Monkey Bars®
GARAGE STORAGE SYSTEMS

MONKEY BARS®
OVERHEAD RACK
INSTALLATION

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Thank you for purchasing the New Monkey Bars® Overhead storage rack.
The most innovative overhead rack on the market

WARNING

THE PROPER INSTALLATION OF THIS STORAGE RACK IS CRITICAL TO THE SAFETY OF THE USERS. THE UNITS ARE DESIGNED TO BE INSTALLED TO 4 CEILING JOISTS. IF THE “CEILING MOUNTS” ARE INSTALLED ON LESS THAN 4 JOISTS OR Ceiling joists, THE WEIGHT CAPACITY IS REDUCED TO 19 LBS FOR EVERY SQUARE FOOT. THE “CEILING MOUNT” LAG SCREWS ARE INTENDED TO BE MOUNTED TO THE “CENTER” OF THE CEILING JOISTS. THE “LAG SCREWS” SHOULD BE “SNUG” WITHOUT CONTINUOUS TURNING. CAUTION SHOULD ALSO BE TAKEN TO NOT SECURE SO TIGHT WHERE THE “LAG SCREW” IS AT A BREAKING POINT. IF THERE ARE ANY RESERVATIONS OR DOUBTS REGARDING THE INSTALLATION OF THE “CEILING MOUNTS,” PLEASE GET HELP FROM SOMEONE WHO HAS EXPERIENCE WITH THIS TYPE OF INSTALL.

WARNING

DO NOT EXCEED THE LISTED WEIGHT LIMIT FOR EACH PLATFORM. THE WEIGHT CAPACITY IS INTENDED FOR EQUAL DISTRIBUTION OVER THE PLATFORM. BE AWARE OF THE WEIGHT OF THE ITEMS STACKED ON THE PLATFORM AND DO NOT EXCEED 24 LBS FOR EVERY SQUARE FOOT OF PLATFORM SPACE. (4’x 8’ Platform = 750 lb rating) USE A STURDY, WEIGHT APPROVED “STEP LADDER” FOR LOADING THE PLATFORM. THE BEST POSITION FOR THE LADDER IS FACING TOWARD THE PLATFORM WITH THE TOP BEING SEVERAL FEET AWAY FROM THE PLATFORM. DO NOT CARRY ITEMS WHILE CLIMBING THE LADDER. DO NOT USE “EXTENSION LADDERS” FOR LOADING THE PLATFORM. DO NOT HANG FROM
OR CLIMB ON THE PLATFORM.

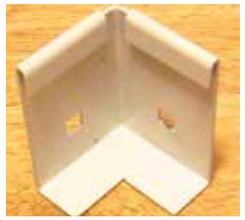
WHAT YOU WILL NEED

- Sturdy step ladder tall enough to work on the ceiling while standing at least two steps down from the top of ladder
- Wide (stiff) tape measure
- Stud finder
- Pencil
- Hammer and nail or drywall punch
- Small impact driver or ratchet w/ 1/2" socket
- Safety glasses
- Self-leveling laser level

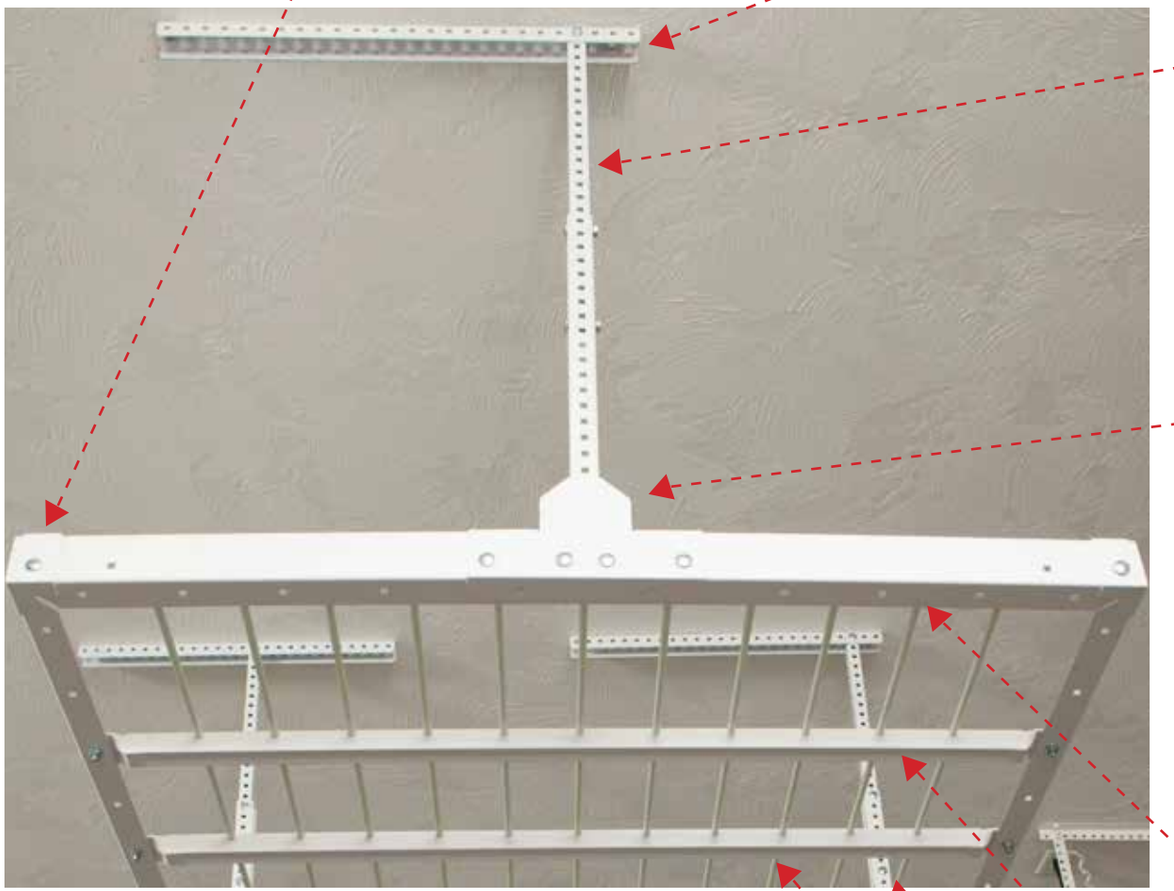
HARDWARE PROVIDED

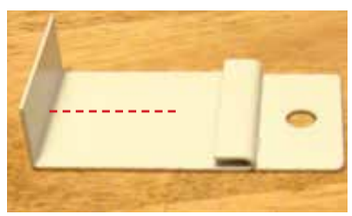
QUANTITY	SIZE	DESCRIPTION
8 Each	5/16" x 3"	Lag screws for fastening "ceiling mount"
8 Each	1/4" Flat Washers	Washers for above mentioned "lag screws"
12 Each	5/16" x 1 1/2" Carriage Bolts	Used to fasten "down-tube" & "T-brace" assembly
44 Each	5/16" x 1/2" Carriage Bolts	Used to fasten platform assembly
56 Each	5/16" Serrated Nuts	Used to fasten platform assembly
8 Each	1/4" x 1/2" Carriage Bolts	Used to fasten platform assembly (if needed, see instructions)
8 Each	1/4" Serrated Nuts	Used to fasten platform assembly (if needed, see instructions)

COMPONENTS



Corner Brace (x4) - 2” x 2” x 2 ½” angle





Wall Kit (Not Pictured, sold separately) -
Platform angle joint, wall angle holder (x4)

Grid Poles (x22)
3/8” x 48”
Fiberglass rods

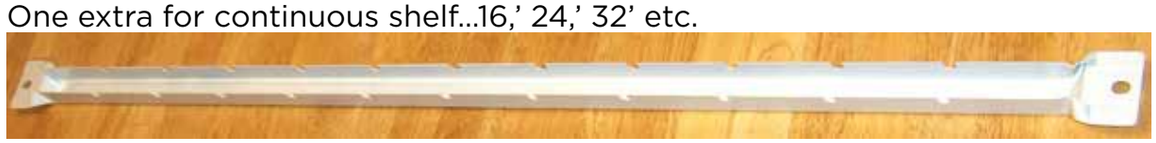
Ceiling Mount (x4) - 1 ¼” x 26” channel, 5/16” square hole every inch

Down Tube (x4) - 1” x 24” square tubing, 5/16” square hole every inch

T-Brace (x4) - 1 ¼” channel x 24” w/ 9” angle bracket, 5/16” square hole every inch.

