coping saw. **Step 4** – The moulding should be ready for installation. See photos.





#### **Gluing Miter Joints**

We strongly recommend gluing all miter joints on PVC or styrene mouldings using a quality instant glue and/or PVC cement. It may seem unconventional, but the benefits out weigh the inconvenience. When assembling splice and return miters try gluing the mouldings together before installation. This will allow you to fit the joints uninhibited, and fasten the trim to the wall as one unit. Fitting these joint on the wall can be difficult and possibly jeopardize the integrity of the miter joint.

#### **Fastening Moulding to the Wall**

Polystyrene and PVC trim can be nailed with finishing nails and/or glued. Our recommendations for the nails are paneling, finishing, or pneumatic finish nails. For the glue we recommend PL Glues/PC – 200, 300, 400/LIQUID NAILS applied according to manufacturer's directions. Glue alone is not advised for crown mouldings.

# **Helpful Hints**

- Chair Rails can be installed 32" to 36" from the floor.
- Base, shoe, and quarter rounds should be the last mouldings to be installed.
- Use any brand of spray furniture polish on saw blade as a lubricant for easier cutting.
- Use Rosettes and Plinth blocks at the corners of windows and doors to eliminate the mitering process. (see fig 1)
- Royal Mouldings also has a line of products to aid in crown moulding installation called Perfect Corners that eliminate the need for miters.
- After installation is complete, caulk and/or putty all gaps and nail holes.

#### **Maintenance and Repainting**

To clean Clearwood<sup>®</sup> PS, gently wipe with a damp cloth. To clean other finished mouldings, use a mild detergent soap.

To re-paint white finished mouldings, lightly scuff, sand with 220 grit sandpaper and apply latex or oil based paint as directed by paint manufacturer.



Fig. 1

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