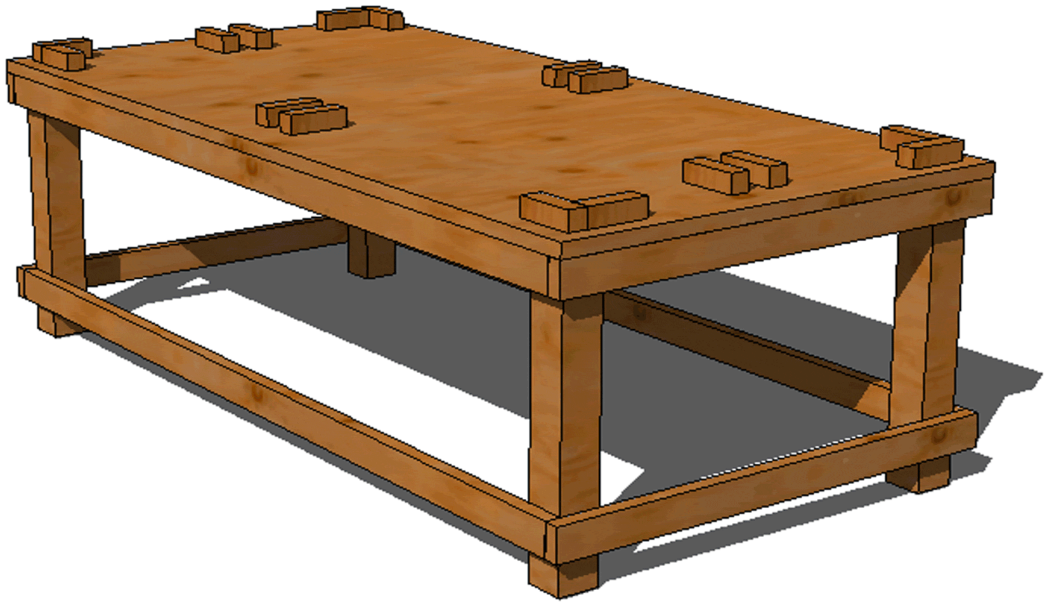
Wall Panel Jig



Provided by Haunt Design Kit.com

The purpose of a jig...

This guide was created in order to help readers understand the importance of a “jig” and how to build one. So what is a jig? In wood or metal working, a jig is a custom tool made to direct the motion or usage of another tool. A jig's primary purpose is to provide repeatability, accuracy, and interchangeability in the manufacturing of items. For the purposes of this guide, we’re talking about wall panels used in haunted attractions.

What does this mean for my haunted house?

Using a jig to construct your wall panels will have several benefits to your business. First, you will save precious time by being able to build several wall panels in just minutes and hours, compared to hours and days without one. This means more time painting, detailing and doing all the fun stuff haunted house owners like to do. We’ve seen a wall panel fully built in less than TWO MINUTES! Time is money afterall!

Second is accuracy. Using a jig will insure that every wall panel made will be exactly the same size and construct. This accuracy will actually add strength to yout attraction once it’s all assembled.

Third...manpower! A lot of haunts I see still build their wall panels flat on the ground (which this alone can lead to inaccurate measurements and “wavy walls”) which can wreak havoc on your labor. Using a jig to raise the panel construction off the floor to a comfortable table height will reduce the amount physical stress on your build crew. This leads to fewer injuries, fewer breaks (good for business, right?) and a happier more productive crew.

Costs of a jig?