Platform Angle (x6) - 2 ½” x 2” x 48” angle
One not needed with continuous shelf...16,’ 24,’ 32’ etc.

Cross Brace (x11) - 1 ¼” x 48” channel
One extra for continuous shelf...16,’ 24,’ 32’ etc.

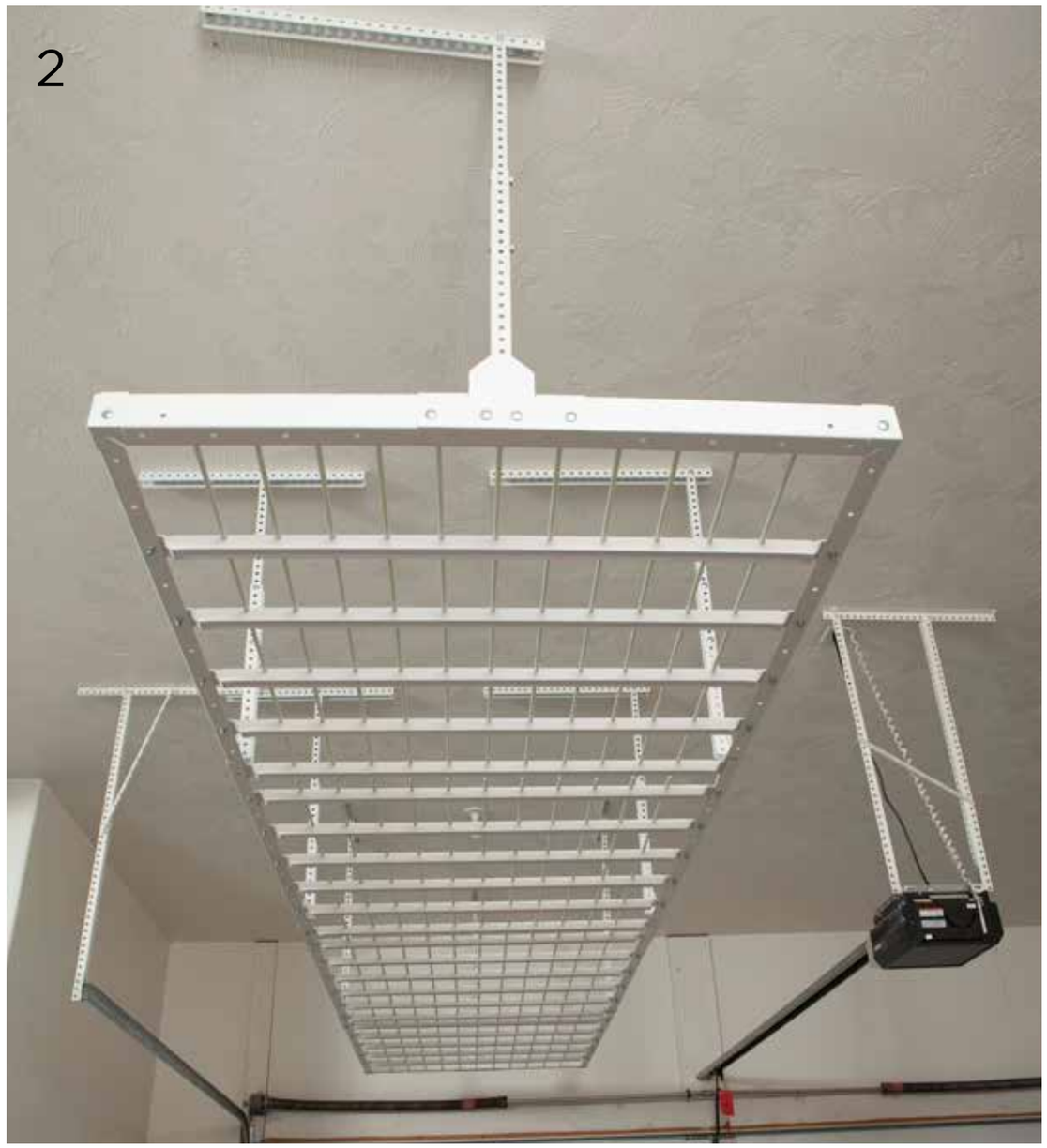


GENERAL INFORMATION

Where are the best locations for the overhead storage?

Here are things to consider:

1. The strongest install is in a corner or against the wall.
2. Both 8’ sides open allows easier access.
3. For more light exposure, center between lights, or avoid areas with lights.

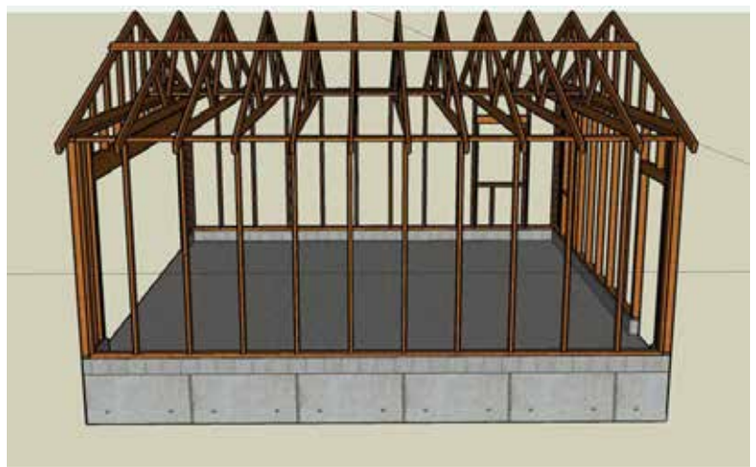


GENERAL INFORMATION

Where are the ceiling joists? In most cases you can tell by stepping outside and looking at the roof over the garage. Ceiling Joists are “typically” 24” center to center, but not always. Here are the main types and configurations you will find:

Side Gable

Notice the forward ceiling joists going toward the garage door.



Forward Gable

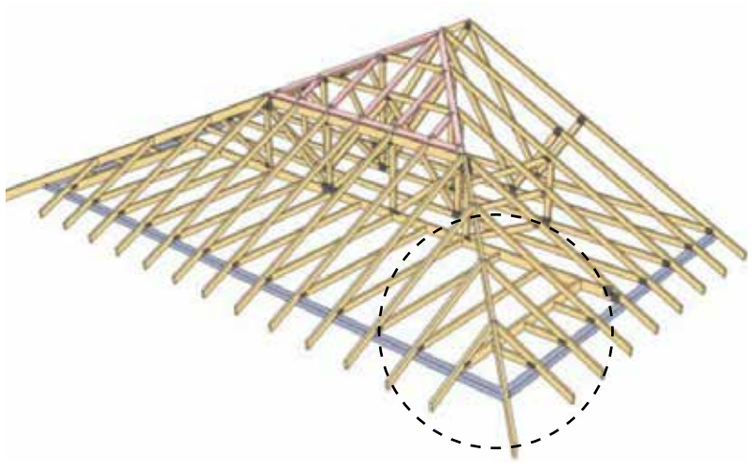
Notice the side to side ceiling joists, parallel with the garage door.

