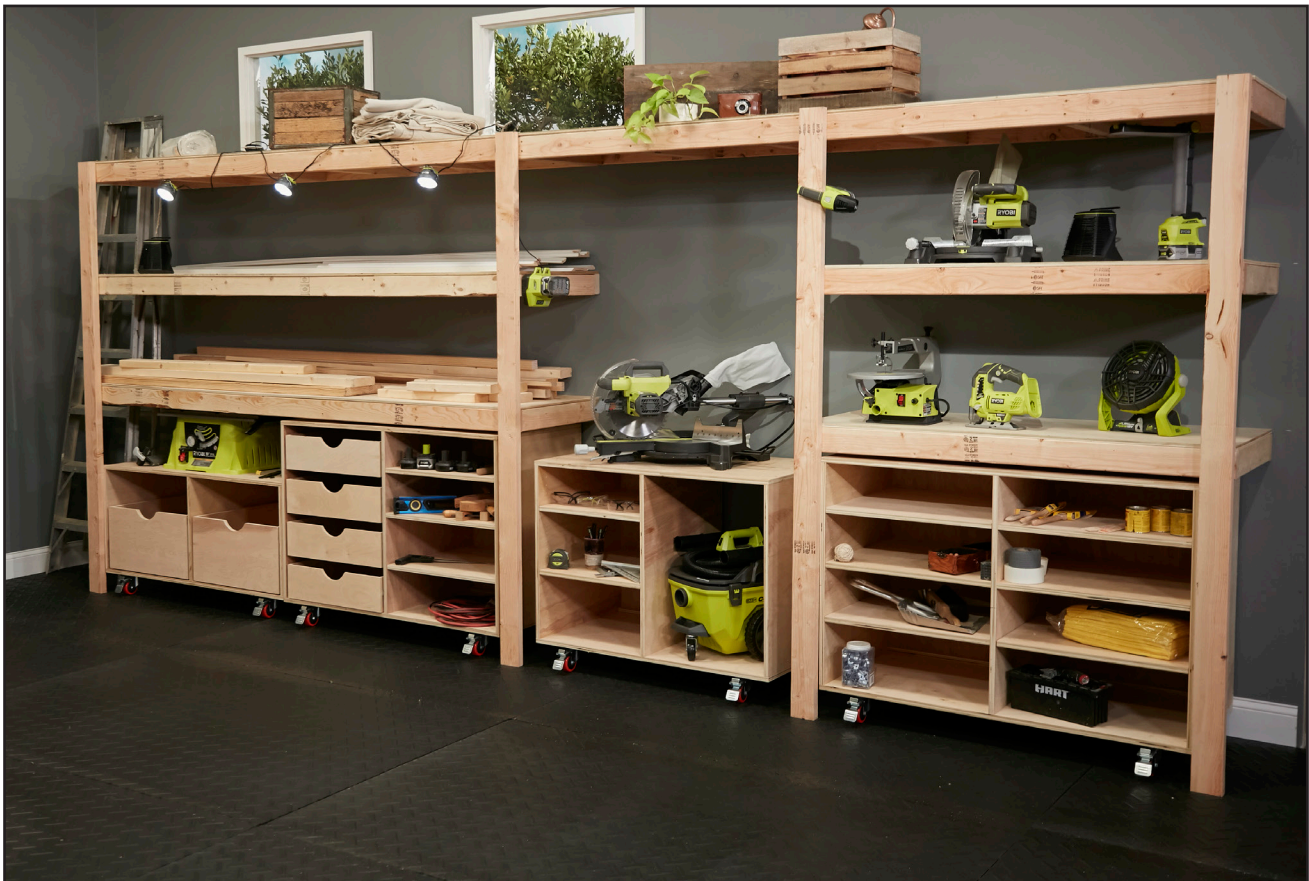




PLANS BY ANA WHITE

# BUILT-IN SHELVES



TOTAL DIMENSIONS: 180 X 24 X 96  
DIFFICULTY LEVEL: EASY

## PURCHASE LIST:

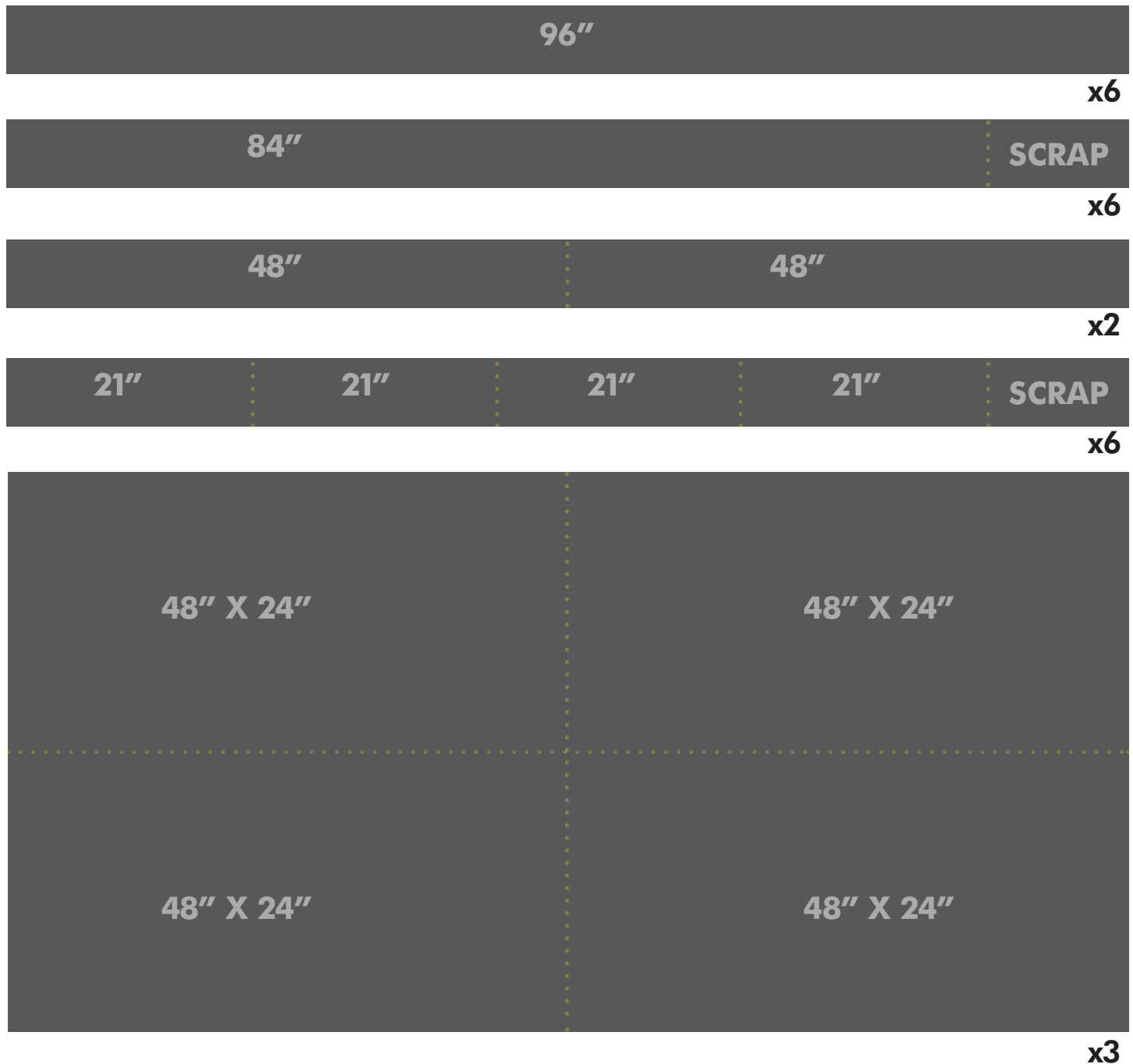
(20) 2" x 4" x 8'  
(3) 1/2" plywood sheets  
3" or longer self-tapping wood screws

## LUMBER CUT LIST:

## RECOMMENDED TOOLS:

Saw for cutting 2x4's  
Drill/Driver  
Pocket Hole Tool (optional)

To create the shelving system shown. You can modify these plans to fit your space and shelving needs.



