Over-Garage Door Lumber Rack

Designed by RJ Brown

internetwoodworking.com

Instructions for building the Over-Garage Door Lumber Rack
By RJ Brown
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If you're like me and have your shop in your garage, there's a good chance you have little room for lumber storage. I had been thinking about the wide expanse of space above my garage door for years, wondering how I could put it to use and came up with a relatively simple system for storing long boards and even sheet goods.

There isn't much room height-wise, but having a 16' garage door, there's a good deal of width on either side of the garage door opener. I built a rack on one side of the door and will eventually build an identical unit on the other side. Even if your garage door isn't as wide as my 16 footer, you can probably still build a rack that is a little narrower. Any of my dimensions can be modified to fit your particular space needs. You'll find some drawings at the back of this file with dimensions on the parts and placement. Let's get started!

1.) **The** first thing you need to determine is which direction the trusses or joists run above your garage ceiling. In most cases, they will run the length of the garage door, parallel to the door opening. The idea is to spread the lumber weight across as many members as possible. I used 2 x 2s that I made by splitting 2 x 4s on my table saw, and bolted them 34" apart with ¼" x 4 ½" lag bolts. I started at the header above the door and ran about 10 feet out, bolting to every truss member along the way (16" on center in my case). After locating and marking all the trusses, I used a couple of long drywall screws to support the 2 bys while I predrilled for the lag bolts.

2.) **The** next step is to make the pipe support blocks. I used ¾" medium density overlay (MDO) plywood but any ¾' plywood will do. DO NOT use particle board or oriented strand board (OSB) as they are not as strong as standard laminated plywood for this application. Also, your support blocks may vary in length from mine (see drawing). Since there is limited room when the door is in the up position, be sure to take careful measurements as to how long your blocks can be. Be aware that the garage door will actually raise to a higher point where it curves from vertical to horizontal; this apex will determine the lowest level of your rack.

I placed the block above the door close enough to the header to clear the top of the door as it rounds the bend to take advantage of an extra inch or so between the pipe and the bottom of the support block. You'll want to open and close the door several times while measuring this area to determine where to place the first support block and how long you can make it.

3.) **I** mounted the pipe support blocks – six per rail – 21" apart. The one nearest the door is 8 ½' from the header. I predrilled and used two #10 x 2" screws to mount each support block to the inside of the 2 x 2 rails. You want to mount them all so that they are perfectly level. But since most ceilings – especially garage ceilings – are very uneven, locate the highest point along the rails and mount the first block there. Then work both directions using a level to position each additional block, cutting them in length when needed (cut on the top end). Some of my supports blocks are as much as a half an inch shorter that the first one I mounted. Mount all

