

HART™



8"x 10" Picture Frame

PROJECT PLAN

Finished Dimensions: 12-1/2"w x 15"h x 1-1/2"d

Skill Level: Beginner

Materials

Item	Qty
1" x 3" x 8' Board*	1
1" x 2" x 8' Board*	1
Paint Sticks	2
Sand Paper**: 150g, 220g & 320g	
Wood Glue	

* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

** Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

This Project Plan will show you how to build a Picture Frame for an 8x10 photo if measurements are followed exactly.

Tools Used



Miter Saw

or



Circular Saw



Orbital Sander



20V 4.0Ah Battery



Charger



Tape Measure



Safety Glasses

Also Needed:

(2) 24" Bar Clamps

(4) 6" Bar Clamps

(4) 6" Spring Clamps

Framing Square

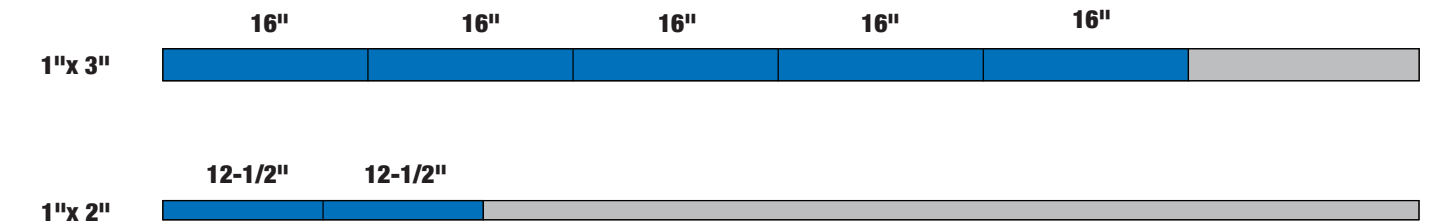
Battery Tip: A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

Lumber Cut List

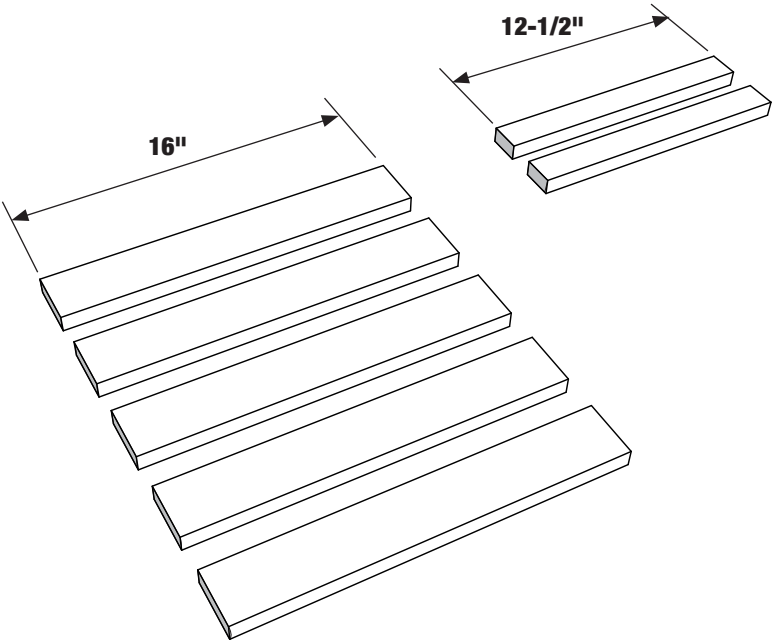
Board*	Cut to	Qty
1" x 3" (Frame)	16"	5
1" x 2" (Rail Boards)	12-1/2"	2

* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

Lumber & Sheet Lay-Out Guide [Actual Dimensions]



Lumber & Sheet Cut Lay-Out Guide



Assembly Instructions

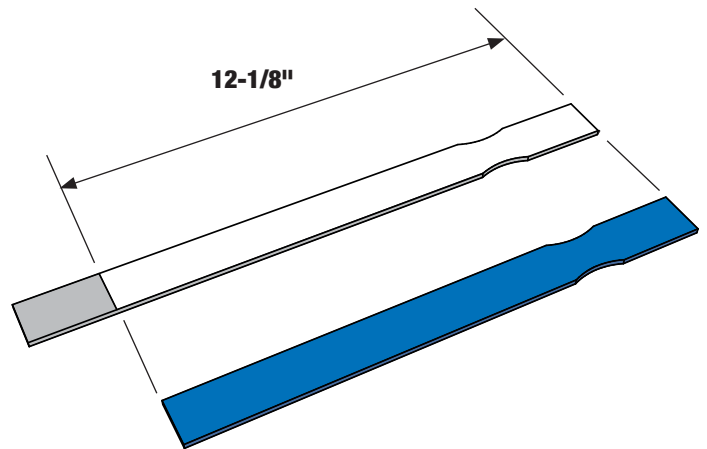
Step 1

Cut out all material using the Lumber & Sheet Cut Lay-out Guide.