Vaulted

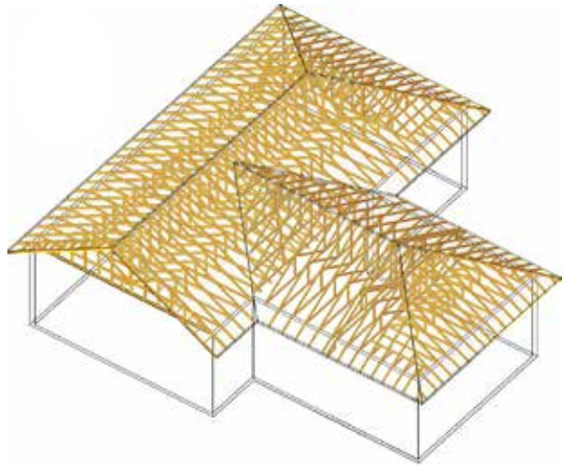
Note: “Ceiling mounts” would need to be along the ceiling joists, instead of crossing two joists. The top corner of the “down tube” would need to be cut on the down side so the “down tube” can tilt with the roof.

Hip Joists

Ceiling joists for “ceiling mounts” typically change directions



Combinations

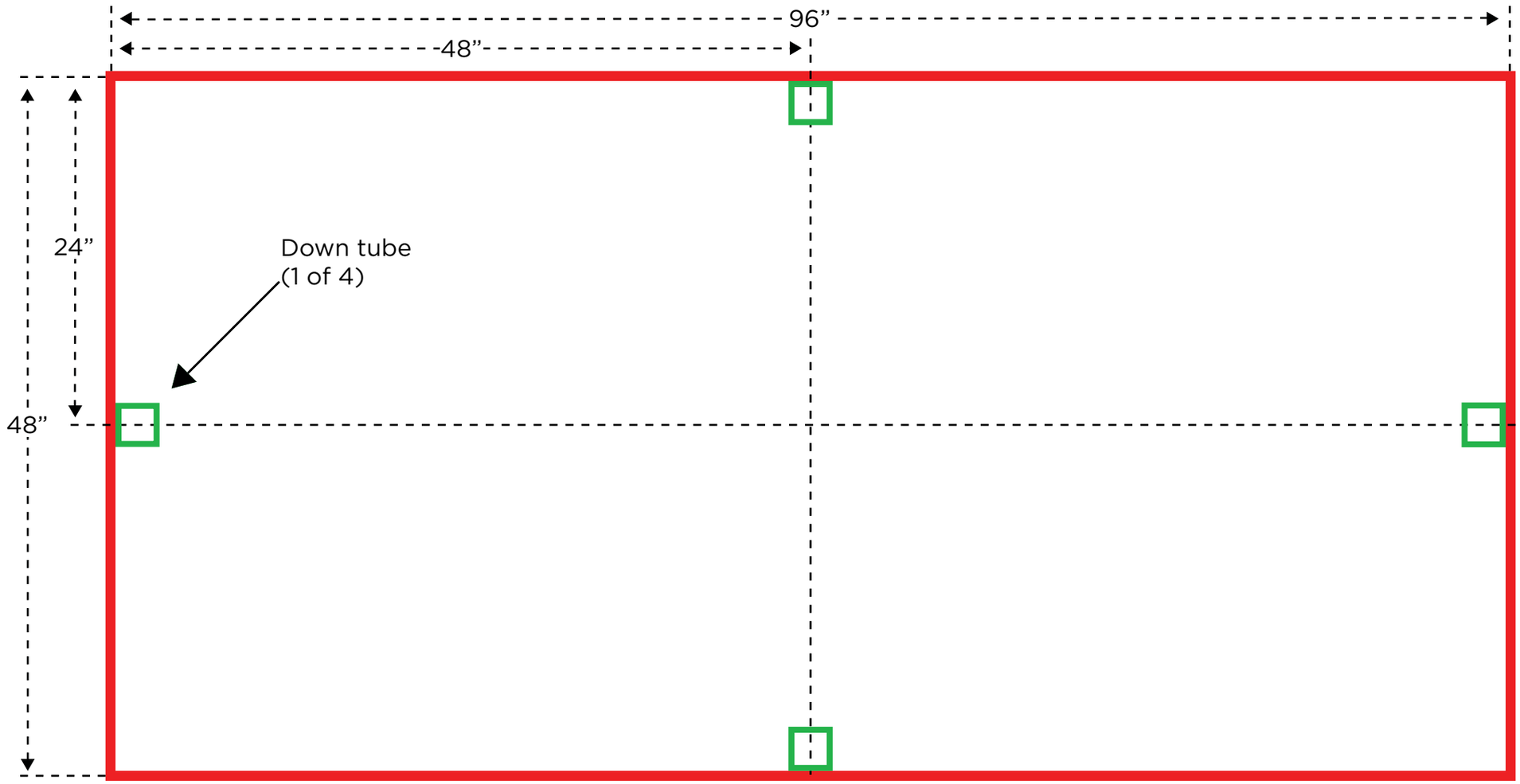


GENERAL INFORMATION

There are many different ways to measure to get the desired layout, as long as the result is the same (see “CEILING LAYOUT” below). Use parallel walls or structures to determine the position of the “down tubes.” Use this Layout as a guide to measure and mark locations.