six blocks on one rail then use the level from one to establish the vertical position of the first block on the other rail and then mount the rest of them using the level from one to the next.
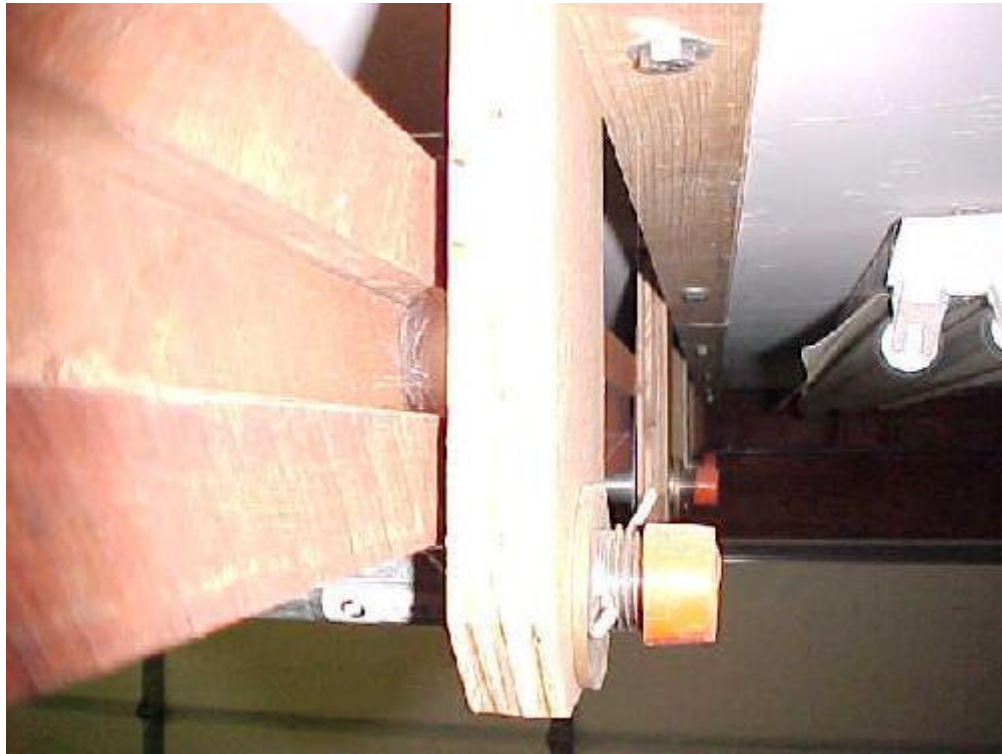
4.) **I** used ¾" diameter galvanized pipe because it's so much cleaner than black pipe. Of course black pipe can be cleaned and even painted but one way or the other it will leave marks on your pretty cherry and maple boards! I bought 3 foot pipes threaded on both ends simply because I was unable at the time to transport 10 foot lengths of pipe. It would have been more economical had I bought the 10s and cut three 3 footers from each. With the support blocks spaced 34" from outside to outside, you'll have 1" of pipe extending beyond each block. I used 7/8 " washers (or were they 1"? – find whatever will slip over the pipe) and drilled holes for cotter pins ½ from each end of the pipes. Slide each pipe through the holes in the support blocks and install the washers and cotter pins and you're done!
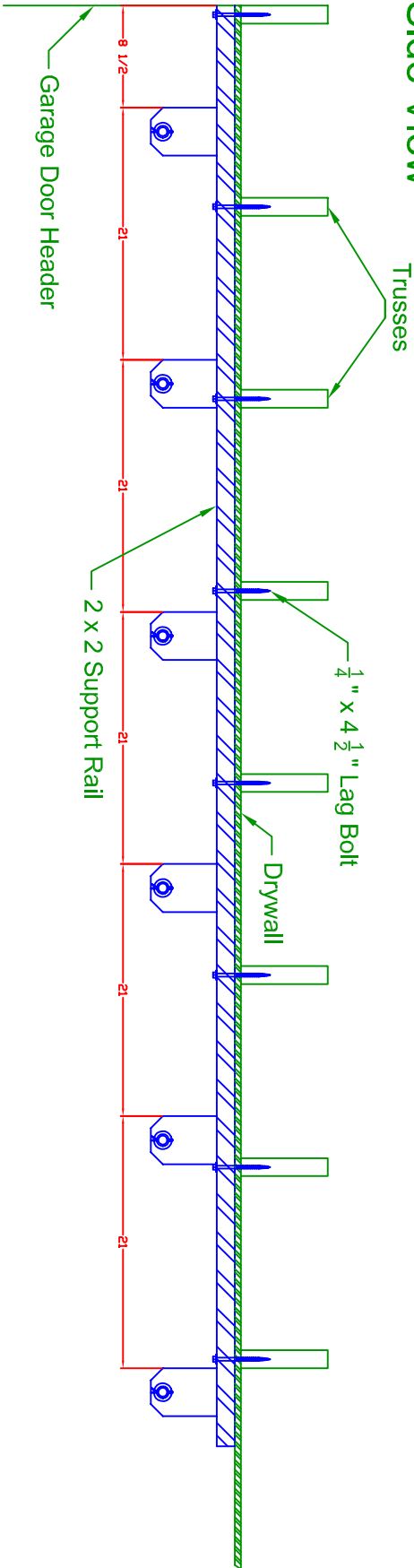
I hope you enjoy building this simple project. It is a good way to add storage space for quite a bit of lumber in an area that would otherwise go unused and wasted. I urge caution when loading or unloading heavy, cumbersome boards up above your head or while balanced on a ladder! And lastly, I am in no way responsible for any injuries sustained or from any damage that may occur as a result of the installation or use of this rack in your shop. But of course you knew that!
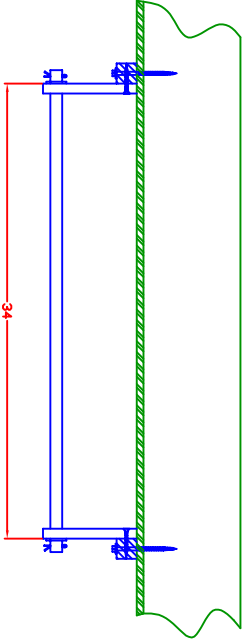
Good luck and have fun! ☺

