



## USA Overhead Racks Assembly Instructions

Thank you for choosing [USA Overhead Racks](http://USAOverheadRacks.com) and congratulations you are well on your way to getting your garage floor back! Our mission is to provide homeowners with high quality, easy to install garage storage solutions. We are always here to help at [USAOverheadRacks.com](http://USAOverheadRacks.com) please contact us with any questions or concerns throughout your installation process.

Please read these instructions in its entirety before beginning installation. There is a large amount of information straight from a professional installer with over 50,000 Overhead Rack installations completed. Also check out our help section on [USAOverheadRacks.com](http://USAOverheadRacks.com) for tips and tricks to make your installation go smoothly.

### Tools necessary for installation

Ladder    Tape measurer    Pencil    ½" Wrench    Level

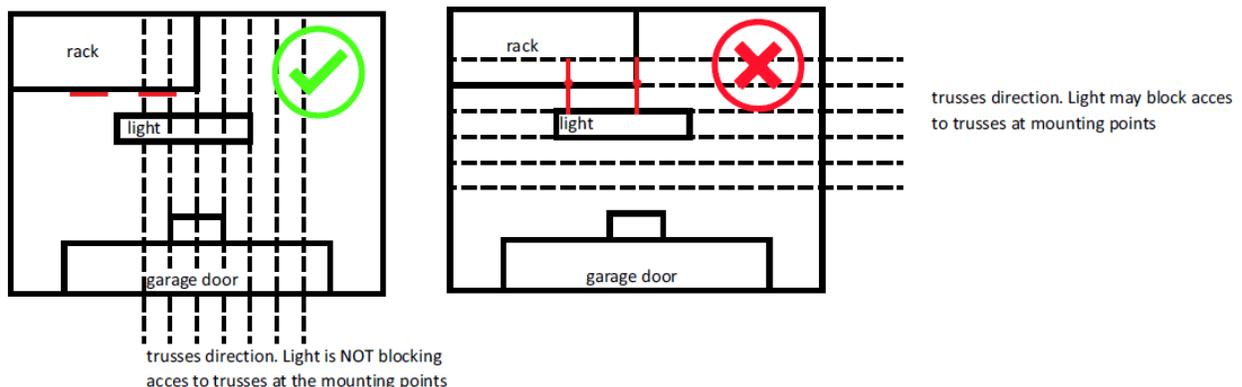
Drill with 3/16" drill bit    ½" socket with ¼" impact gun with socket adapter

7 amp ½" Drill with 7/16" driver    Safety glasses

### Step 1 Pick a location

Picking a location can be the most important part of this process. We suggest staying in the perimeter of the garage away from entry doors. The more wall surface you can mount to the more stable your rack will be and the more weight will be transferred from the ceiling trusses to the wall studs. Corner mounted racks are the easiest to install and will be the strongest and most stable.

Once you have decided the location of the rack make sure you can locate the trusses on each side of your ceiling mount locations. Sometimes you may have a fixture on the ceiling that blocks the access to the truss. There can be ways to work around this with our help but its best to work around these fixtures.



Your measurements for the ceiling will be your rack size plus  $\frac{3}{4}$ " (Example a 4ft x 8ft rack is 48  $\frac{3}{4}$ " x 96  $\frac{3}{4}$ "). You will have a vertical support for every 4ft of perimeter of racking that is not attached to a wall and/or each corner. See our diagram on the [help page at USAOverheadRacks.com](http://USAOverheadRacks.com) for all the mounting points for all sizes of racking.

In some scenarios you may have a vertical post need to drop down in the exact location a truss is. In that case you can align the 26" bracket the same direction as the truss. Always connect to the ceiling using 2 lag screws with the vertical post coming down in between them. You will not be able to use the single hole ceiling tabs in this situation. As always, ensure you are screwing into the center of the wood for a solid connection.

**We will show here an example of our 4ft x 8ft overhead rack with a 20" drop from the ceiling. Your measurements are the size rack you bought plus  $\frac{3}{4}$ ". The drop from the ceiling is adjustable in 1" increments within range based on the size kit you purchased.**

### **Step 2 Open & Inspect**

Open and inspect your USA Overhead Racks frame kit. Stack up the pieces on the floor separated by length. Our product is made with all the same heavy duty 13-gauge steel material. The only difference is the length of the pieces.



See below the specs for your kit. USA Overhead Racks does offer customizable kits in any increment by the 1". If you have purchased a custom kit please see your custom build sheet included with your frame kit. Your order may come in multiple packages depending on the project size.

We offer two sizes for vertical drop which range from 12"-26" and 27" – 38". Vertical drops can be adjusted in 1" increments within the range of sizing you order. Vertical posts must always connect together with two bolts on the same side.