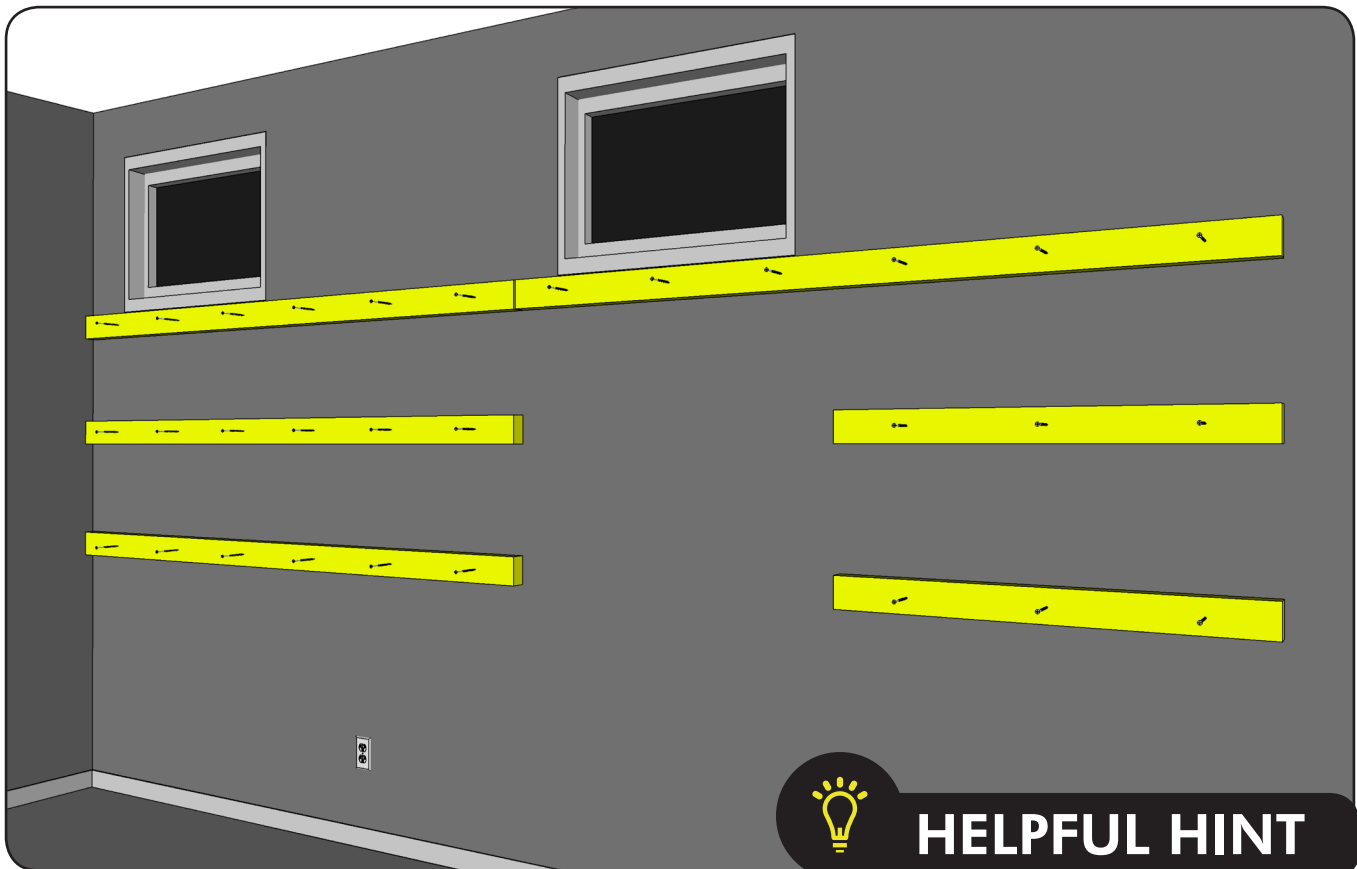
# ASSEMBLY:

1

Mark out all the studs in the wall and attach a 2x4 in the desired shelving length to the studs in the wall. You can also piece 2x4s (for example, we used two 8 foot long 2x4s to create a 16 foot section, and half of one to create 4 foot sections) - just make sure you adequately attach to studs in wall. Use 3" or longer screws (depending on wall construction). Use a level to make sure you attach the 2x4 to the wall level. Self-tapping wood screws will make your job much easier.

2

Once you have the first one up, you can just measure off of it to attach your remaining shelf boards. We suggest figuring shelf heights to fit totes, tools, or whatever you may be storing in these shelves.