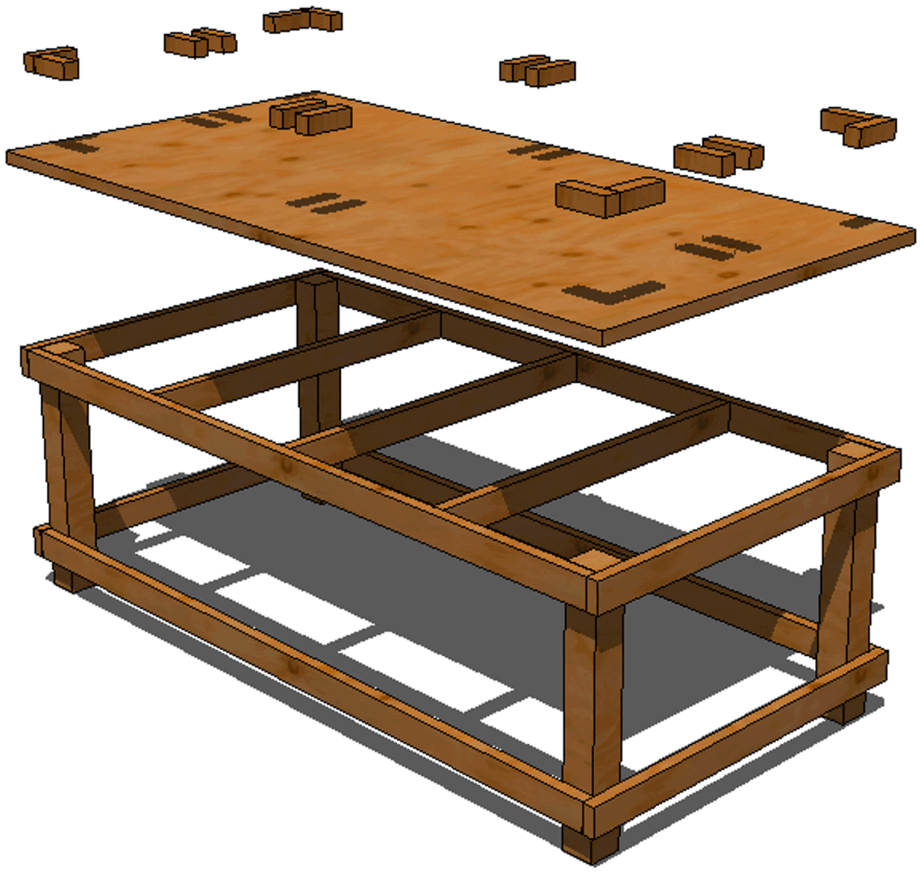
So, how much does it cost to build a wall panel jig? It’s really hard to get into specifics of costs because that totally depends on the local price of wood where you are, the quality of jig you’d want to achieve, etc. etc. So, it’s hard to say just how much building a jig would cost...but we can guess using this formula: COST OF MATERIALS + 1 HOUR OF LABOR = COST OF JIG