12"-26" vertical drop kits will come with a 12" piece and a 16" piece for each vertical post.

27"-38" vertical drop kits will come with a 16" piece and a 24" piece for each vertical post.

#### **4ft x 8ft Rack**

2 pieces @ 8ft.

#### **2ft x 8ft Rack**

2 pieces @ 8ft.

5 pieces @ 4ft.  
3 pieces @ 26"  
6 single hole tabs  
6 vertical posts (2 per mount)  
nut & bolt pack  
3" lag screws

#### **4ft x 4ft Rack**

5 pieces @ 4ft  
2 pieces @ 26"  
4 single hole tabs  
4 vertical posts (2 per mount)  
nut & bolt pack  
3" lag screws

3 pieces @ 2ft  
3 pieces @ 26"  
6 single hole tabs  
6 vertical posts (2 per mount)  
nut & bolt pack  
3" lag screws

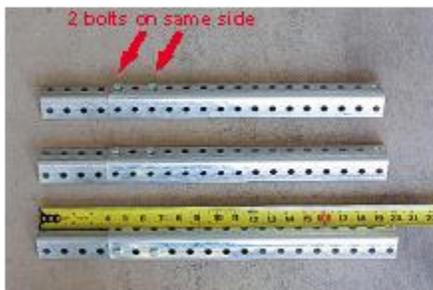
#### **2ft x 4ft Rack.**

2 pieces @ 4ft  
2 pieces @ 2ft  
2 pieces @ 26"  
4 single hole tabs  
4 vertical posts (2 per mount)  
nut & bolt pack  
3" lag screws

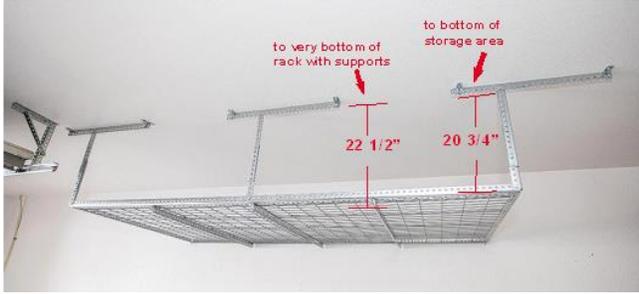
### **Step 3 connect vertical posts to desired drop height**

You will have one 26" ceiling mount piece and 2 vertical posts for every 4ft of rack perimeter that is not attached to a wall and/or each corner. If you have 4 or more ceiling connections and purchased extra ceiling brackets, they will come in a separate package. We will provide enough vertical post for every corner and/or every 4ft of perimeter of racking.

Bolt together your vertical posts to your desired drop from the ceiling using the 5/16" lock nuts and bolts. The two pieces slide together so you can adjust the height in 1" increments. The bottom of the 2 vertical posts should be on the inside. Always connect using two holes as shown with two bolts on the same side.



Use our guidelines to ensure you have clearance when mounting above garage doors and other objects. Installing a 20" rack will require at least 23" of clearance.



Custom vertical posts can be made at almost any distance in 1" increments. Contact us at [USAOverheadRacks.com](http://USAOverheadRacks.com) for help with custom sizing.

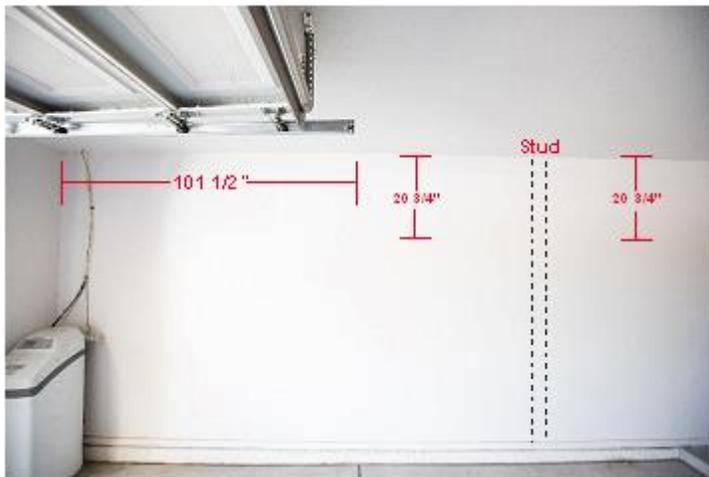
#### **4 install wall frame pieces**

\*\*\*If you purchased extra vertical posts so you can free hang your rack attaching to the ceiling only, you can skip this step and start your first ceiling bracket.

Start by mounting any frame sections that are against the wall. Make two marks down from the ceiling at 20 3/4" and check for level. Also find the side measurement to the closest wall of where you want the rack to start.

Mark the location of a stud near the center of the rack.