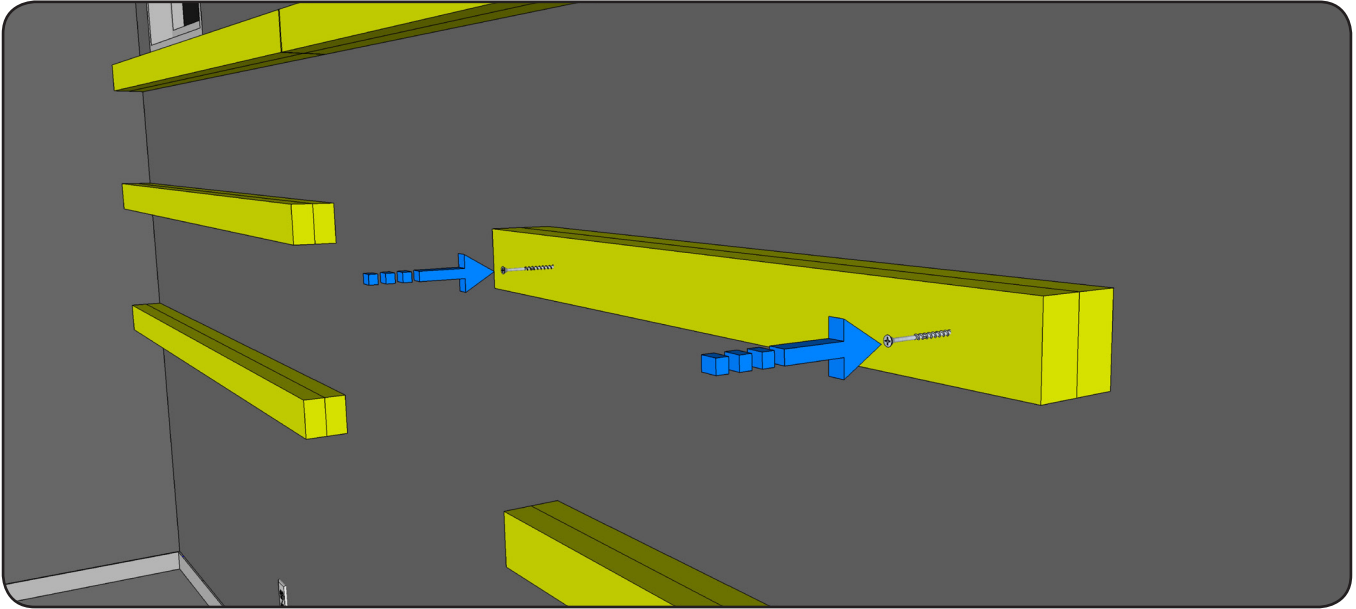
## HELPFUL HINT

Consider making your shelves 8, 12, 16 or 20 feet long to optimize wood use.

## ASSEMBLY:

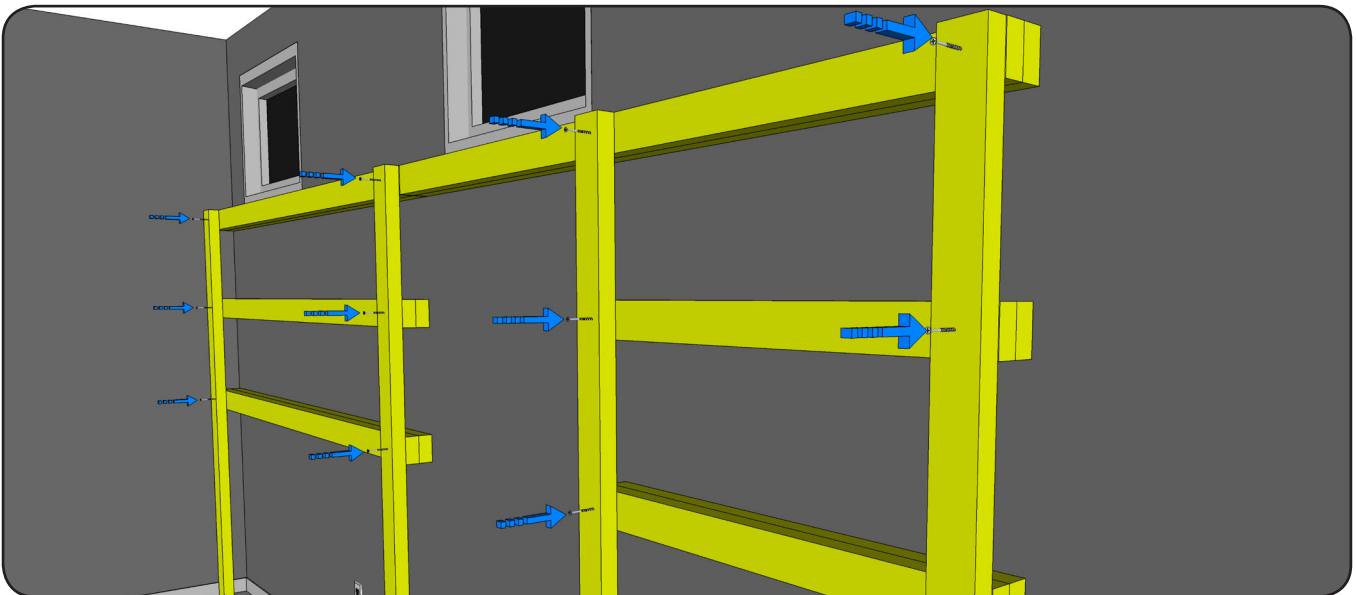
3

Next, screw a second 2x4 to the first 2x4, in the same length. Don't screw the screw all the way in, and only put two screws in each board. These are just to hold the boards in place.