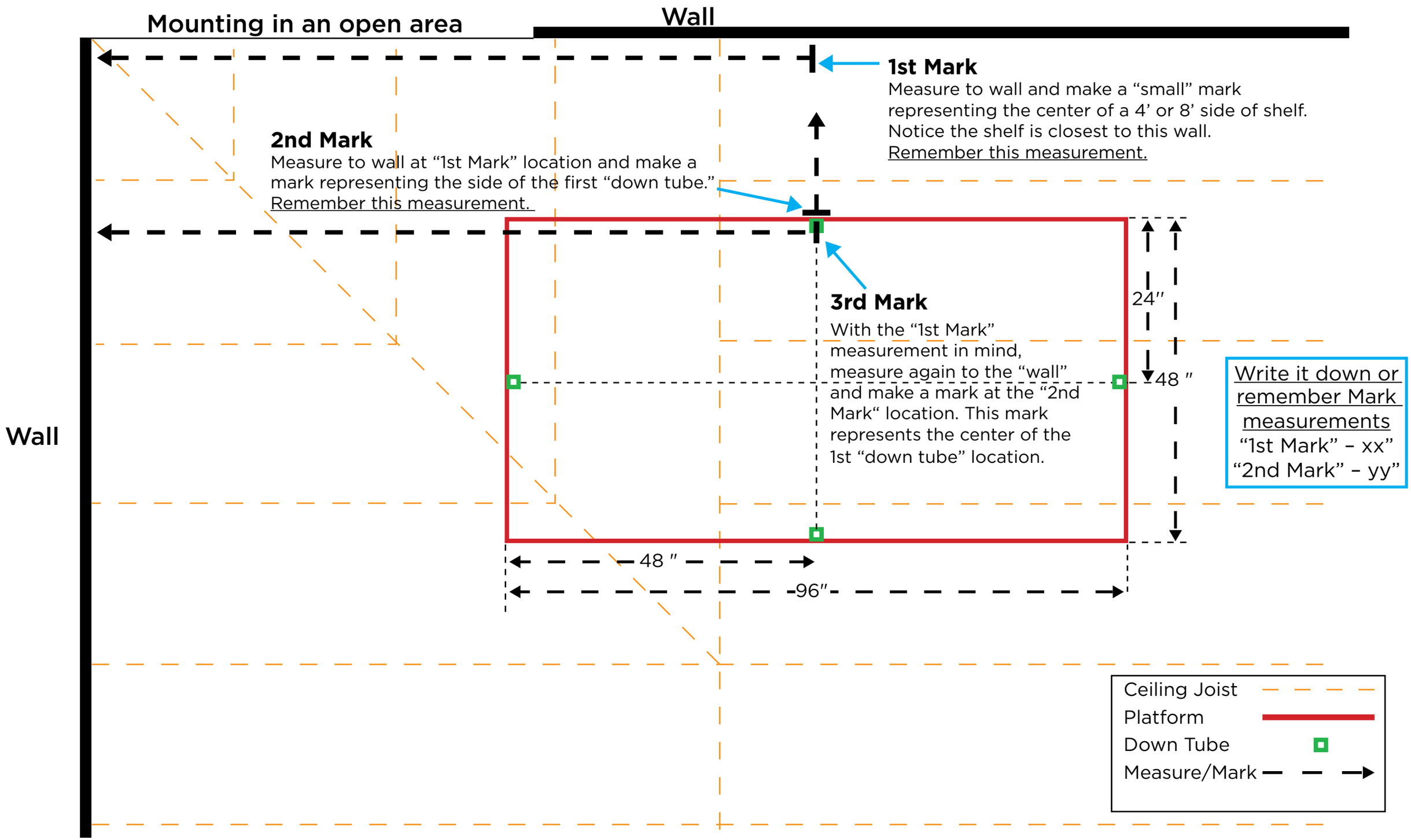
CEILING LAYOUT - 4’ X 8” PLATFORM

Ceiling “down tube” locations and measurements



STEP #1

Determine and mark the first “down tube” location.
Make the following marks in the order presented.



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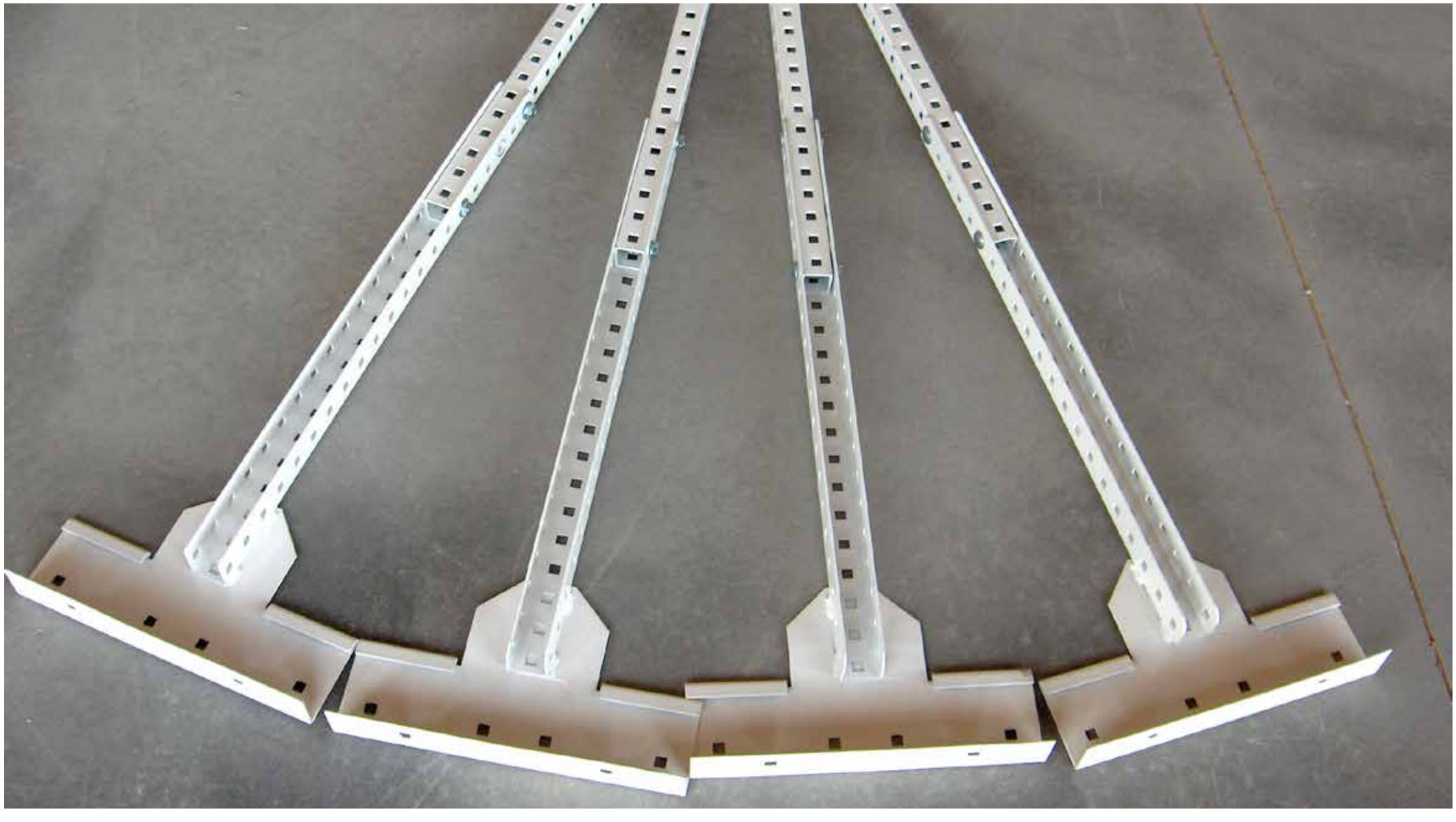
STEP #2

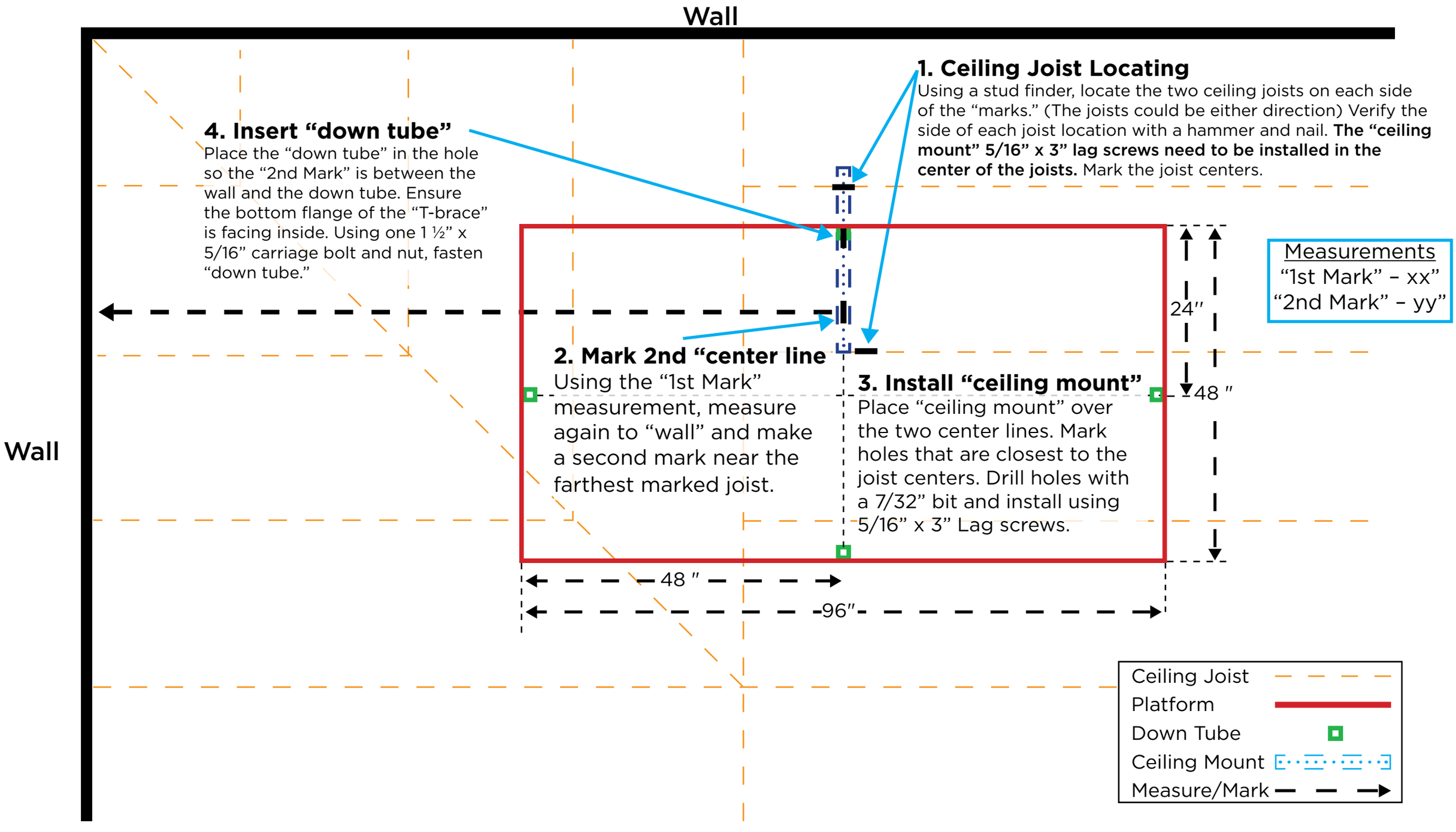
Using two 1 ½” x 5/16” carriage bolts, fasten “down tubes” to “T-braces” as shown at desired height and tighten. (Remember: the bottom of the shelf will be approximately 1” below the bottom of the “T-brace.”)