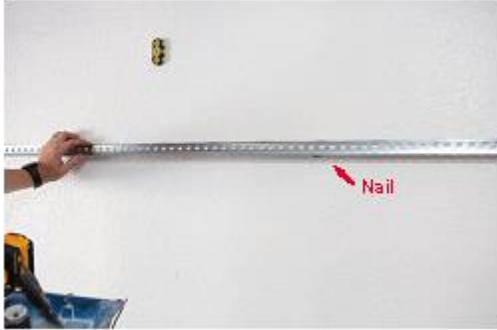
Add 3/4" to the measurement of your vertical support, this will be the bottom of the perimeter frame.



If mounting in a corner, leave a 1/4" gap to the wall as shown.



Hold the metal frame aligned with your marks with one hand while Using your drill and drill bit to predrill the marked stud. When initially drilling into the stud check each side to make sure you are drilling into the center of the stud. You can hammer long nails into the drywall to help hold the frame while you mount it to the wall if you're having difficulty holding with one hand. Pound in 2 nails at least 4 ft apart at your 20 3/4" marks from the ceiling and set the frame piece on top of the nails. Ensure the marks are level before pounding in nails.



Use the 3" lag screws to mount the frame to the wall studs predrilling each stud with the 3/16" drill bit. Repeat this step for all the studs in the wall while ensuring the frame is level. Repeat this step for every remaining stud in the wall, We supply enough lag screws for studs at 16" spacing.



Wall mounted framing need a lag screw within 2ft of each end of the frame piece. This is minimum standard code for any wood framed wall.

## **5 install the ceiling brackets**

Check out our help section on [USAOverheadRacks.com](http://USAOverheadRacks.com) for extra information to help with mounting ceiling brackets.

If you have another story above your garage, we recommend you use our guidelines on USAOverheadRacks.com and 2 story bolt pack to ensure you aren't taking unnecessary risk. Most two-story homes use box style trusses and often use that space to run water and electrical throughout your entire home as shown below. 3" lags which are standard with all ceiling racks will pass through the truss and could puncture one of these critical lines causing the need for a costly repair.



Two story bolt packs will include extra lag screws in lengths of 2" and 2.5". depending on the thickness of your drywall you can choose the right lag screw to use to prevent costly repairs.

**USA Overhead Racks does not take any liability for installation. It is up to you the installer to determine the correct action for your situation.**

Measure the location of the first vertical post. Your first bracket should start at one of the corners. In this example we are 48.75" from the wall and 101.5" from the nearest the side wall. Locate the trusses on each side of your vertical post location AND the direction they are running. Make multiple measurements adjacent to the direction of the trusses to ensure your bracket will be square to the wall.

If you are mounting the rack into a corner measure from your side wall and start with the center support.

Hold up the 26" ceiling bracket and align it so that it runs perpendicular of the trusses while it crosses your marks for the vertical post location and can connect to two trusses as shown.



Using the 26" bracket as a stencil, mark the holes with a pencil where the trusses are located. Your vertical post must fall in between the two trusses and never outside of them. Set aside the 26" ceiling bracket.



Use your drill and drill bit to find the edges of the trusses to ensure you will be screwing into the center of the Truss. Very gently drill through the drywall to find the edges of the wood. Once the bracket is installed, most if not all of these holes will be covered. You can also use small finish nails to poke through the drywall if you don't wish to make larger holes. Either way you can use some drywall putty to cover these holes and knowing that you have a secure connection in the center of the truss is well worth this extra step.



Pre drill the stenciled hole that is most centered with the wood beam with your 3/16" drill bit. You can slightly adjust this location to make sure you are drilling into the center of the truss.



Mount the 26" ceiling bracket with the Lag bolts included using the predrilled hole.

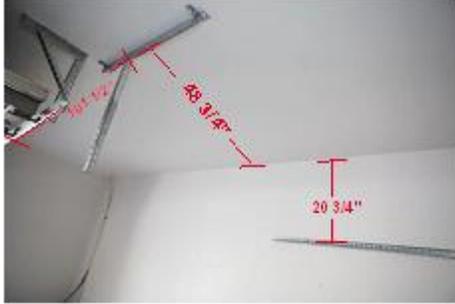


Repeat this step for the truss on the other side of the ceiling bracket.