4

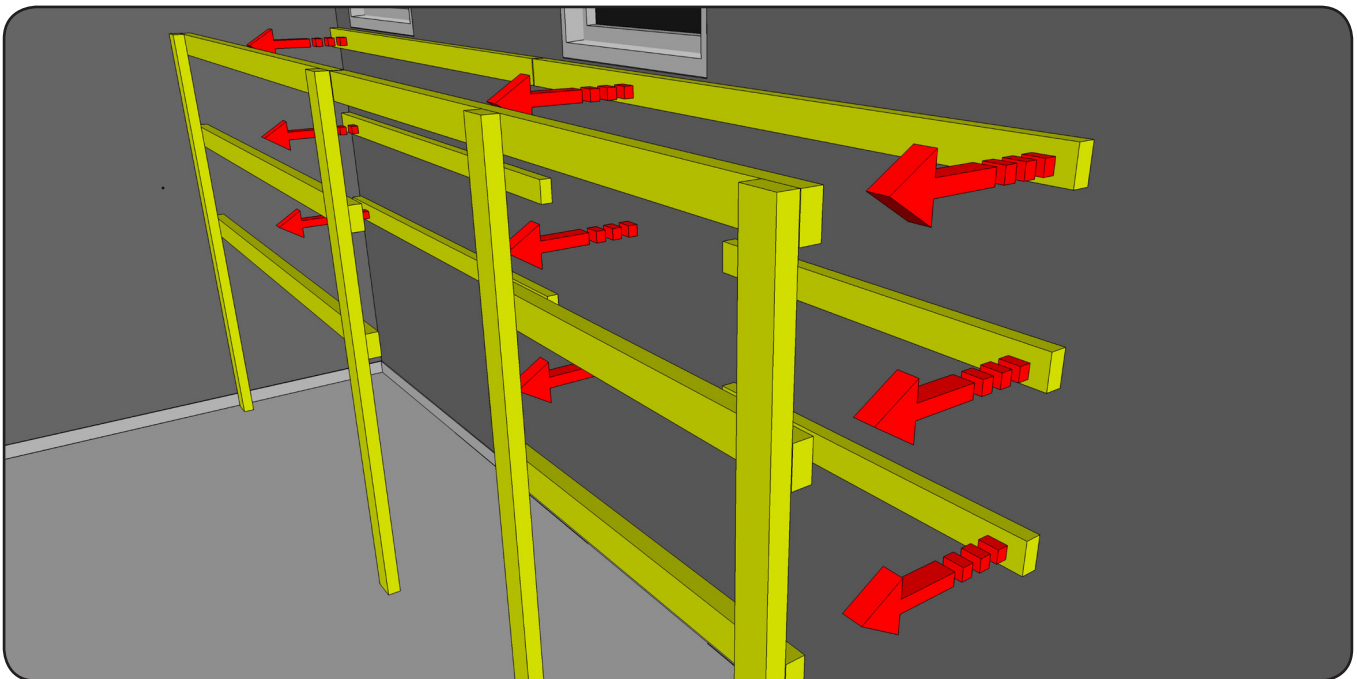
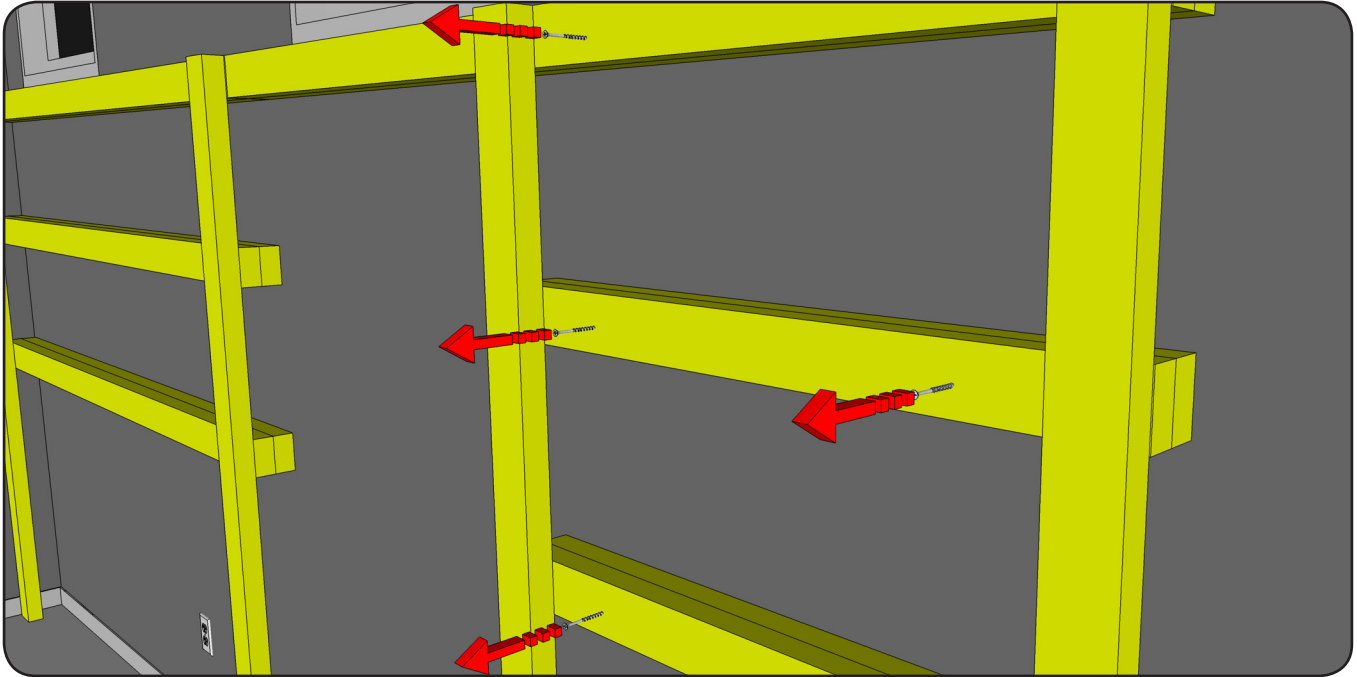
Next, cut 2x4s to the height of your shelving and screw to the outside 2x4 with 3" or shorter screws. You'll want a leg on each end and middle legs depending on how long your shelves span.