STEP #3

Install the first “ceiling mount” and “down tube.”

Notes: The overhead shelf is designed to span four ceiling joists, with a few exceptions. All “ceiling mounts” should be attached to two joists. If the “marks” for the “down tube” are directly over a joist, consider moving the “Platform” (6 inches or more) to spread the weight over two joists. Use the instructions in the order they are presented.



STEP #3

Here is an example of the first “ceiling mount” installed. The first “ceiling mount” is the one nearest a wall or structure to measure from. Drill pilot holes using 7/ 32” drill bit and fasten with 5/16” x 3 “ lag screws.

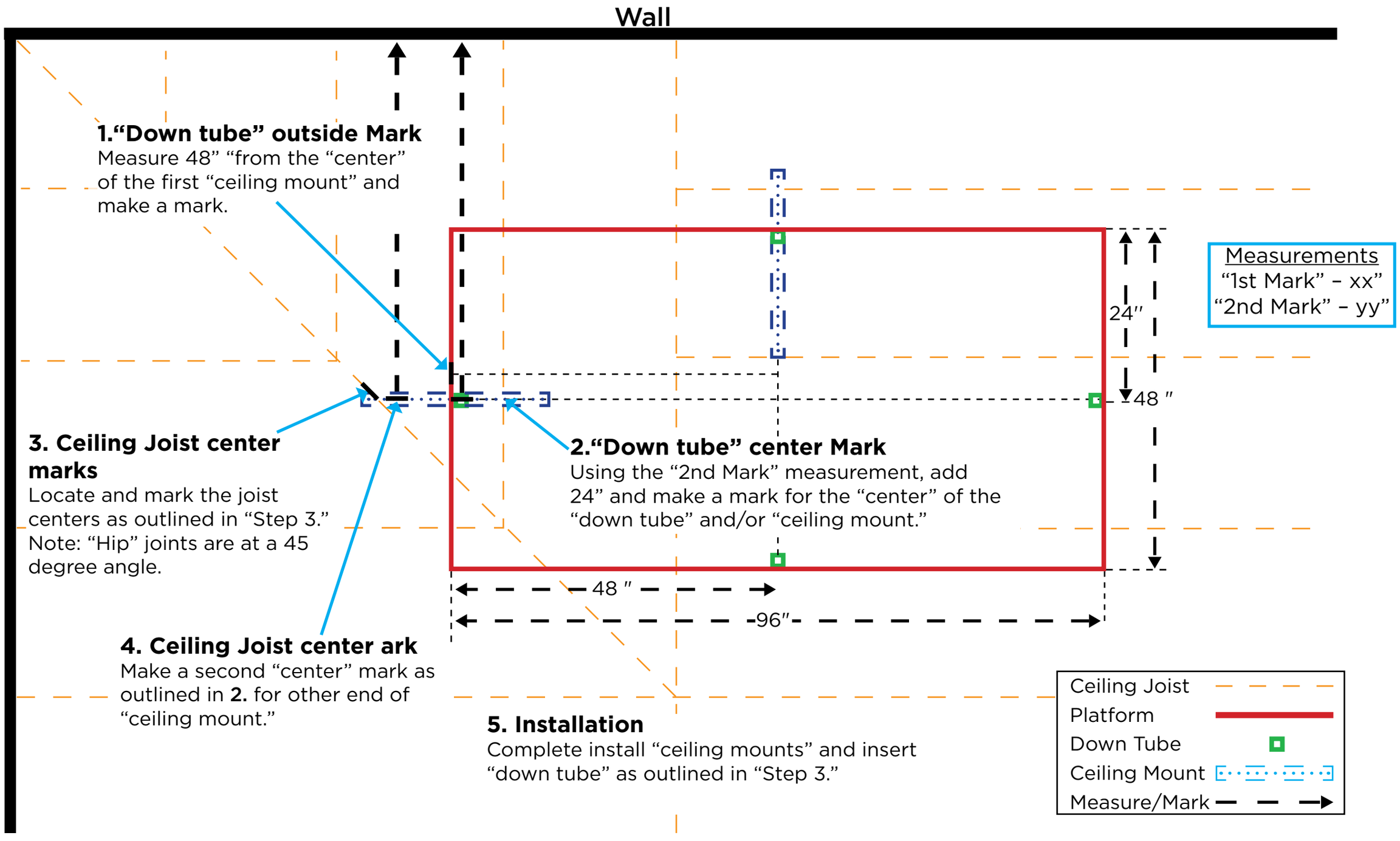
STEP #3

Insert 1st down tube in “ceiling mount” at desired hole location. Ensure the bottom flange of the “T-brace” is facing inside. Insert 1 ½” x 5/16” carriage bolt and tighten.

STEP #4

Mark and Install the second “ceiling mount” and “down tube.”

Determine the location of the second “down tube” using the 1st and 2nd “Mark measurements.
Note: Use installed “ceiling mounts” when possible to measure from to determine other ceiling mount locations. Use the instructions in the order they are presented 1. through 5.