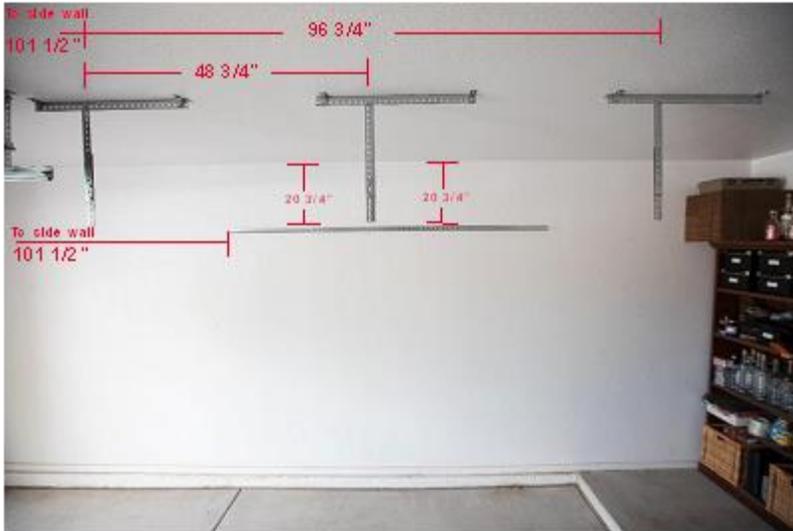
Once the bracket is secure to both trusses Bolt on the Ceiling mount single hole tabs directly behind your screw connections using the 5/16" lock nuts & bolts. Pre-drill the ceiling holes with your 3/16" drill bit and screw in lag bolts



Bolt on your vertical post at the point it crosses your mark.



Repeat this step for all remaining ceiling mounts for your rack. See our diagram on [USAOverheadRacks.com](http://USAOverheadRacks.com) for detailed mounting locations for all rack sizes. In this example we will have two more ceiling connections for the outer 8ft of rack that is not attached to the wall.



**Congrats! The hardest part is over. All that is left is simple connections piecing the rack together.**

## **6 Connect perimeter framing**

Once you have completed all of your ceiling mounts and installed the vertical posts you can connect the perimeter frame pieces. Each connection is made with the 5/16" lock nuts and bolts provided.



If you are connecting together multiple rack sections (example to create 4ft x 16ft unit) now is the time to connect the adjoining piece. (Shown Below) Butt the frame pieces together where you want to extend the next section. The 2 racks will share this vertical support and this will serve as the first corner of the next rack.



Mount the frame with the lip up, we like to say make a basket. The decking sets inside.



Only connect the outside corners.



Leaving the center support unconnected for easier deck placement later on.

## **7 Bottom supports**

The bottom support pieces play a vital role in the strength and stability of your rack. We do not recommend to ever modify these pieces. If the bottom supports are not properly installed your decking material may fall through the bottom causing severe bodily injury and damage.

Install the bottom support pieces as shown. Measure from one side and place the  $\frac{3}{4}$ " bolts at 2ft, 4ft, & 6ft along each 8ft piece. Racks 24' wide and under only have one bottom support at 4ft. All racks over 2ft wide have a bottom support every 2ft.



From the bottom of the rack hand tighten on the support pieces to the bottom of the perimeter framing where you just placed the bolts.



Then go back with a  $\frac{1}{2}$ " wrench and  $\frac{1}{2}$ " socket to tighten the rest of the way.



## **8 Install decking material**

Now we can load our decking material. If you chose to purchase our powder coated steel decking it will arrive in a separate package. **Proceed to the instructions provided with the steel decking package.**

If you decided to use your own decking, we recommend a 1/4" thick hardboard or plywood. This can be found at most any hardware store and is extremely affordable. If you are installing a 4ft x 8ft rack you can have the board cut in half at the hardware store for ease of transportation. If you have a custom size rack you can also have this product cut to fit any size at most big box retailers. Cut your decking to the size of your rack without the added 3/4" Example 4 ft x 8ft.

If your own custom decking has any interior seams, ensure that they are centered over a bottom support piece so that the seam is supported by a bottom support piece.

Use of plywood or anything thicker than 1/4" you may have to notch out some areas where nuts & bolts are connected.

Once your decking is installed you can connect the center support. Simply install the vertical post to the perimeter frame using the 5/16" lock nuts and bolts provided. Use a level to ensure plum.

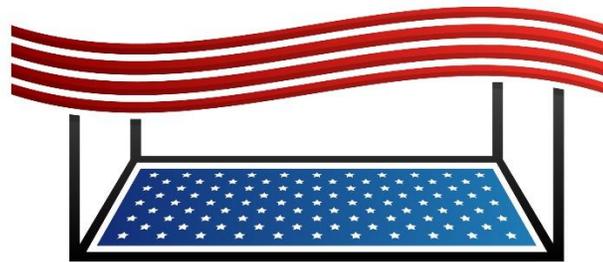


Center supports do intrude on your storage space 1.5". If the center support might interfere with your items you can mount to the outside of the frame as shown below.



Inspect the rack to ensure all nuts and bolts have been tightened completely.

Congratulations on your completed storage rack. Enjoy your new space!



**USA OVERHEAD RACKS**  
— GARAGE STORAGE SOLUTIONS —

[USAOverheadRacks.com](http://USAOverheadRacks.com)