## ASSEMBLY:

5

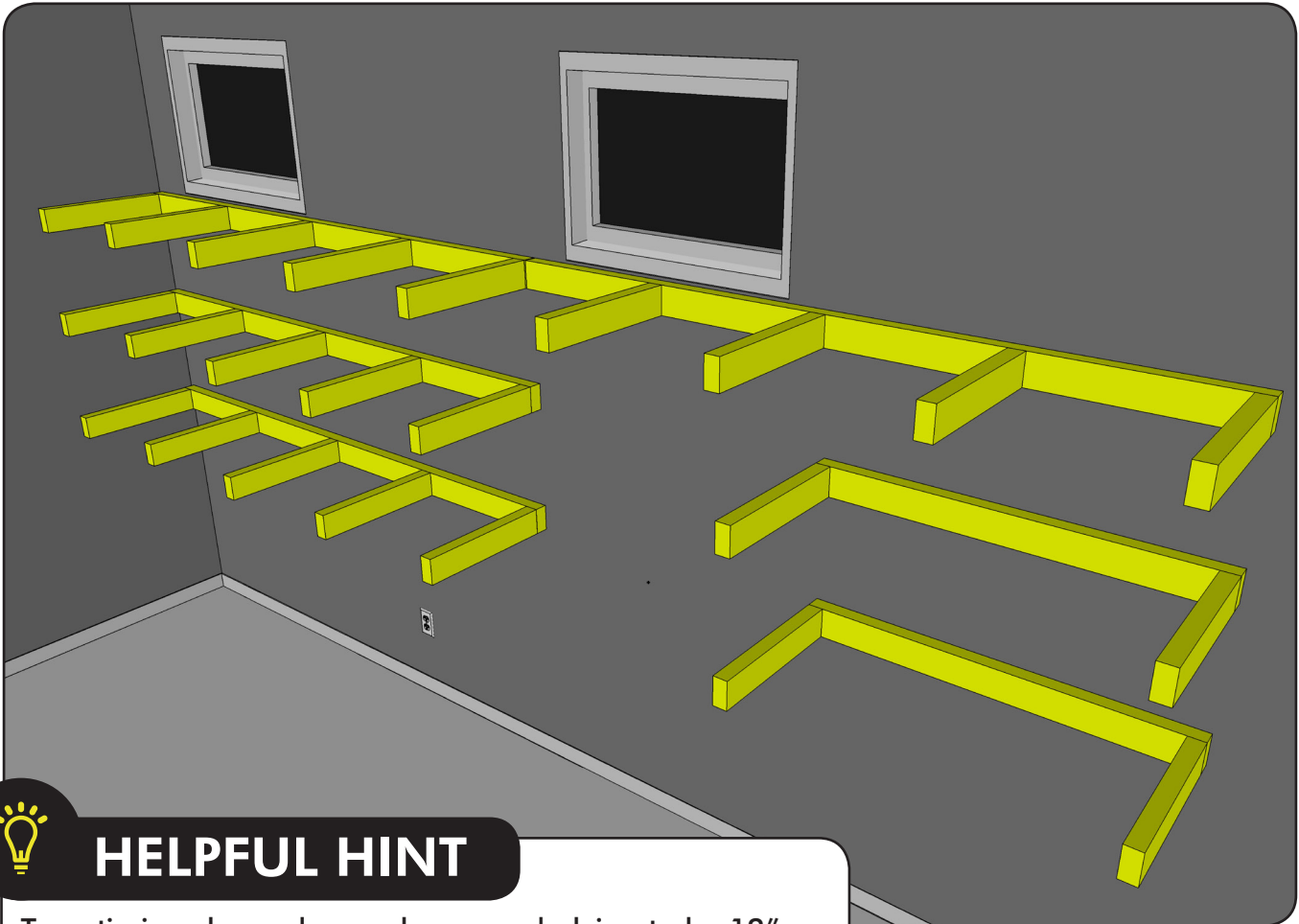
Now unscrew those screws that attached the second 2x4s to the first ones, and remove the upright leg and crossbar.