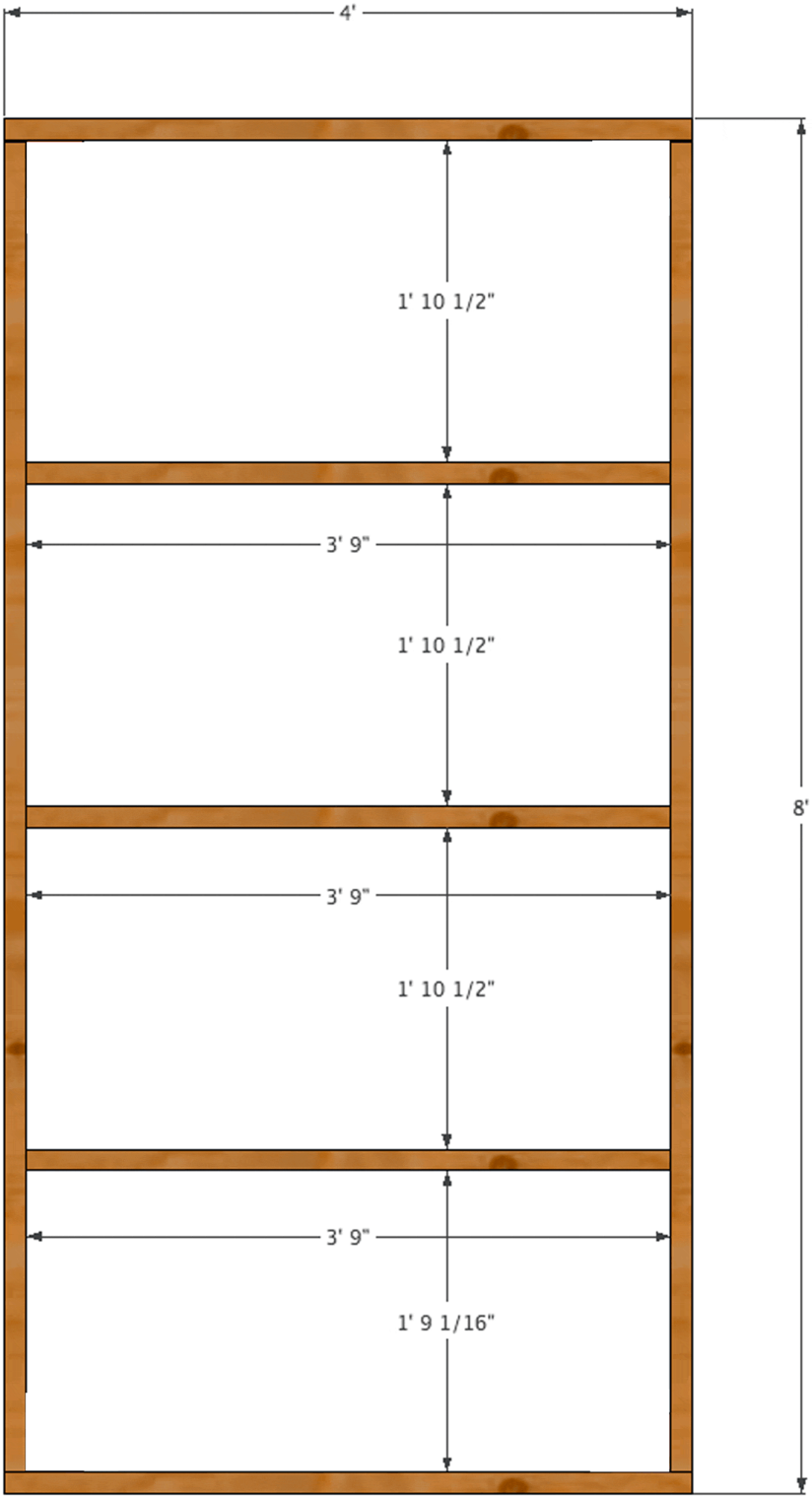
So let’s assume your materials cost is $75. You pay labor at $9.00/hour. You jig cost would be $84.00...that would be a good estimate to go buy. You can certainly do it cheaper (not recommended) and you can make as expensive as you like, the choice is yours.

Materials:

(2) 4″x4″x96″
(9) 2″x4″x96″
(1) 4′x8′ Plywood/OSB; 3/4″-1″ thickness is good.
Plenty of screws
Plenty of scrap 2x4's or 2x2's

