UNDER BED HO LAYOUT

MATERIALS LIST & INSTRUCTIONS

Here is a list of all materials used to create this 3 x 5' under bed layout and the approximate cost for each at Home Depot[1].

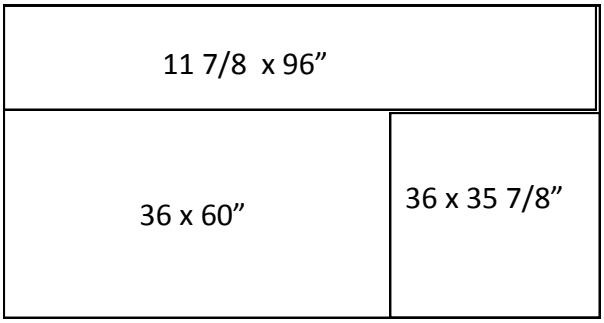
QUANTITY	SIZE IN INCHES	DESCRIPTION	COST
1	48 x 96	1/4" Sanded Plywood - finished on one side	$21.92
5	1 x 3 x 72	Short Strip[2] Special ($.075 ea) – Can substitute 1 x 3 x 72 pine at a higher cost	$ 3.75
1 lb box	1" #6	Course Thread Screws	$ 6.97
1 lb box	1.25" #6	Course Thread Screws	$ 6.97
8 oz bottle		Elmer's Carpenter's Glue	$ 2.97
2		Handles	$ 5.94
4		Revolving Casters	$11.88
		TOTAL	$60.40

TOOLS NEEDED:

- ◊ **Quick Square**
- ◊ **Pencil**
- ◊ **Ruler**
- ◊ **Rasp or Sand paper (80 grit) to smooth sawed edges**
- ◊ **Saw for frame and cross pieces (Plywood can be cut to size by a Home Depot Associate), a table saw is best but you can use a circular saw**
- ◊ **Screw Driver (Drill with screw driver attachment, flip bit - $13.00 on Amazon – makes assembly easy)**
- ◊ **Bar Clamps to hold material during construction**
- ◊ **2 Saw Horses to hold material, will prevent a sore back**

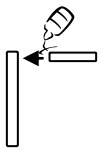
PROCESS:

1. **Cut plywood so you have (1) 36 x 60"; (1) 36 x 35 7/8"; (1) 11 7/8 x 96"**

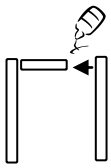


PROCESS Cont'd

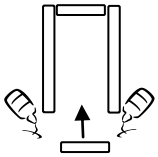
2. **Cut 2 of the "Short Strips" to a length of 61 3/8" – retain scraps**
3. **Cut 3 of the "Short Strips" to a length of 36" – retain scraps**
4. **Creating the Frame:**
   a. **Take one 61 3/8" and one 36" and glue and screw together with 1 1/4 screws so that the shorter piece is on the longer piece at the end. Using the "flip bit" pre drill location for screws. Note the "flip bit" also has a countersink on the drill bit for a finished look.**



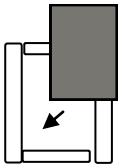
   b. **Take the remaining 61 3/8" board and glue and screw to the two pieces already attached, being careful to square up the corners and countersink the screws.**



   c. **Take the final piece of your frame , place it between the two uprights, glue and screw in place.**



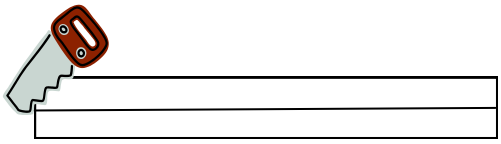
   d. **Next you want to test fit the frame around the 36" x 60" piece of plywood and make any adjustments you need to at this pint with sandpaper or a rasp**



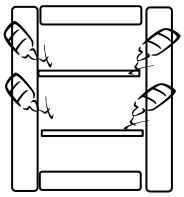
5. **Next we will create the ledger and the cross pieces from the saved scraps to hold the plywood in place.**

   a. **Find the scrap that measures 36" or more inches. Trim the piece to 36" exactly if it is longer.**

   b. **The rest of the scrap pieces and the 36" piece needs to be ripped (cut in half long ways).**

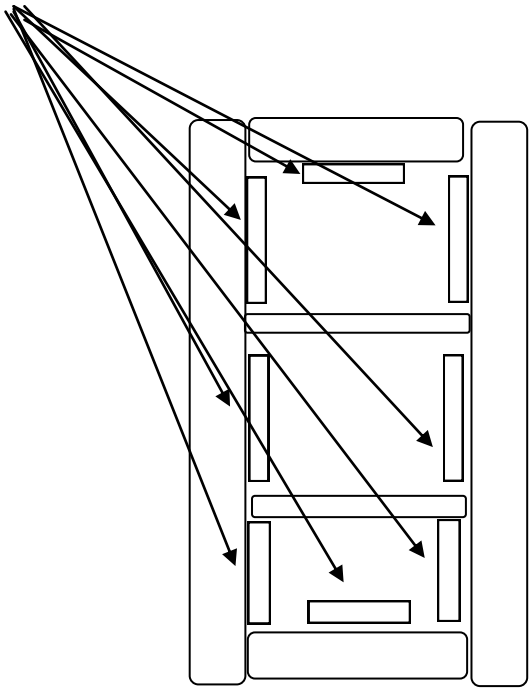


   c. **Taking the frame, we want to place the 36" long ripped pieces across the middle, approximately 20" apart and 20" from each side. These must be flush with the bottom of the frame**



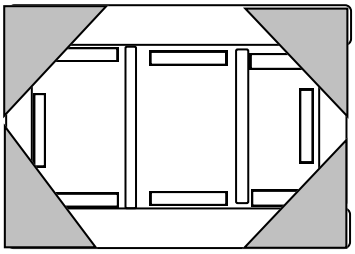
PROCESS Cont"d

Ledgers



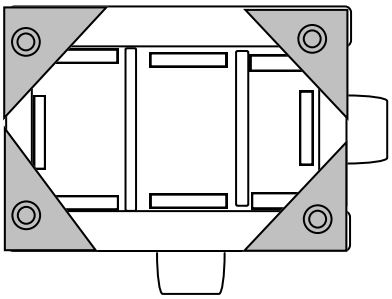
6. **We now need to continue the process of attaching the ledgers around the sides and ends of the frame. These also need to be flush with the bottom of the fram so that the plywood sits flat on them (all pieces should be glued and screw in place.**

7. **It is now time to place the 36"x 60" piece of plywood onto the frame you just created. As we have already test fit this you can position wood glue on the tops of the ledgers. Now place the board on top of the ledgers and secure with 1" #6 screws.**



8. **Now we need to make mounting brackets for the casters. Using the "quick square" trace the outline onto one of the scrap pieces of plywood. Remember you'll need to make 4 of these.**

   Now you need to mount the casters by screwing each one into the support bracket you just installed.



9. **Lastly, you need to place the handles (draw pulls) onto the layout. Congratulations, you are done.**

Footnotes:

1. Home Depot prices vary by location.
2. Short Strips are "outsized" lumber usually sold at/or slightly above cost.