

197 WORKBENCH



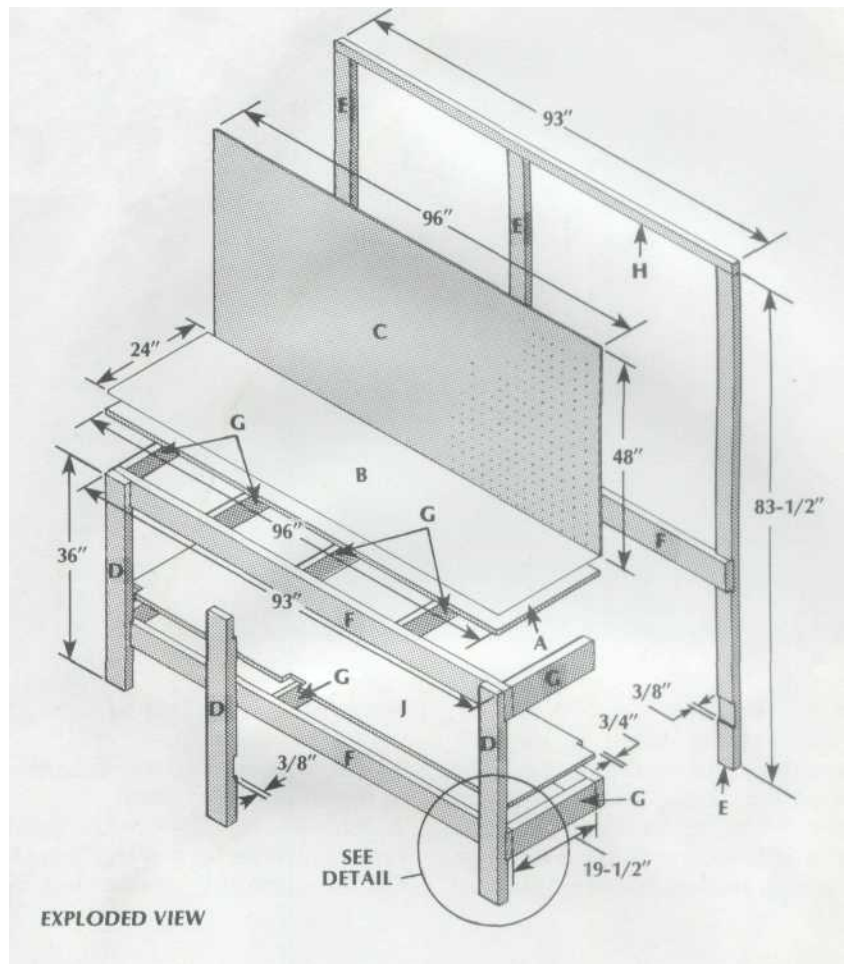
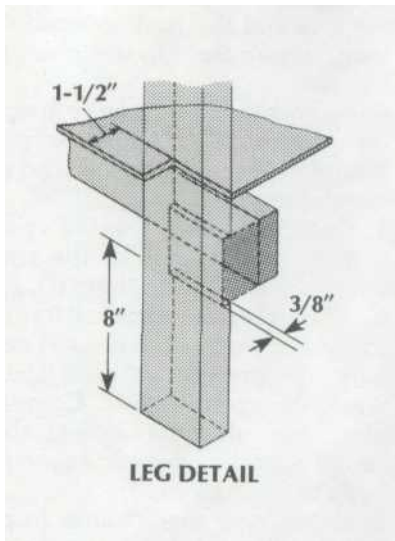
Any home handyman knows the value of a workbench. This one provides plenty of work space, a large shelf, and a perforated peg-board backing for hanging tools. The tabletop is made of 3/4" waferboard covered with 1/4" hardboard. The workbench shown here is 8' long, but you can make it any length to fit your work space.

1. Cut all pieces to size according to the dimensions given.
2. Assemble the support frames (F) for the tabletop (B) and the shelf (J) by fastening the fronts and backs to the crosspieces (G) using 12d nails. In both cases, position one crosspiece at each end and one across the middle. Add two more crosspieces to the top frame to help stiffen the tabletop work surface.
3. Cut a 3-1/2"-wide x 3/8"-deep rabbet across the top of each front leg (D) for fitting the top frame on the legs. Then cut dadoes of the same dimensions at a parallel location across each of the back legs (E). Also, cut parallel dadoes across each leg about 8" above the bottom for fitting the shelf frame between the legs.
4. Fasten the legs to the frames using #8x2-1/2" flathead wood screws countersunk flush with the leg surface. Use at least two screws per joint and offset them for increased frame stability.

LIST OF MATERIALS

(finished dimensions in inches)

| | |
|---|------------------------------------|
| A Tabletop base | 3/4 × 24 × 96 waferboard |
| B Tabletop | 1/4 × 24 × 96 hardboard |
| C Backing | 1/4 × 48 × 96 perforated hardboard |
| D Front legs (3) | 1-1/2 × 3-1/2 × 36 |
| E Back legs (3) | 1-1/2 × 3-1/2 × 83-1/2 |
| F Top and shelf frame fronts and backs (4) | 1-1/2 × 3-1/2 × 93 |
| G Top and shelf frame crosspieces (8) | 1-1/2 × 3-1/2 × 19-1/2 |
| H Crossbar | 1-1/2 × 1-1/2 × 93 |
| J Shelf | 3/4 × 23-7/8 × 93 waferboard |
| Wood screws | #6 × 7/8 |
| Wood screws | #8 × 1-1/2 |
| Wood screws | #8 × 2-1/2 |
| Angle irons | 1-1/2 or 2 |
| 12d nails | |
| Construction adhesive | |



5. Cut 3-1/2"-wide x 1-1/2"-deep notches in the front edge of the shelf, one at each end and one in the middle, in order to fit the shelf around the front legs. Cut parallel notches of the same width, but 3/4" in depth, on the back edge of the shelf for fitting around the back legs.

6. Insert the shelf between the legs and fasten it to the support frame using #8 x 1-1/2" flathead wood screws, countersunk flush or driven slightly below the shelf surface. If you like, run a bead of construction adhesive along the upper edge of the frame before installing the shelf.

7. Set the tabletop base (A) on the top frame. Push the top against the back legs and center it along the length of the support frame.

8. Clamp or tack the top in place while drilling countersunk pilot holes for #8 screws through it into the frame. Space the holes about 12" apart. If you want to use construction adhesive, remove the top and spread a bead of adhesive on the top of the frame. Then reposition the top and fasten it in place using #8 x 1-1/2" flathead wood screws. Drive all the screws slightly below the surface of the tabletop.

9. Position the tabletop over the base, making all edges flush. Then fasten the top to the base using #6 x 7/8" flathead wood screws, driven slightly below the outer surface. This installation method will allow for periodic replacement of

the tabletop. For permanent installation, apply construction adhesive to the base, position the tabletop over it, and press it flat, then tack it in place.

10. Place the bench in the desired location and shim the legs as needed to make the top completely level and to stabilize the bench. Then use angle irons to fasten the legs to the floor, or run fasteners through the back legs into the wall, or do both.

11. Set the backing (C) on the tabletop. Center it along the length of the bench, then fasten it to the upper section of the back legs and to the crossbar (H) using #6 x 7/8" flathead wood screws.