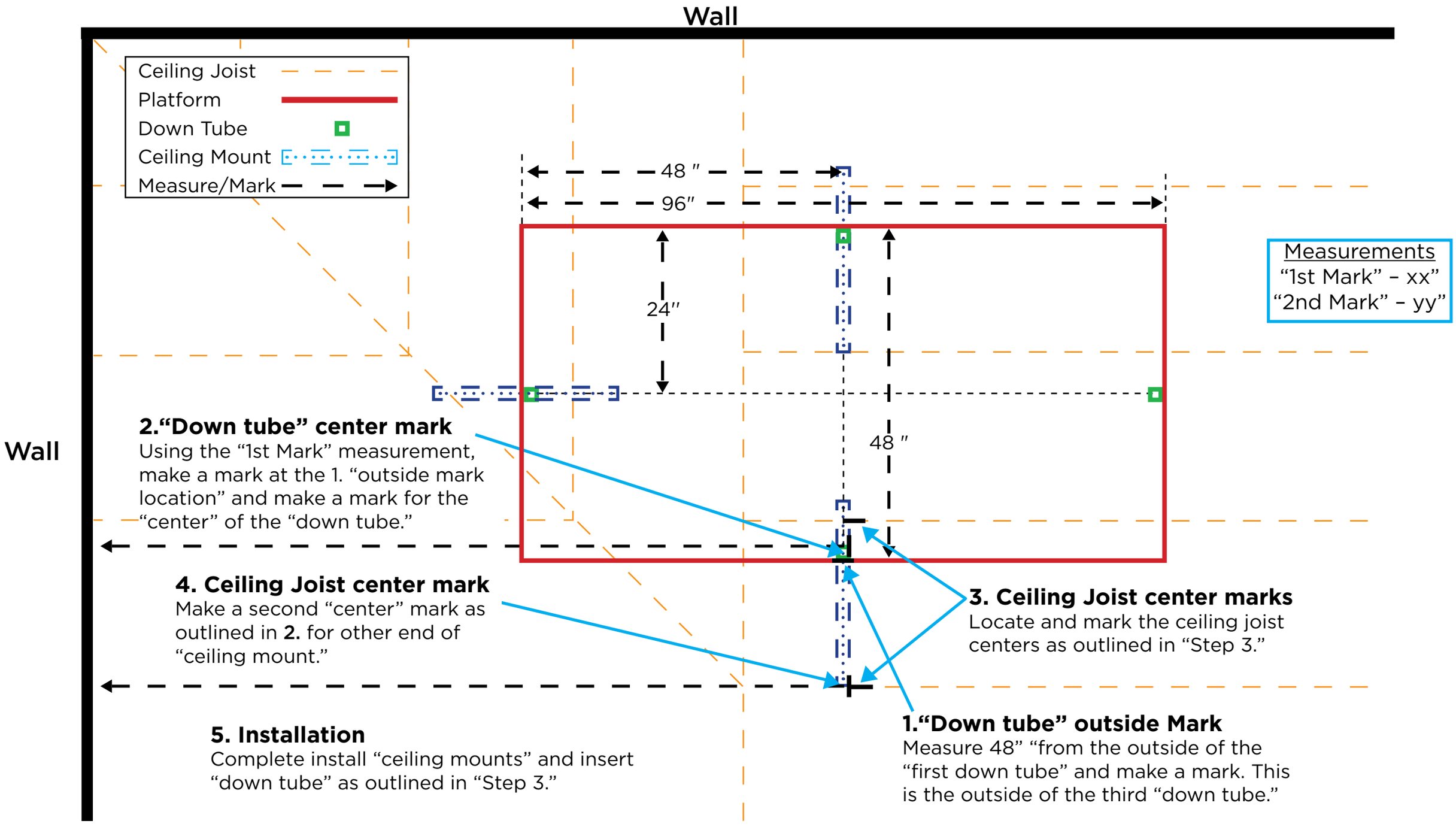


MEASUREMENTS

Here is an example of measuring for the second ceiling mount install. In this case one side of the ceiling mount is on the same ceiling joist as the first ceiling mount.

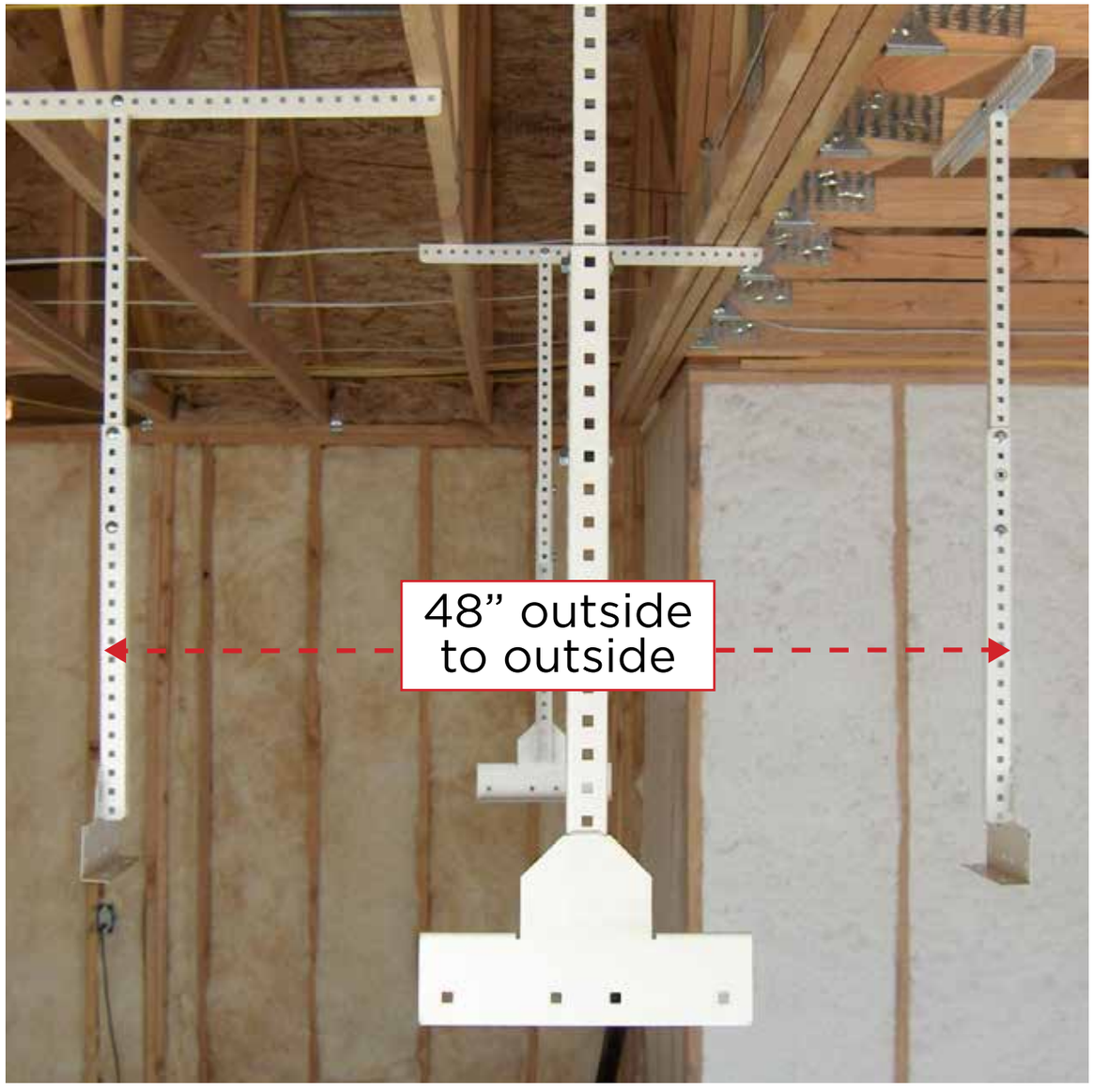
STEP #5

Mark and Install the third “ceiling mount” and “down tube.”
Use installed “ceiling mounts” to measure from to determine other ceiling mount locations. Use the instructions in the order they are presented 1 through 5.



