

## ITEMS YOU WILL NEED:

- Square
- Jig saw with 45° cutting angle and fine tooth blade
- Rasp
- Round file
- Small planer
- Adhesive
- Caulk gun
- Measuring tape
- Painter's tape
- Safety glasses

## Installing a beam top and a beam end cap

**Step 1** – Measure your beam and beam top to the length required; using a square, mark beam on sides and bottom and beam top at the desired cut length.



**Step 2** - Square beam using small cut blocks of polyurethane or other material along the length of the beam. This will ensure proper alignment of the beam top.



**Step 3** – Using jigsaw with fine tooth blade, cut beam and beam top to marked length (cutting all sides of the beam).

**Note:** To ensure a straight cut, you can use the square as a guide.



**Step 4** – Turn beam with open cavity facing upward and place the beam top on the beam to ensure the beam top and beam are at the same length.

**Note:** If any minor trimming is required on either beam or beam top, this should be done now.



**Step 5** - After beam and beam top have been cut, tape in several places along the length of the beam or clamp beam top to the open beam.

**Step 6** – Place the smooth side of the beam end cap against the end of the beam – determine which portion of the beam end cap façade you want to capture (based on your preference).



**Step 7** – Holding the smooth side of the beam end cap to the cut beam end and beam top, trace the outline of the beam and beam top onto the end cap.

**Note:** Designate the beam end cap as top and bottom with marks (B – bottom), (T – top).



**Step 8** – Using the jigsaw, cut beam end cap along the marked line on the smooth side of the beam end cap.

**Note:** Round the edges where marked.



**Step 9** – After the beam end cap has been cut, move the jigsaw bevel gage to a 45° angle. You are going to miter cut the beam end cap with grain side up (make sure the miter is placed at the correct angle). Begin cutting by following the grain profile, using the painted edge as your guide



**Step 10** – Now cut the beam top to fit the beam end cap at the same miter angle. Cut at a slight angle to follow the curve of the beam top.

**Note:** Be careful when you reach the edge of the beam top – extra material can be trimmed as needed.



**Step 11** – Now miter the beam to accept the end cap. With the open side facing you and using the same miter angle as the beam end cap, begin cutting the beam side.



**Step 12** - Rotate the beam so the open end is sitting flat on a work surface. Start cutting the bottom of the beam at a slight angle until you can get a straight 45° angle.



**Step 13** – Turn the beam with open side facing away from you and begin cutting the final side.



**Step 16** – Determine where the beam top and beam must be filed for beam end cap to fit securely. Using a rasp and/or file, shave the interior of the beam miter along the bottom, corners and sides of the beam. Do the same for the beam top.



**Step 14** - To clean up corners on the bottoms of the beam, change direction of the miter to the opposite 45° angle and begin cutting around the beam bottom. Turn the beam as you go around it.



**Step 17** – Again dry fit the beam end cap to the beam and beam top. Determine where you need to sand the beam end cap to achieve a finish fit. Starting with grain side up, use a rasp and/or file to shave the mitered edges on the beam end cap where necessary.



**Step 15** – Place beam top back onto the beam (tape in place) and dry fit the cut beam end cap to the beam.



Again, fit beam end cap to beam and beam top and continue to sand as needed for final fit.

**(Note:** Once you are satisfied with your final fit, file the edges of the beam end cap to flow seamlessly into the beam and beam top).

Repeat steps 5 – 17 for the other end.

**Step 18** – Now place a thin bead of adhesive (PL Premium®) along the edges of the beam and place beam top on beam. Tape in place.



**Step 19** - Now place a thin bead of adhesive (PL Premium®) along the mitered edge of the beam end cap and beam, wipe away any squeeze out of the adhesive.



**Step 20** - Using painters tape, tape the beam end cap to the beam to secure beam end cap until adhesive dries. Once the adhesive dries (use recommended drying time specified by adhesive manufacturer), your beam is ready to paint or stain and then install.



**Tip:** If desired, after the adhesive dries, you can also use a finish nail gun to ensure beam end and beam top are secured (use small finishing nails with proper PSI settings based on the nail gun used).

