

Vivi's Theater Construction Details

Bill of Materials

2 each—4'x8' sheets of 1/2" BC Plywood

Cut each sheet to 6' length for stage floor panels (remainder is scrap).

1 each—4'x8' sheet of 1/4" BC Plywood

Cut pieces to the following dimensions:

2 each—10"x84" (stage front vertical panels)

1 each—10"x76" (stage front horizontal panel)

1 each—9-3/4"x 76" (stage front bottom skirt)

(Remainder is scrap)

16 each—8' 2x4s

1 each—10' piece of 3/4" EMT Conduit (cut to 8' for curtain rod)

2 each—#12 hose clamps for securing curtain rod

4 each—8' pieces of metal carpet trim

1 each—6'x9' piece of interior/exterior carpet

14 each—1/4"x3-1/2" carriage bolts

4 each—1/4"x6" carriage bolts

18 each—1/4" hex nuts

18 each—1/4" flat washers

Miscellaneous screws and nails

Note: The side and rear horizontal supports are NOT listed in the above, as you may not desire or require them. Our project has a simple 2x4 frame as shown in photos, which can easily be duplicated using five 8' 2x4s (two rear legs, three top horizontal members, and two short diagonal braces cut from scrap) and appropriate hardware to attach to stage front and floor.

Construction/Assembly Details

Note 1: These fabrication instructions are written to make it relatively easy to disassemble and store or relocate finished theater.

Note 2: Though all bolts are 1/4" diameter, we used a 9/32" drill bit to facilitate future disassembly.

Note 3: Dimensions can be modified to suit your intended location. The finished dimensions of our project are as follows: 84-1/4" high X 75-3/4" deep X 96" wide. The stage floor is 10" from floor of room.

Note 4: It is suggested that all "visible" surfaces be sanded as needed, putty applied to nail and

staple holes and other imperfections, primed, and lightly sanded prior to assembly. This will greatly simplify final painting.

1. Fabricate five 2x4 frames (two stage floor frames, two front vertical frames, and one front horizontal frame) as shown on Parts One, Two, and Three.
2. Securely nail or screw 1/2" plywood to both stage floor frames.
3. Securely staple or nail 1/4" plywood to both stage front vertical frames.
4. Securely staple or nail 1/4" plywood to stage front horizontal frame.
5. Staple (or glue) carpet (cut in half) to both stage floor frames, covering surface of 2x4s where frames are joined, thereby providing a better "seam." Trim other three edges flush with outside of floor. This provides a better "seam" where panels are joined. (See Page 3.)
6. Nail or screw carpet trim (cut to length) to three edges of stage floor sections, omitting "inside" edges where frames are joined.
7. Turn stage floor sections carpeted sides down on smooth surface, align "inside edges," securely clamp or hold, and drill six 9/32" holes through BOTH "inside" 2x4s. (See Page Two.)
8. Insert 1/4"x3-1/2" bolts through holes and tighten securely.
9. Screw 9-1/2" 2x4 legs to four outside corners and to ONE side of inside joint. (See Page Two.)
10. Carefully invert stage floor assembly and position as desired on floor.
11. Place 1/4" plywood scraps under vertical panels (this ensures only stage legs contact floor), clamp or hold left and right front vertical panels flush with outside edges of stage floor and plumb, and drill 9/32" holes as shown on details "A" and "B" on Part Two.
12. Insert 1/4"x6" carriage bolts through holes drilled in vertical panels, ensure panels are plumb left and right, install flat washers and hex nuts, and tighten bolts securely.
13. Cut two 72" 2x4 braces for bracing front vertical panels to stage floor.
14. Hold or temporarily brace front vertical panels plumb front to rear, hold or clamp braces from 13 above with bottom end 36" back from front of stage, and mark and cut angles on braces.
15. Hold braces in place, screw bottom of brace to stage floor, and drill two 9/32" holes through top of each brace through outside 2x4 on vertical panels.
16. Install 1/4"x3-1/2" carriage bolts, flat washers, and hex nuts and tighten securely.
17. Hold front horizontal panel in place with top surface aligned with top of vertical panels and drill two 9/32" holes through each end of horizontal panel and sides of vertical panels.
18. Install 1/4"x3-1/2" carriage bolts, flat washers, and hex nuts and tighten securely.
19. Cut two 7" 2x4s and drill 1" holes centered on 3-1/2" dimension and 1-1/2" from end for rod supports.
20. Mount rod supports to rear of stage front vertical panels with screws.
21. Install rod through supports above and tighten hose clamps outside both brackets to secure rod in place.
22. Tack or screw stage front bottom skirt to front of stage between vertical panels.

Note: Details for side and rear horizontal supports are NOT included. (See note at end of Bill of Material.)