historydaym

Wood-Frame Exhibit Building Instructions

This is just one option for creating a basic wood-frame exhibit board. Outside of the size requirements in the *NHD Contest Rule Book*, there are no "correct designs" or "required materials" that must be used.



Supplies List		
Quantity	Materials	Tools
6	1" x 2" x 60" Wood Strips (for a 5' tall board)	Drill and Phillips Screwdriver Bit
9	1" x 2" x 24" Wood Strips (for a 5' tall board)	Hand Saw or Electric Saw
2	<i>Optional</i> 1" x 2" x 40" Wood Strips (for a title panel)	Wood Glue
2	<i>Optional</i> 1" x 2" x 12" Wood Strips (for a title panel)	Half-inch Wood Screws
4	3" Hinges with Removable Pins	Panel Adhesive of your choice
2	2" 'L' Brackets or 1/4" Small Wooden Dowels	Panel Material of your choice
12*	3" Metal 'L' Braces	Safety Goggles
6*	3" Metal 'T' Braces	
18*	5" x 5" x 7.25" Wooden Triangular braces out of quarter-inch plywood	
* You can use either metal braces OR the wooden braces to hold your sections together. See "Supply Alternatives" on the next page for details.		MINNESOTA HISTORICAL SOCIETY

Instructions for a Standard 5' Board

- 1. Make sure your safety goggles are on and long hair is tied back with a hair binder.
- 2. Cut out wood strips to size.
 - a. Each panel should be equal—approximately 24x60" and a title panel should be approximately 12x40".
- 3. Lay out the pieces for one panel.
- 4. Align the metal 'L' or 'T' braces at each corner.
- 5. Pre-drill small pilot holes with drill bit where your braces should go to avoid splitting the wood.
- 6. Drill in the wood screws to secure your wood strips together with the braces.
- 7. Repeat steps 2-5 for the other two panels.
- 8. Set your panels together and line up where you want your hinges, approximately 1/3 of the way from the top and bottom.
- 9. Use a pencil to mark where the hinges should be and pre-drill small pilot holes.
- 10. Line up the hinges and drill in the screws to secure in place.
- 11. When all hinges are attached, stand up your panels and insert the hinge pins to see how it looks, adjust as necessary.
- 12. Complete steps 2-5 to assemble your title panel.
 - a. 'L' Bracket: Decide where you want your title panel and mark the spot on the frame. Attach one side of the 'L' bracket to your frame and tape the other screws to your panels. You will need a screwdriver at the event to attach the title panel.
 - b. Wooden Dowels: Mark the spot on the frame where you'd like the title panel. Drill out holes in both the frame and title panel. Glue the dowels into the title panel to keep it secure. At the event, you will just need to place the title panel dowels into the holes in the frame.

Panel Options

- Foam core: Lightweight and popular but gets expensive, and finding large sizes to fit your frame may be challenging.
- Felt/Fabric: Comes in many colors and can be used to cover cardboard or another material.
- Cardboard: Lightweight and can be painted or covered. Finding the size you need may be a challenge.
- Plywood: Sturdy and affordable, but gets heavy—quick!
- "Handi-Panels": A wood-blend, these are only for boards that are 4 feet tall, but are already cut to size at most home improvement stores.

Adhering Panel	Supply Alternatives
 You can use a variety of materials to adhere your panels to the frames: Fabric can be stretched over the frame and stapled to the back. Velcro works for other panel material if you want them to be removable. Glue or caulk (like Liquid Nails) will permanently hold your panels in place. Be sure to avoid water-based glue with foam core, it could cause it to bubble. 	 Wooden Triangular Braces work just as well as the metal braces and are usually cheaper. You will adhere them with wood glue and a staple/nail gun for a secure hold instead of using a drill. Have other plans for a title panel? Awesome—get creative! For a different size board, plan accordingly for how many wood strips to buy. History Day rules say your board can't be more than 40" wide, 30" deep, and 6' tall.