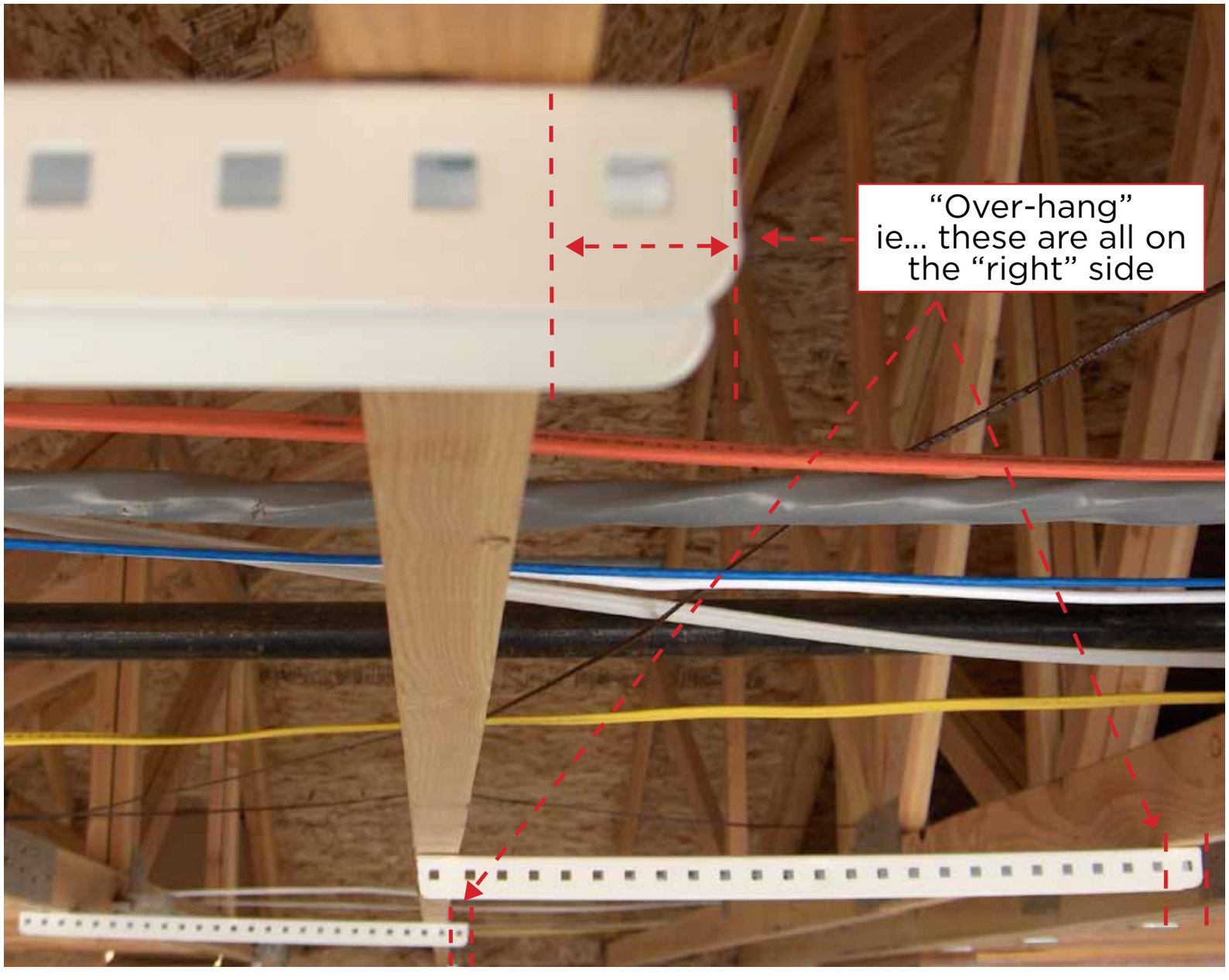
GENERAL INFORMATION

Here are a few ceiling joist examples with t-braces installed. Note the direction change of the ceiling joists on the first picture. Each “ceiling mount” is designed to be fastened to two ceiling joists except for some sloped ceilings. Note the side to side measurement.



GENERAL INFORMATION

For ceiling joists that run the same direction, the “ceiling mounts” should overhang on the same side of each ceiling joist...

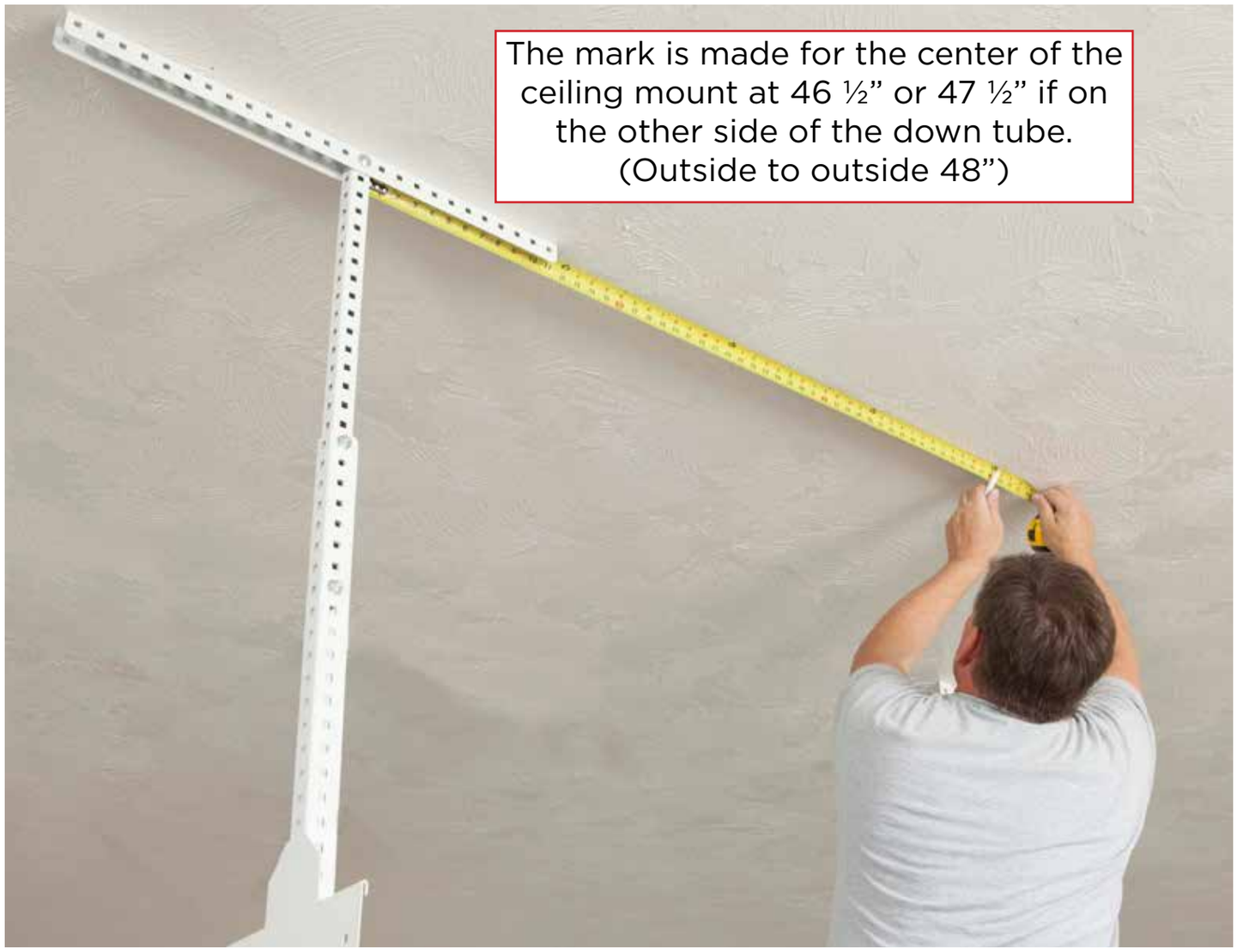


GENERAL INFORMATION

...that way, all you have to do is count holes and put the “down tubes” in the same hole position as on the other “ceiling mounts.” (ie...each “down tube” is fastened in the tenth hole from the left end of the “ceiling mount.”)
Note the “down tube” measurements.

MEASUREMENTS

Here is an example of measuring for the third ceiling mount install. (or second, the order doesn't matter) This one shows a "center" marking option. Make first mark as shown, then measure to wall for a second mark parallel with wall, draw a line between marks. Place ceiling mount over and center on the line and mark the ceiling joist location holes.



