

THE LEXICON
BUILDING A-FRAMES
TOOLS FOR POP UP
ART SHOWS

WHAT YOU NEED TO BUILD EACH A-FRAME

MATERIALS

- 4 legs: 82" tall and $1\frac{3}{8}$ " x $\frac{3}{4}$ "
- 4 cross bars: 27" long for vertical frames / $39\frac{1}{4}$ " long for horizontal frames and $1\frac{3}{8}$ " x $\frac{3}{4}$ "
- 2 pieces of cardboard 28"x40"
- 2 hinges
- 1 supporting chain that allows for 19" of separation space
- 8 pieces of support wood for the back corners
- Staples to attach pieces of support wood (if not staples then use screws instead)
- 10 screws (8 for the hinges and 2 for attaching the support chain)

STEPS FOR BUILDING AN A-FRAME

Adhere the images to the cardboard:

- Establish where the image will go so that it is centered on the cardboard.
- Use a spray adhesive to coat the back of the image and the cardboard and lay the image on the cardboard. (Fig. 1)
- Smooth it out.
- Repeat until all 24 images are adhered to the frames.

Build one frame:

- Cut and mill all the pieces you'll need to build 12 A-Frames. (Fig. 2)
- Choose which A-frame design you will build first (horizontal or vertical) and establish a way of standardizing this process. The easiest way is to construct a simple jig by securing some pieces of wood to your working surface and using them as guides to set each frame into place. (Fig. 3)
- Lay out the 4 pieces that make up each frame (2 legs and 2 cross bars) and set the cardboard into the milled openings. (Fig. 4)
- Holding the frame in place, use a staple gun to attach the support pieces along each corner. (Fig. 5)
- Repeat until all individual frames have been built.

Combine two frames to create an A-frame:

- Lay two frames face down and align the tops of the legs.
- Set a hinge down so that it sits evenly on each leg and screw it into place.
- Repeat until all horizontal and vertical frames are paired up into A-frames.
- Taking your pre-measured chain, drill a screw through the last link and into the back of one of the frames, making sure it's centered. Then attach it to the other frame.
- Repeat until all A-frames are linked up.



FIG. 1

USE A SPRAY MOUNT ADHESIVE TO COAT THE BACK OF THE IMAGE. FOLLOW THE SPECIFIC INSTRUCTIONS OF YOUR SPRAY MOUNT TO ENSURE A PROPER APPLICATION.



PREPARE THE POSTERS ON THE CARDBOARD PRIOR TO BUILDING THE FRAMES



FIG. 2

OUR PILE OF CUT AND MILLED WOOD PIECES THAT WILL FORM THE LEGS AND CROSS BARS OF ALL THE FRAMES



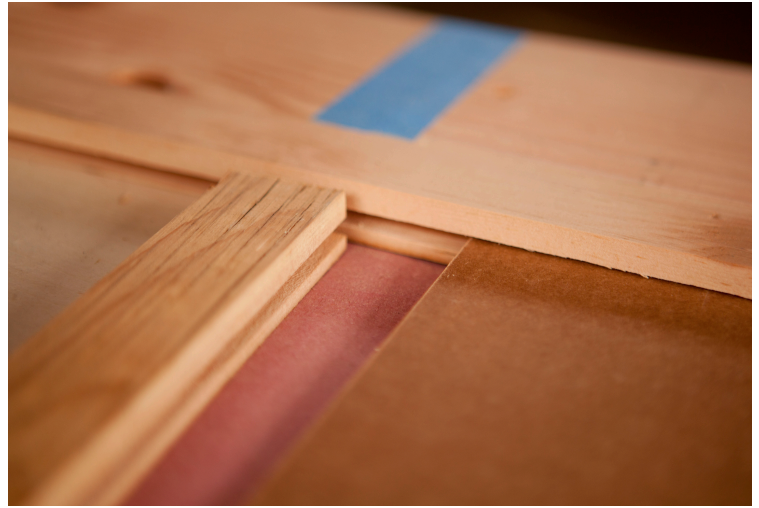
FIG. 3

USING A JIG ALLOWS YOU TO STANDARDIZE THE PROCESS. HERE WE USED TWO PIECES OF WOOD WHICH ALLOWED THE FRAME TO BE SET INTO PLACE BEFORE ATTACHING THE SUPPORTS.