**All materials can vary depending on the quality of jig you want to make. This is a basic list.





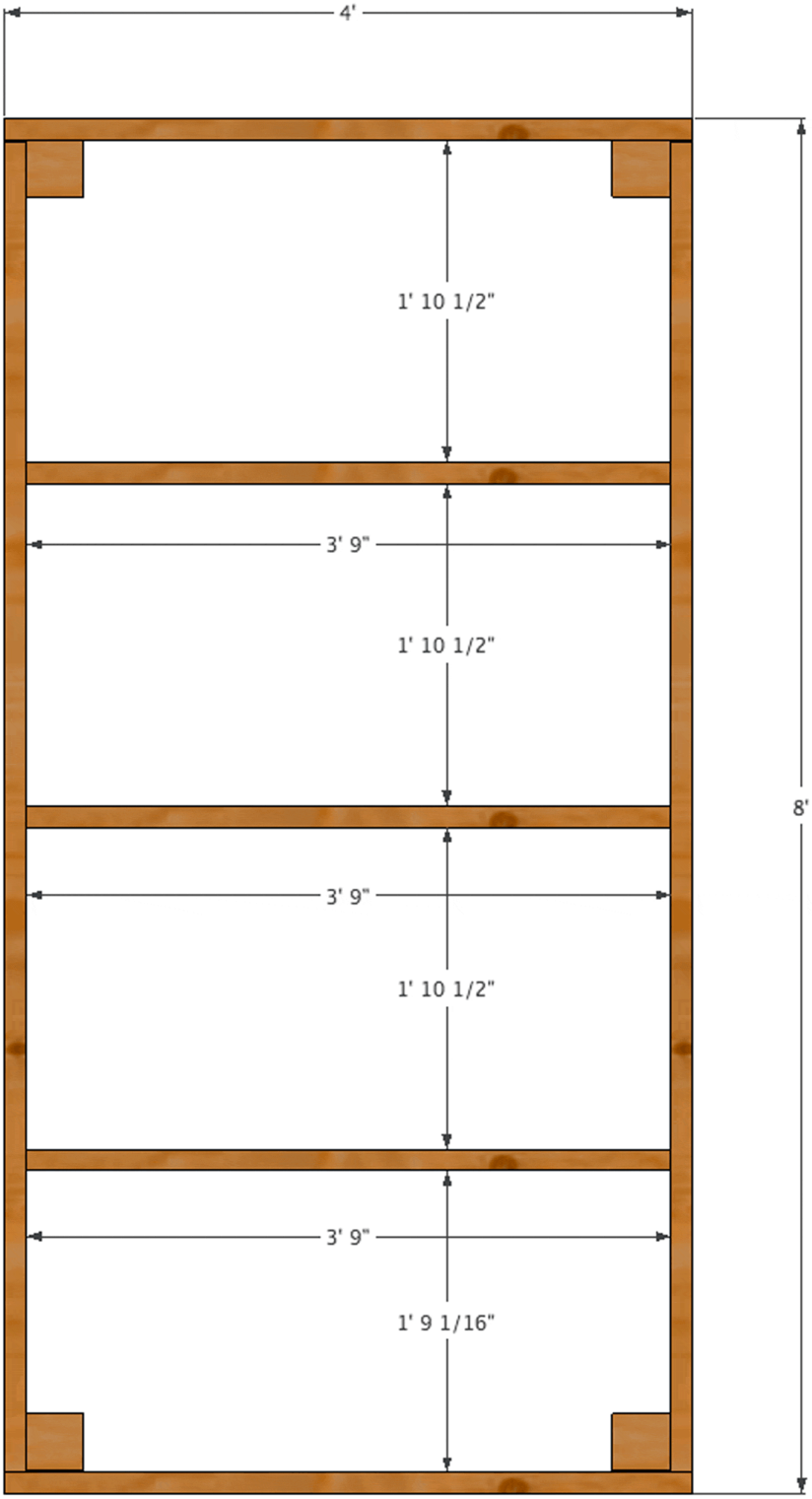
Step One:

- Build a standard 4'x8' wall panel as accuratley as possible.
  - -Cut one 2x4 exactly in half making two pieces exactly 4' wide.
  - -Cut 3" off two 2x4's, this will be the side supports.

- Make sure that all your corners are perfectly square and that the wall is 48"x96".

- Add three horizontal supports evenly spaced for added support.

- Use the diagram on the left for reference.



Step Two:

- Cut the 4”x4”x96” in half making four pieces. These will serve as the legs to your jig.

- Here you can get creative and make the jig as short as you want. A 4’ tall jig may be to tall for some, cutting the legs down to 36” may be more suitable.

- Attach the legs to the INSIDE corners of your frame as per the diagram on the left.

