Crown / Cove Mouldings

PRODUCTS

COMPOUND APPLICATION

CROWN MOULDING SPRING ANGLE

JIG ASSEMBLY / MITER CUTS
Crown or Ceiling Moulding

- Available in different widths, profiles, wood species, mdf and focal point.
- May be applied in layers (compound) to create a wider appearance.
- Material and labor are more costly than base or casing.
Compound Crown Moulding

1 x 3 Pine

1/4 R cove

4-1/4" fj pine crown moulding

1 x 4 Pine

1/4 R cove

Scale: 1" to 1'

DETAIL B
The Compound Angle

• Because it is installed at a tilt called (spring angle), miters must be cut as a compound miter.

• Angles must be precise or the miters will not close properly.
Calculate Crown Miter Angles

- Crown moulding is therotically milled to a 38° tilt.
- Cove moulding to 45°
- These degrees are sometimes off.
- It is best to physically lay the moulding on a board with 90° corners, mark the position, measure the adjacent and opposite sides then calculate the actual tilt degrees.
Hold a small piece of crown as it would fit at the ceiling / wall on a square corner & mark the angle.
Measure the o & a sides accurately. Calculate the angle
Why Use a Jig

• The saw compound crown miter settings work only if the crown is milled to 38°
• Tilting the miter saw is slow, difficult to set and hard to cut to your measured marks.
• The crown jig is at the proper degree.
• The moulding is cut upside down so the measured marks are clearly visible.
• The moulding can be held firmly and safely.
• Regular vertical degree settings are used.
Jig Assembly

• Cut the angle block first marked with the saw set at the correct degree setting.
• Mark with pencil on the saw base the (a) side of the block.
• Rotate the piece you are cutting angle blocks from 90° and slide the (a) side to the pencil mark and cut the second block. Cut 5 to 6
• ¾” pine works well for these blocks.
More Jig Assembly

• Glue the angle blocks spaced (a side vertical) to a base 4” to 5” wide x 18” to 24” long. ¾” MDF or particle board works well.
• You may pin nail these except for the ends.
• Make sure the angle blocks are straight along the fence edge.
• After 10 minutes glue a piece of ¼” mdf to the blocks. You may pin nail except for the ends.
• Set a piece of crown upside down against the ¼” fence and mark for a stop.
Measure opposite and adjacent sides

\[
\frac{O}{a} = \tan \tan^{-1} = \text{degrees spring angle}
\]

set miter saw and cut 5 to 6 jig blocks

Jig Block

spring angle

adjacent

90°

3/4" Pine or mdf

1/4" mdf

Jig block

3/4" x 4" x 24" mdf

stop
Crown Jig Check

Top edge of crown

Cut opposing $45^\circ$ degree angles on 12" pieces of crown. Hold them together with the miters tight. Have your lab partner place a square in the inside upper corner. Should be $90^\circ$
Crown Miter Cuts

• All of the miter cuts will be the same as the base.
• Cope inside corners
• 45° 90 degree corners
• 22.5° 45 degree corners.
• Splice and end the moulding same as except the crown will only return 90° to end
Moulding should rest flat

Slightly open

Acts as wall

Acts as ceiling

Tight
Coped joint
Bad cope joint

\( \frac{3}{4} \) radius corner
Product Options

• Focal Point manufactures a complete line of decorative trim mouldings and medallions made of a dense foam core & polyester skin.
• Some of the crown mouldings are too wide to use a jig.
• Sometimes you may need to tilt to achieve the compound miter cuts.
Focal Point

Crowns
Light fixture medallions
Stair brackets