FIG. 4

SETTING THE FRAME AND CARDBOARD INTO PLACE



THE MILL CUTS ARE $\frac{1}{2}$ " DEEP AND ARE USED TO ENCLOSE THE CARDBOARD WITHIN THE FRAME



FIG. 5

ATTACHING THE SUPPORT PIECES USING A PRESSURE-POWERED STAPLE GUN



THE SUPPORT PIECES ARE WHAT HOLD THE FRAME TOGETHER. USING STAPLES INSTEAD OF SCREWS MINIMIZES THE CHANCES OF SPLITTING THE WOOD



VERTICAL FRAMES – FULL VIEW



VERTICAL FRAMES – INSIDE DIMENSIONS



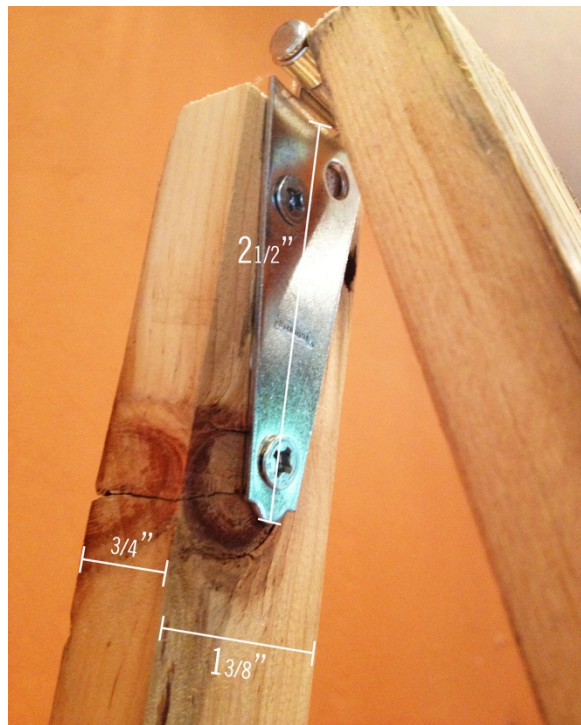
HORIZONTAL FRAMES – FULL VIEW



HORIZONTAL FRAMES – INSIDE DIM.



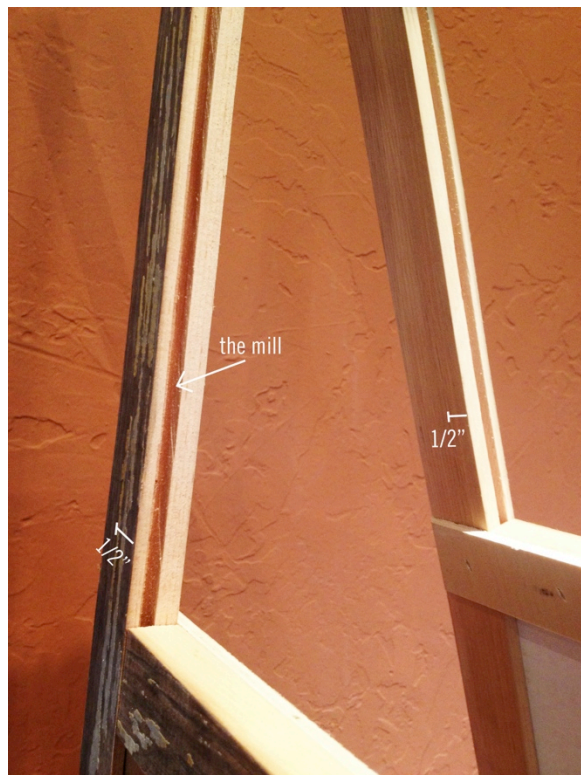
BORDER SIZE



DIMENSIONS OF WOOD + HINGES



SUPPORTING CHAIN



MILL DEPTH

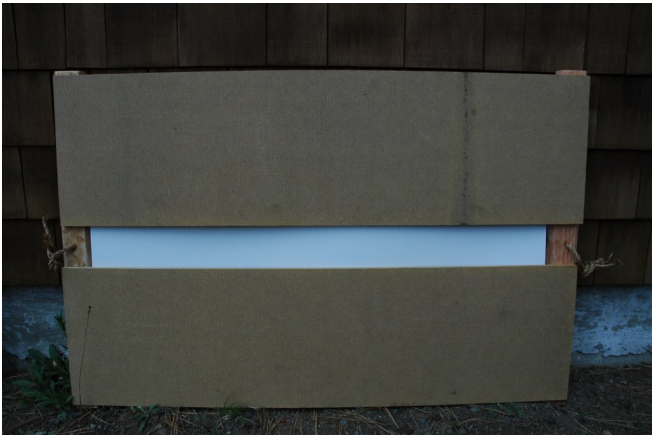


SUPPORT PIECES OF WOOD
IN BACK AT EACH CORNER

OTHER FRAME IDEAS FOR CURATORS



These frames are reclaimed materials from ReStore. It is lumber that we cut a groove into and inserted the lauan sheets. We painted them with marked down and attached the posters with 3M spray adhesive. -- Penny Hayman (Zust)



Images above by Curator Owen Murphy

HOW TO GET OWEN' S FRAMES

- Laminate prints (\$275-300).
- Scrounge pallets from lumber yards and sheets of plywood, particle board, or siding from the local Restore (free).
- Deconstruct pallets; salvage as many cross boards as possible.
- Buy 1-1.5" screws (depending on thickness of boards), rope, and Velcro strips or heavy-duty tape from the hardware store (\$30-40).
- Cut pallet cross boards to 28" and plywood sheets to 42" (1" beyond laminated print measurements).
- Roughly sand boards to remove splinters and smooth edges.
- Clamp and screw boards together. If using multiple plywood backing sheets, position them to extend 1" beyond prints.
- Slightly loosen screws, slide print edges under pallet boards, then fully tighten screws to pinch down the print edges.
- Apply double-sided Velcro or tape to the middle of the prints (wherever they appear to flap or sag) so they don't blow out in the wind.
- Drill holes at either end of the prints for the rope loops.