## ASSEMBLY:

6

Cut 2x4s to 3" less than our plywood shelving pieces, drill pocket holes in one side, and attach to the first shelf boards. If you don't have a pocket hole jig, you can drive screws at an angle into the first row of 2x4 boards.



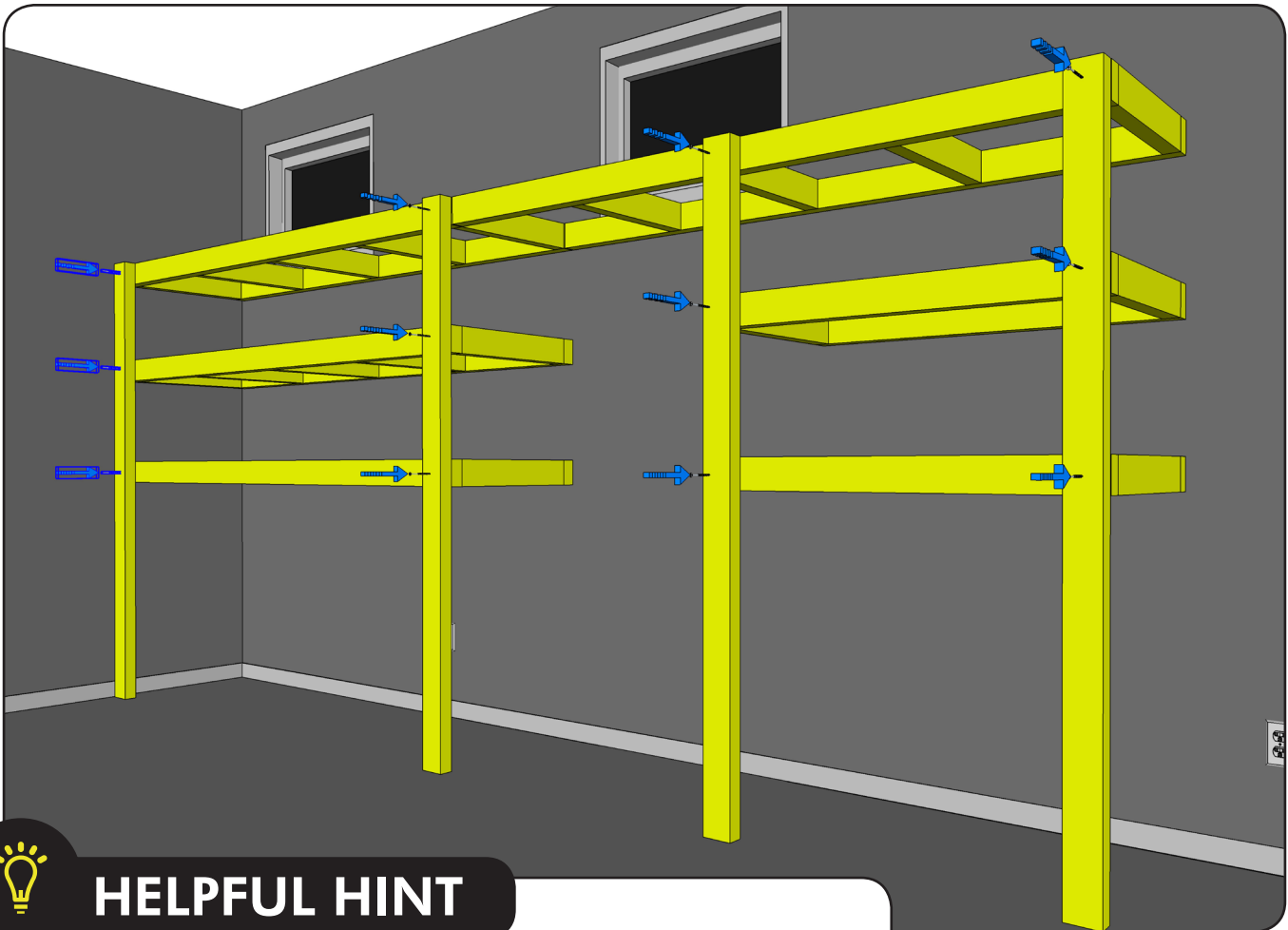
### HELPFUL HINT

To optimize plywood use, plan your shelving to be 12", 16" or 24" in width. This means the 2x4 cleats would be 9", 13", or 21" long, respectively. We placed cleats every 24" for extra strength.