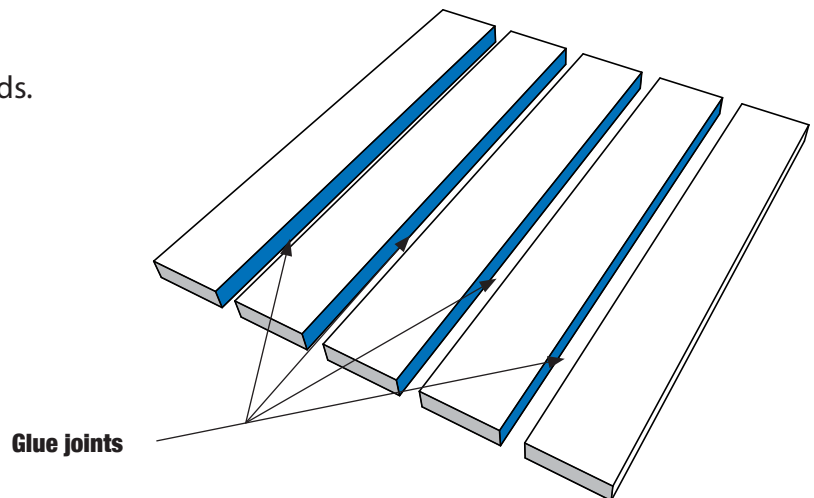
Step 2

Cut paint sticks down to 12- 1/8" using a Miter Saw.



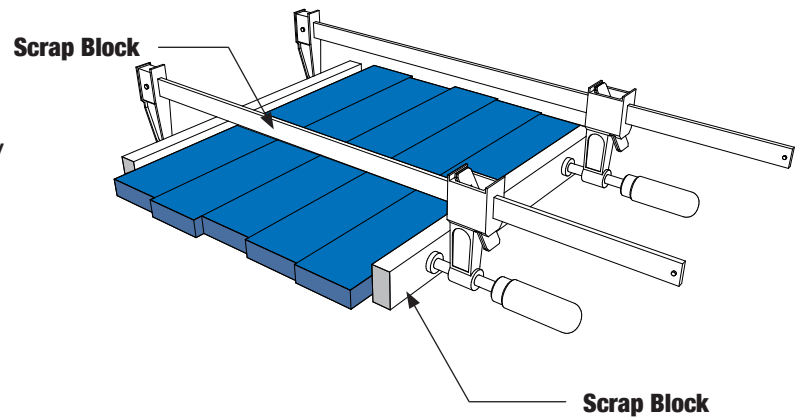
Step 3

Apply glue to the inside edges of the 16" boards.



Step 4

Find two scrap blocks to prevent clamps from damaging the picture frame. Secure the scrap blocks with 24" Bar Clamps just enough to stay in place.



Step 5

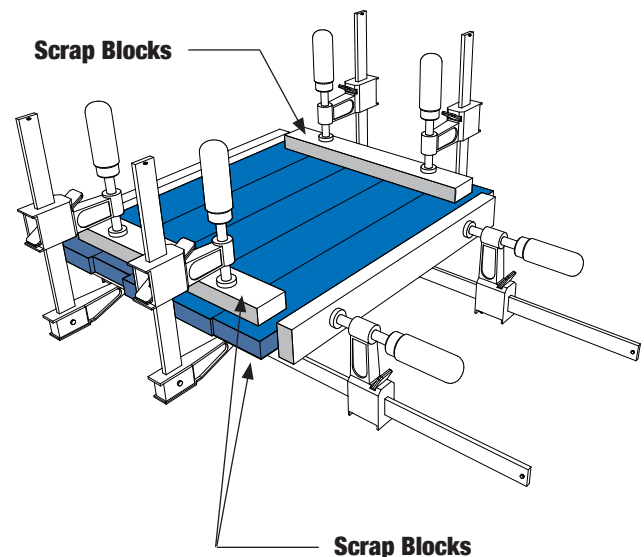
Find or cut four scrap blocks approximately 10" long.

Place them on the top and bottom of the picture frame. Use 6" Bar Clamps to secure them in place. This will prevent the picture frame from cupping.