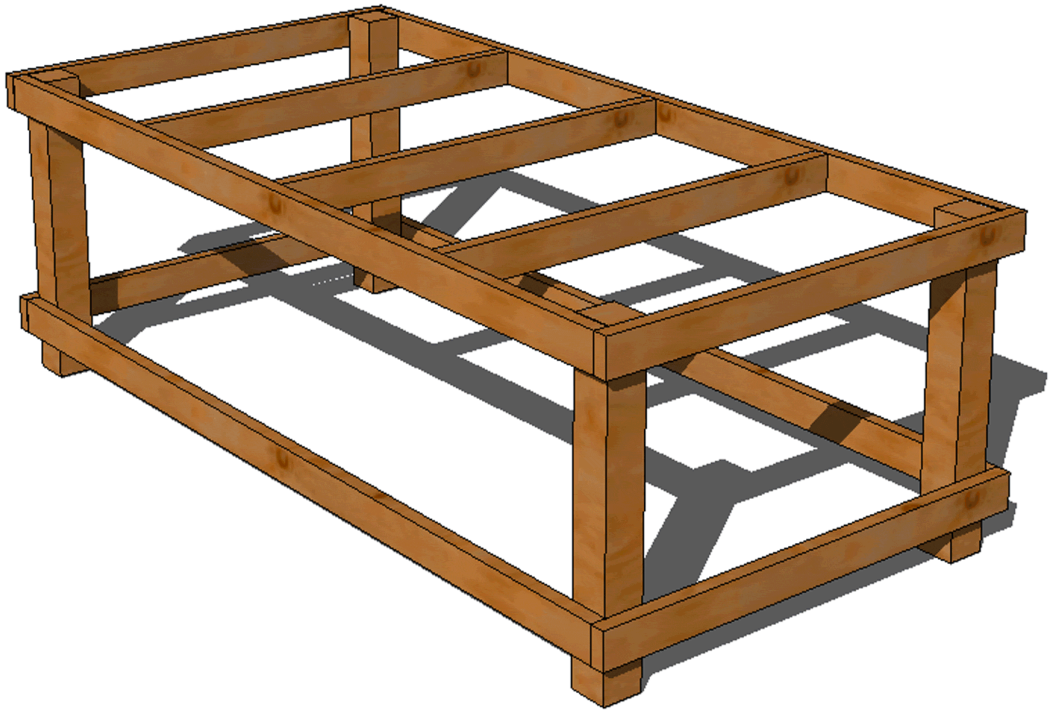
Step Three:

- Take a 2″x4″x96″ and cut it exactly in half making two 4′ pieces.

- Take two 2″x4″x96″s and cut 3″ off each piece.

- Attach them to the OUTSIDE of the legs, 5″-6″ above the floor. This will give added support to the legs of your jig.

- See diagram below.



Step Four:

- Attach your 4'x'8 plywood/OSB sheet to the top of the jig. Screw the panel to the 2x4 frame, middle supports and legs (if needed).

- Make sure to keep your corners perfectly squared as you attach the panel.

- See diagram below.

Step Five:

- Use scrap 2x4's or 2x2's to create "guides" for your jig.

- Attach the pieces in such a way that they would fit "inside" of a wall panel.

- It may help to use other pieces of 2x4's for spacing considerations.

- The diagram on the left shows how to create guides for wall panels with vertical OR horizontal supports.

- DO NOT make the guides to close together as you won't be able to lift a wall panel off of it. Keep about 2"-2.5" of spacing between the guides.

Diagram shows how jig is used to create a wall panel with verticle support beam.
This shows how the scrap wood is used to guide the wood into place.

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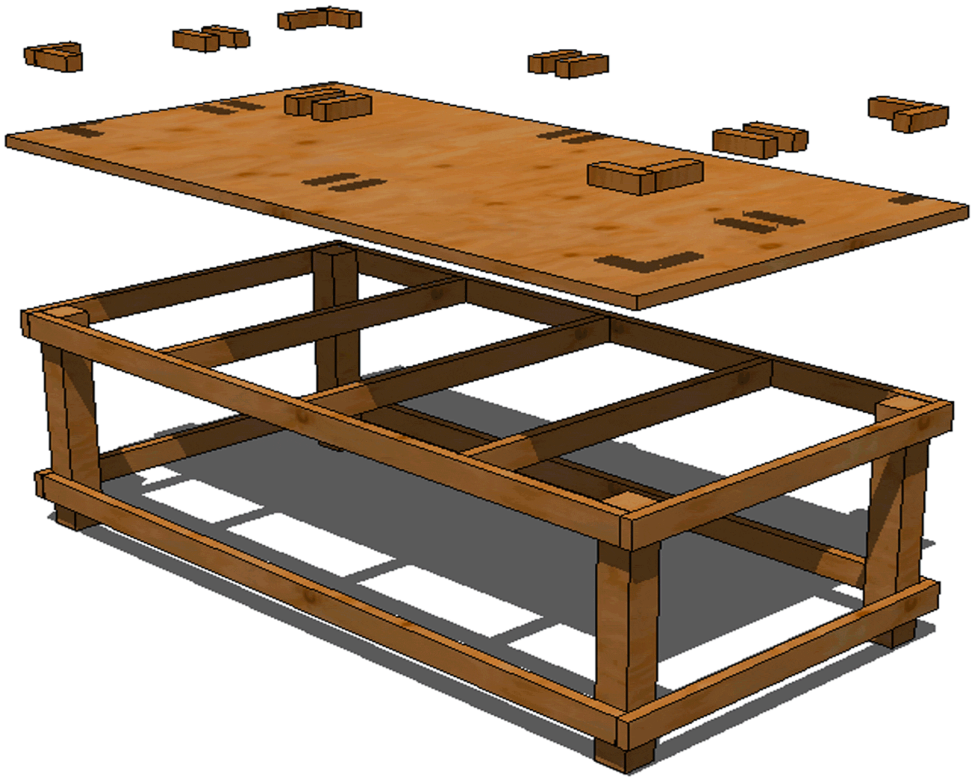