## ASSEMBLY:

7

Bring the leg set up to the cleats, and screw it to the cleats using 3" screws. Then put a screw through the front shelf bar to attach to the cleats.



### HELPFUL HINT

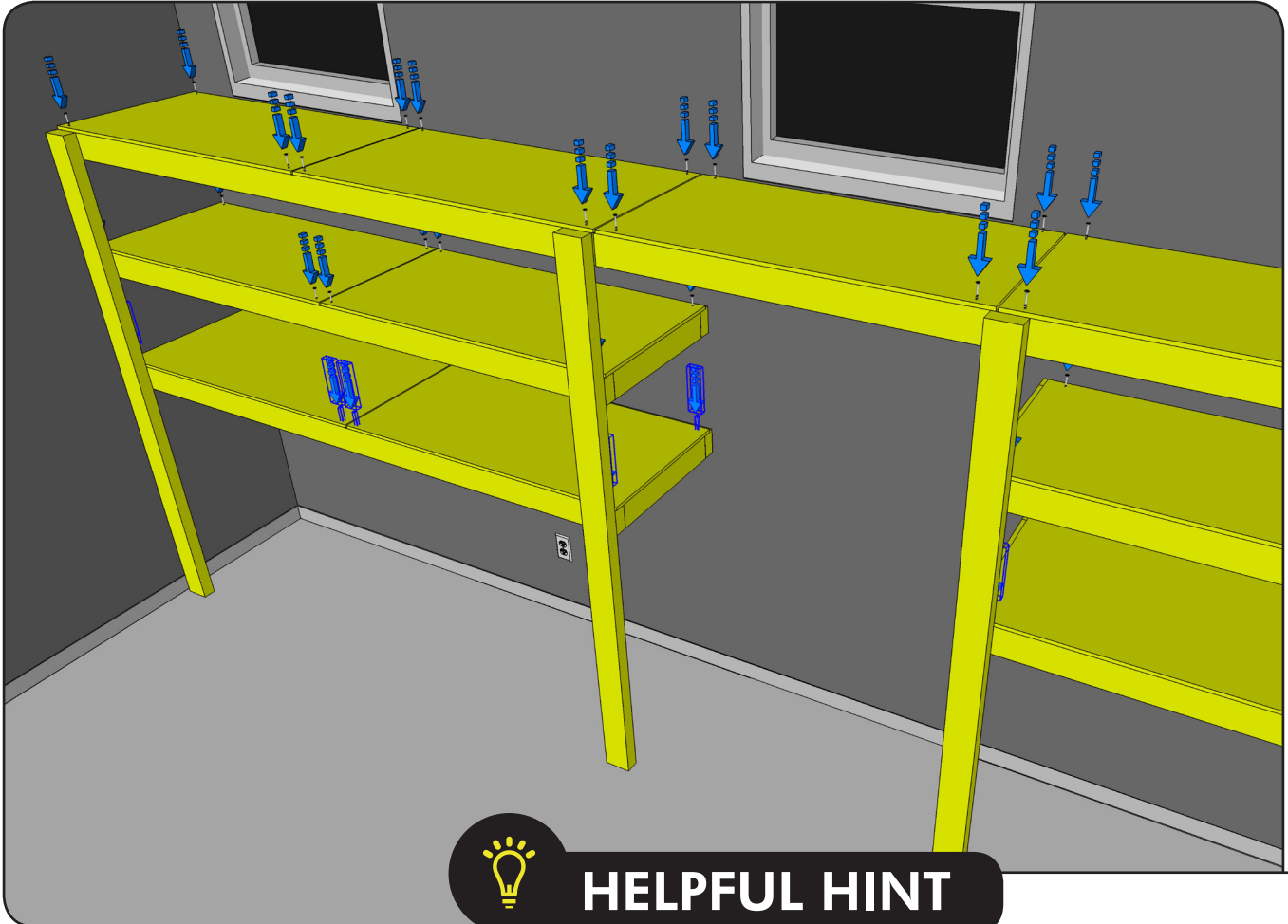
If your floor slopes or is uneven, as most basement and garage floors do, you can easily shim under the legs to level out your shelves.



## ASSEMBLY:

8

We ripped plywood into quarters so it would fit easily inside the shelves. We used 1/2" plywood, but go up to 5/8" or 3/4" if you decide to not use as many cleats.



### HELPFUL HINT

If you don't have a table saw or a truck to haul full sheets of plywood, The Home Depot will rip the plywood for you - perfect accuracy is not essential in this project.