



How to Make a Full Housing Joint - Part 1

In this video you will learn how to make a Full Housing Joint.

The Full Housing Joint connects two workpieces at a right angle by inserting the end of one, like a tenon, into a trench cut across the full width of the other.

It's commonly used horizontally to support shelves or vertically to hold partitions.

The tools that you will need are: A Pencil, a Try Square, a Marking Gauge, a Cross-cut Saw, Bench Chisels, a Mallet, a T-Bar Clamp, a Bench Plane and a Vice.

The materials you will need are: Two pieces of wood, scrap wood, adhesive and sawdust.

Step 1 - Marking.

The layout for the housing follows the width of the tenon piece that will be inserted into it.

Place the housing piece flat on the workbench and position the Tenon piece vertically.

Use a marking knife and straightedge to mark the edges of the tenon piece.

Highlight the lines with a pencil.

Set a marking gauge to the desired depth of the housing.

Here we have used a 1 cm depth that reaches halfway into the board.

The rule of thumb, however, advises against a depth of more than one third of the thickness of the housing piece.

Mark the depth on both sides and highlight with a pencil.

Use a marking knife and try square to connect the lines marking the depth to the ones marking the width of the Housing.

Highlight the lines with a pencil.

Step 2 - Sawing.

Fix the workpiece on the Vice with the housing side up.

Start sawing along the lines marking the width of the channel till you are just short of the depth line.

Plan your cuts slightly into the waste wood to leave some material for finishing.

Step 3 - Chiseling.

Once you have sawed both lines, use a bevel edge chisel to to make a series of cuts along the waste wood as shown here.

Make sure you don't cut too deep.

Hold the chisel horizontally with it's bevel down and the tip of the blade positioned above the depth line.

Strike the chisel with a Mallet all the way through the trench to the other side, clearing away the waste wood.

Continue clearing the path using a paring action through from one end to the other.

Use a wider bench chisel to flatten the walls of the housing.

Turn the piece around and pare through from the other side.

Trim the sides of the housing with the wide chisel, ensuring that they are smooth.

Check if the housing is ready for the tenon piece and if not, you will have to continue trimming until you have a fit.

Step 4 - Assembly.

When the dimensions of the housing are right, use a mallet to drive the tenon piece into the housing.

Use a try square to make sure that the pieces join at ninety degrees.

Sometimes a a lateral strike of the mallet will help it into the right angle.

For the remaining steps, continue watching [How to Make a Full Housing Joint part 2](#).

Watch the video [How to Make a Full Housing Joint part 2](#).

<https://www.sikana.tv/en/diy/woodworking/how-to-make-a-full-housing-joint-part-1>