Re-tighten the 24" Bar Clamps as well.



Tip-Place wax paper under boards to catch excess glue. Take another piece of wax paper and fold it in between the scrap blocks and picture frame. This will keep the scrap blocks and picture frame from sticking together.



Allow glue to dry 24 hours (follow instructions on the glue bottle).

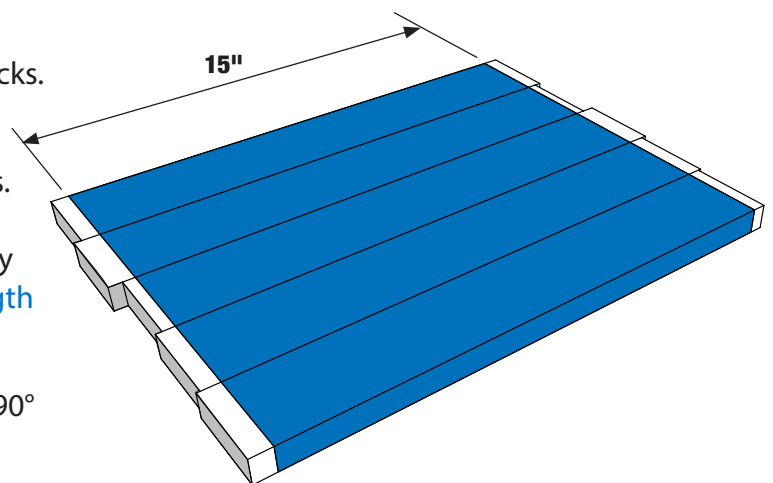
Step 6

After the glue has set, remove clamps and scrap blocks. Clean off any dried glue on both sides.

The gluing process can shift the edges of the boards. Therefore, you will need to trim both sides of the picture frame to create one even edge. One side may require more trimming than the other. **The final length of the picture frame is 15", so trim accordingly.**

Use a Framing Square to mark a straight line that is 90° to the sides on both ends where you plan to trim.

Use a Circular Saw to cut along the outside of the line.

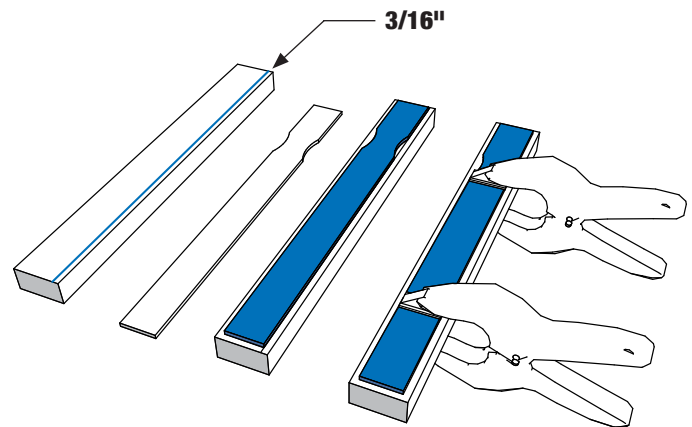


Step 7

Mark a line $\frac{3}{16}$ " off the side of both 12-1/2" rail boards.

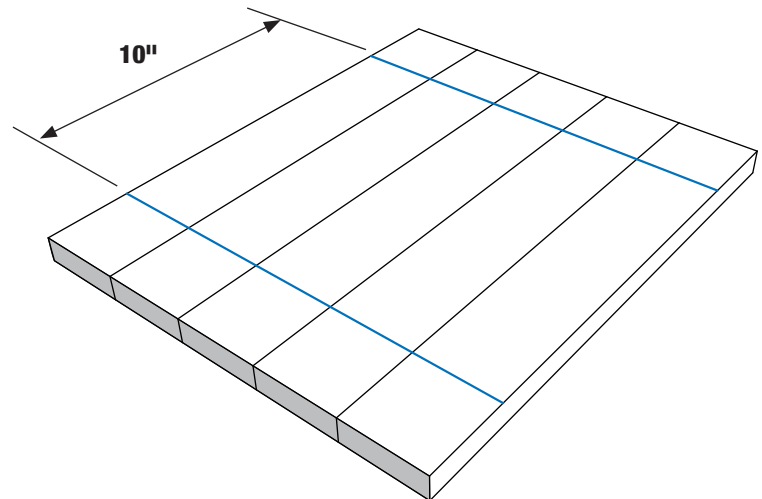
Glue and align edge of the edge of the paint stick with the line on the rail board. Spacing should be the same on both ends. Repeat on the other rail board.