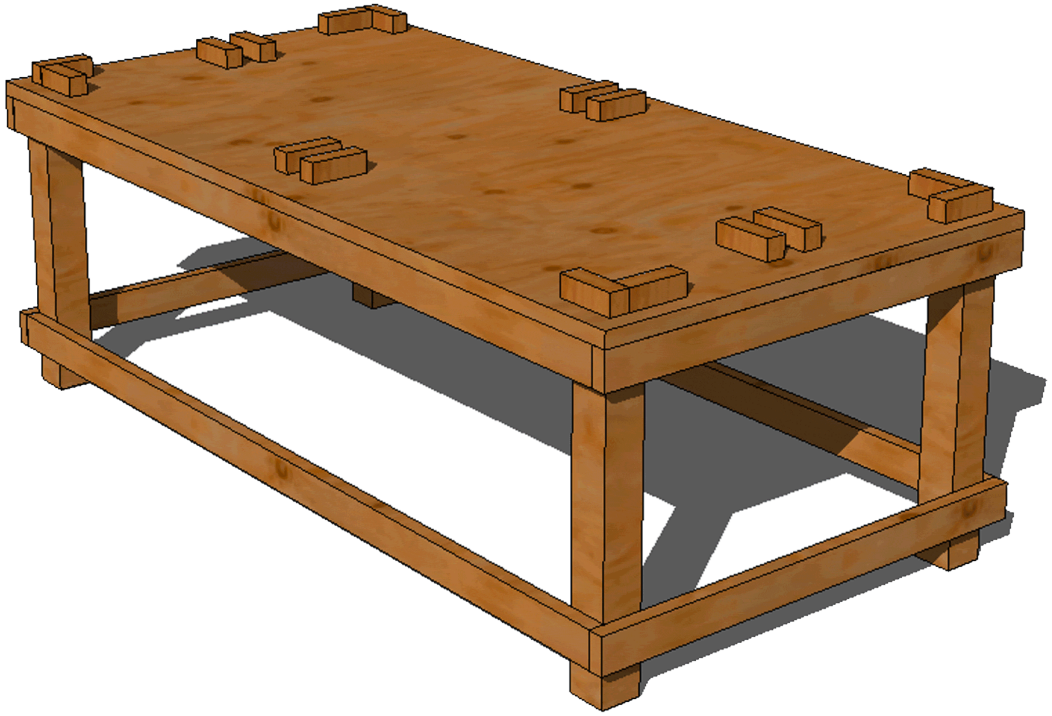

Conclusion...

Now that you have a proper wall panel jig, allow your crew time to get used to it. Soon they'll develop a rhythm and be popping out walls quicker than you can blink! A jig is a very useful tool to haunted house owners and builders, having a properly built jig can make all the difference in the world to your attraction.

Tips and Reminders...

- Remember to keep your corners squared, even and LEVEL when building your jig. Having a level work surface is very important, using a simply bubble level will help you achieve this.

- If you'd like a jig that'd be easier to move around, you can attach lockable cart wheels to the insides of the legs (to prevent tripping). If you plan to attach wheels, keep in mind that they don't have to be directly on the bottom. Side attachments allow you to NOT add significant height to the jig (it could literally be just an inch off the ground).

- The bottom 2x4's that support the legs...you can add cross bracing and a thin sheet of osb/plywood to this and create a storage area under the jig!