Robert J. Brown
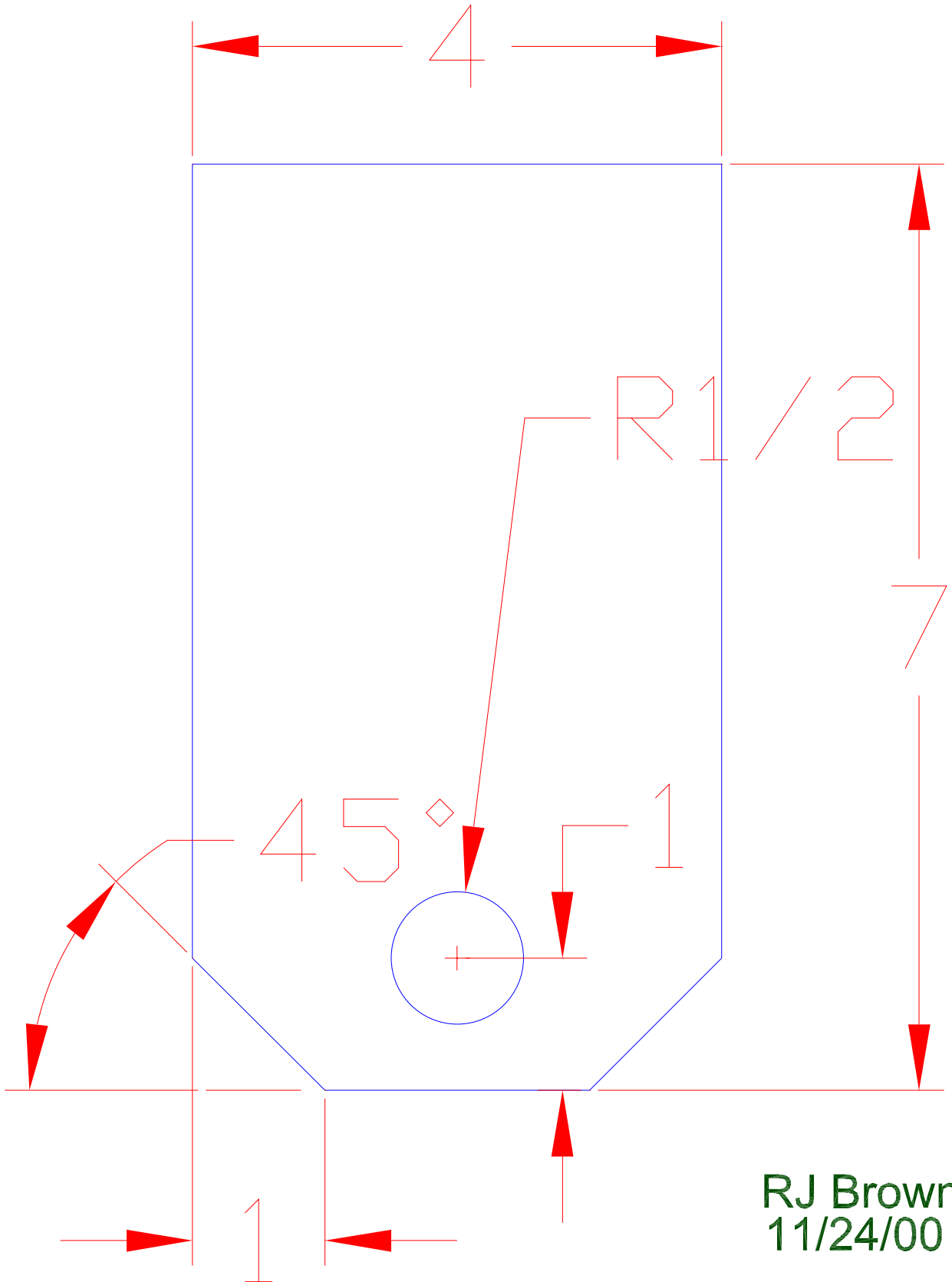11/21/2000

Garage Door Rack Layout

Side View

Garage Door Header

Trusses

2 x 2 Support Rail

$\frac{1}{4}$" x 4 $\frac{1}{2}$" Lag Bolt

Drywall

8 1/2

21

21

21

21

21

Front View

34

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Support Block

4

7

R1/2

45°

1

1

1

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