Clamp the paint sticks to the rail boards with Spring Clamps.



Step 8

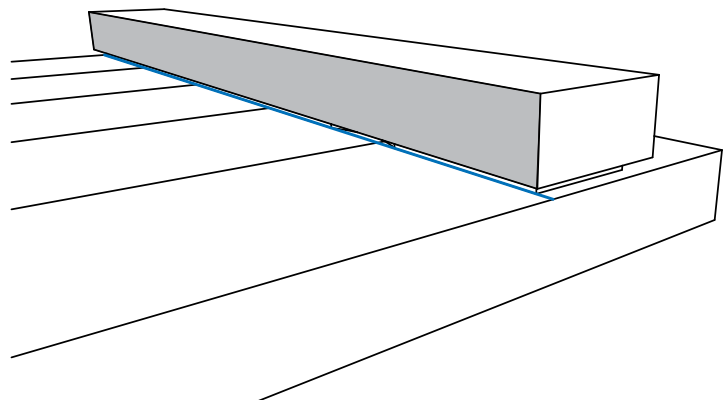
Mark two lines 10" apart from each other and equal distance from the ends of the frame.



Step 9

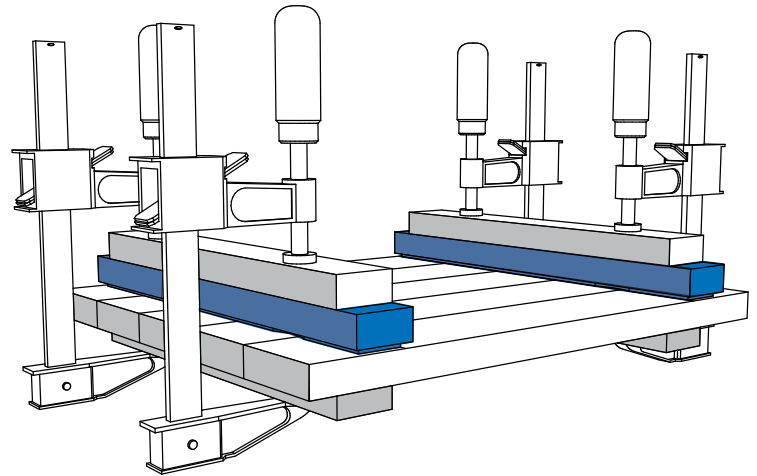
Remove clamps from paint stick and rail board structures.

Glue and align the bottom edge of the paint stick to the line on the frame. Repeat on other line.



Step 10

Using 6" Bar Clamps and scrap blocks, clamp rail boards to frame and let dry.



Step 11

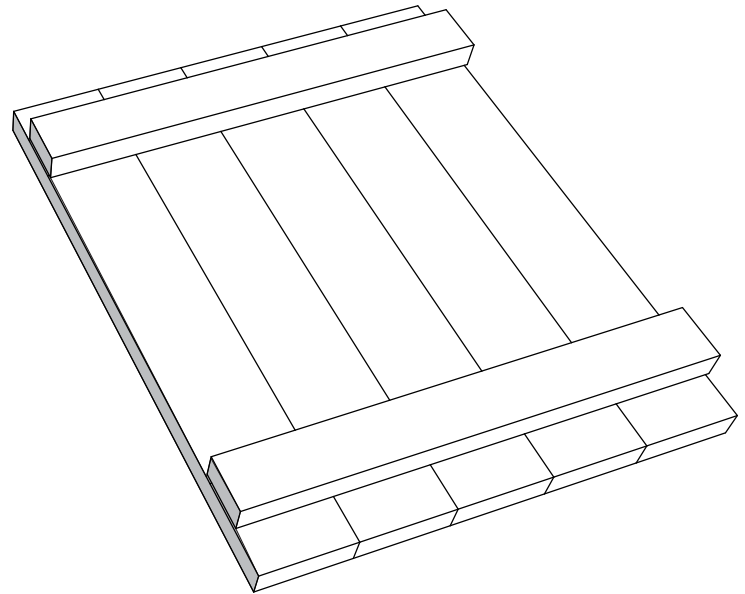
Sand and finish to your desire.

H **Rougher finish** – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

Smoother finish – Use 60-80 grit sandpaper to remove scratches & imperfections. Followed by using 120-220 grit to smooth.

Finish Sanding – Use 320-400 grit sandpaper

Super fine sanding – Use 600+ grit sandpaper



The gap created by the paint stick allows the edge of a picture to slide underneath. For extra reinforcement, you can add a 1/16" x 8" x 10". Sheet of plexiglass in front of the picture.