Ready to hang, educate, and inspire!



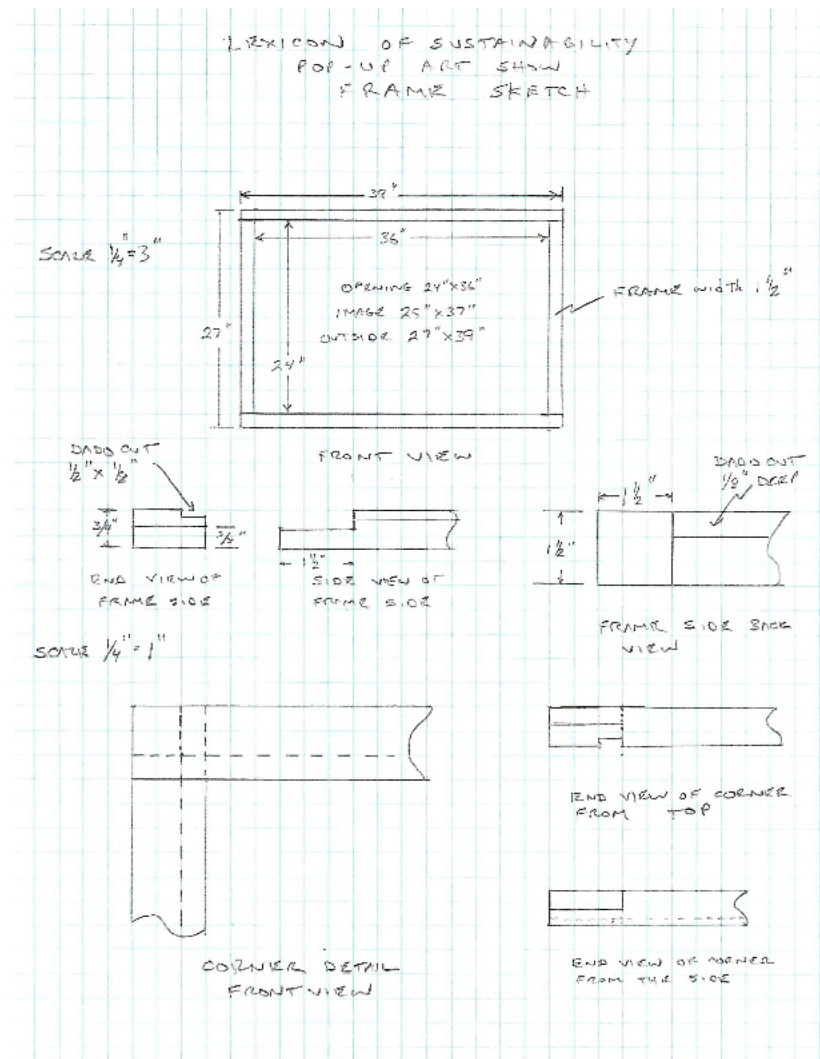
Images above by Curators are Bob Howard and Marie Mayor

These images are 25" X 37". The frames were made to be independent from the easels which made transportation simpler. I made the frames out of 1" X 2" rough cedar. Actually, the cedar is rough on one side and smooth on the other. The actual dimensions of 1" X 2" cedar is $\frac{3}{4}$ " X 1 $\frac{1}{2}$ ". I used the rough side as

most of my boards I bought 1" X 4" or 1" X 6" cedar boards that were straight and ripped them to 1 1/2" width. The corners of the frames were lap joints made by dadoing 1 1/2" of the end of each side to half its thickness or 3/8". I glued the corners and clamped them until the glue was dry. I used the 25" X 37" backing board to hold the frame in the right shape while it was glued. (See Sketch)

I mounted the images on 1/8" masonite sheets that were coated white on one side. I simply taped the images to the backing board because I could not find a good way to glue the images to the board without screwing them up. I attached the backing board and image to the frame with masking tape. Thus the images could be removed from the frames or changed easily.

The outside dimensions of the frames were 27" X 39". The images and their backing boards were mounted in a 1/8" deep and 1/2" wide groove cut in the back of the frame. (See Sketch) –Bob Howard





Images above by Curator Robyn Rees



The images are framed on back to back panels, six in a set, with door hinges so that they can be rearranged if need be. They are light and transportable; but for outside they must be weighed down and covered. We put plastic over the images to protect them, which it does, but it is very shiny and next time I would use a matt finish. –Deb Carey