



# How to Make a Dowel Joint - Part 2

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If you have followed How to Make a Dowel Joint part 1, you are ready to drill the hole and assemble the joint.

The two key steps are drilling the holes and the assembly.

### STEP 1: Drilling the holes

Start by marking one side of the workpieces and the doweling jig so as to avoid confusion.

Mark the two workpieces as A and B.

Here, the two workpieces and the doweling jig each measure a thickness just over 2.5 cms.

Take half the thickness of a workpiece and add it to the full thickness of the doweling jig, here measuring a total of 4 cms.

Measure the same distance from the tip of the drill bit and apply a masking tape to help gauge the depth of the dowel holes as you drill them.

Position the doweling jig on top of one workpiece with all edges aligned.

Clamp both pieces with the doweling jig sitting on top.

Hold the drill at a right angle and drill into the workpiece through the holes of the doweling jig.

Stop before the masking tape reaches the mouth of the hole.

Use a depth gauge to check if you have drilled deep enough.

Now that the horizontal piece of the joint is ready, you can drill dowel holes into the endgrain of the vertical piece, here marked as A.

In order for the doweling jig to stay in place on the end grain of the workpiece, hammer in two nails on each of the two lines marking the thickness of the workpieces.

Clamp the workpiece with the side which needs to be drilled facing up and place the doweling jig on top of it.

Use a clamp to ensure that the jig stays in place.

Hold the drill at a right angle and drill into the workpiece through the holes of the doweling jig as before.

## STEP 2: Assembly

Now that the dowel holes are ready, go ahead and fit the dowels.

Use a dowel that's slightly thicker than the drill bit that you use to create the dowel holes.

As the fit is tight, you will need to plane the dowel down to the right circumference.

Use the workpiece to check the size of the dowel as you plane it.

As the dowel holes have been drilled to a depth of 2 cms, you will need to measure and mark 4 cms for the dowel.

Mark another 4 cms for the second dowel.

Saw along the 4cm marks to create the two dowels that will be used to hold the joint in place.

Use a file to round one end of the dowels.

This helps it enter the dowel holes easily and allows space for the adhesive that will be applied.

Apply adhesive on one end of the first dowel Fit the dowel into the dowel hole and use a mallet to tap it in till it has covered the full depth.

Use a rag to wipe off the adhesive.

Do the same for the second dowel.

Measure the protruding section of the dowel and make sure it fits well into the dowel holes of the other workpiece.

If the dowels are longer than the depth of the dowel holes, as in this case, turn the piece to the side and use a saw to reduce it down to size.

Check the length once more.

Use a file to round the loose end of the dowels Apply adhesive on the dowels and the parts of the workpiece that will make contact in the joint.

Use a mallet to tap the loose ends of the dowels into the dowel holes of the other workpiece.

Wipe the squeezed out adhesive with a rag.

Use a try-square to make sure the pieces join at a right angle.

Apply saw dust along the edges of the joint.

You now know how to make a dowel joint.