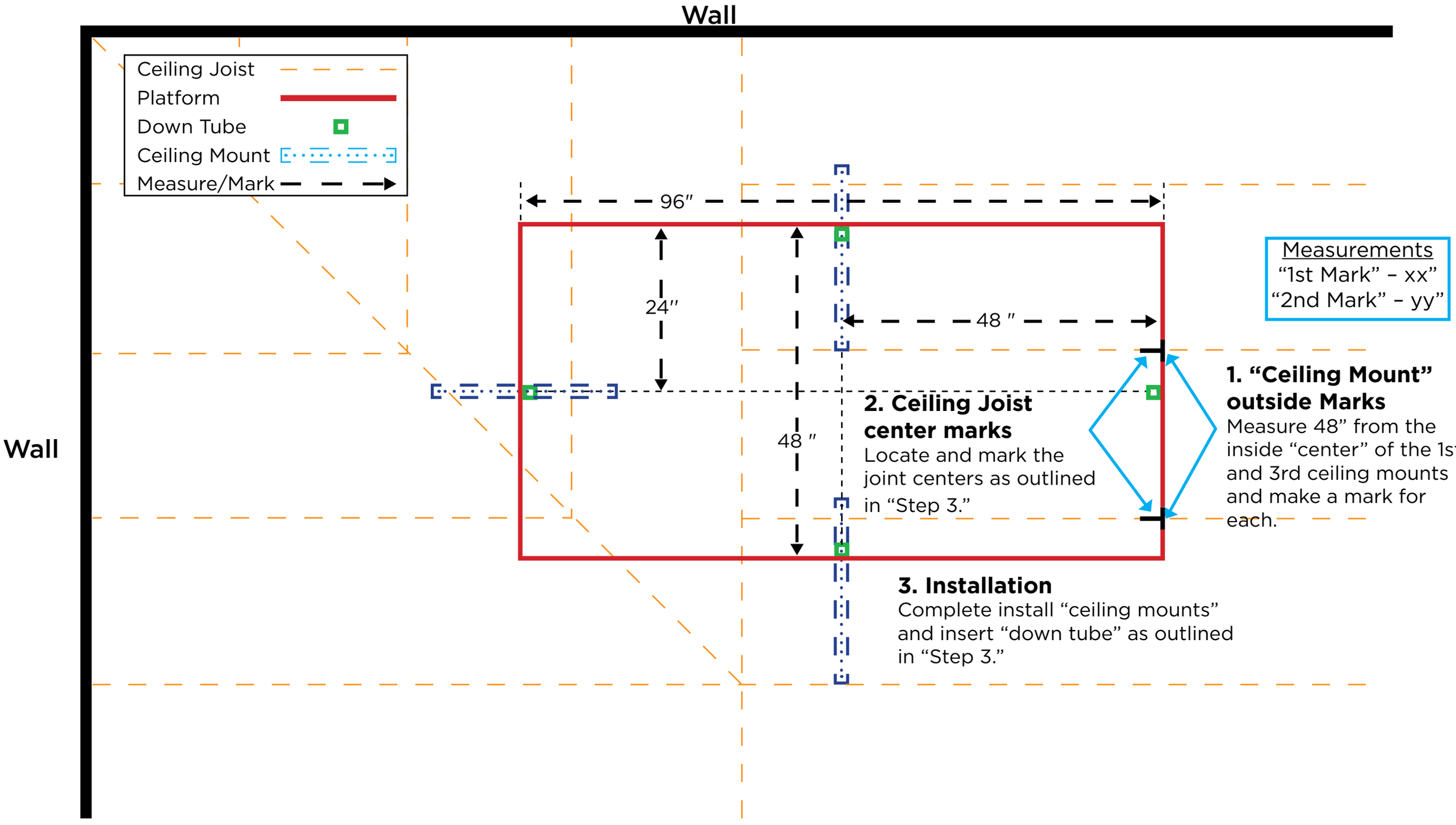
MEASUREMENTS

Here is a simple measurement for the 4’ sides where the ceiling mounts share two ceiling joists. Just measure each side of the first and find the centers of the ceiling joists.

STEP #6

Mark and Install the final “ceiling mount” and “down tube.”

Use installed “ceiling mounts” to measure from to determine other ceiling mount locations. Note: This “ceiling mount” does not require that the “down tube” location be marked. When this “ceiling mount” is positioned the same way on the ceiling joists, the “down tube” will be inserted in the same hole # as the other ones. Use the instructions in the order they are presented 1 through 3.

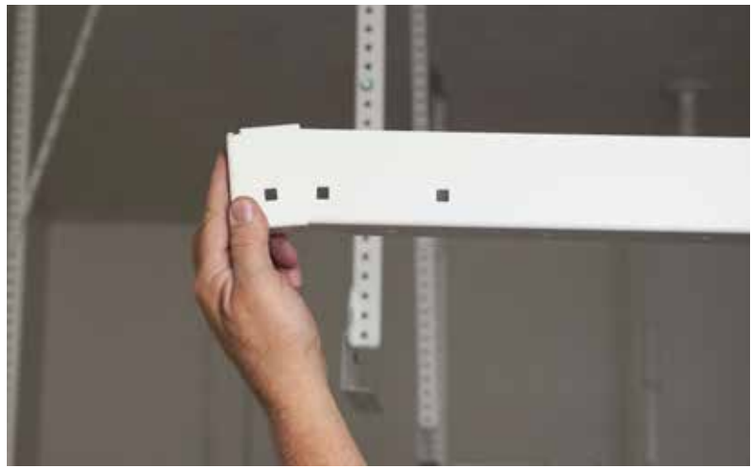


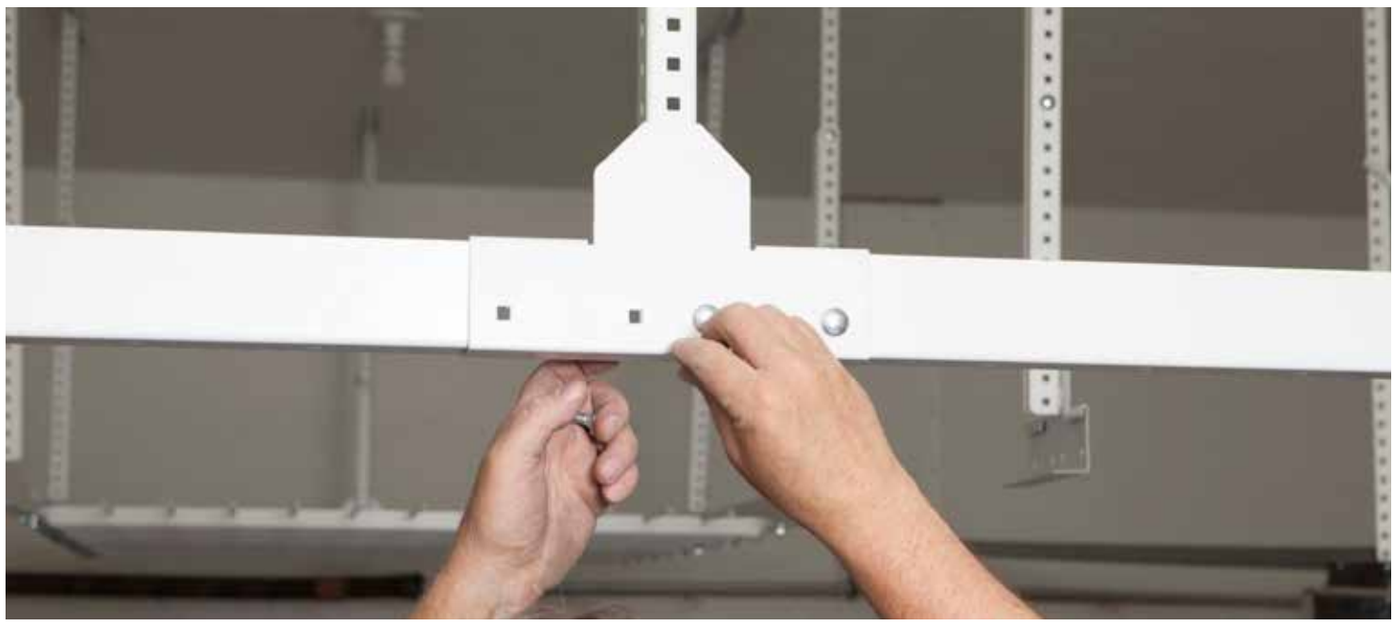
STEP #6

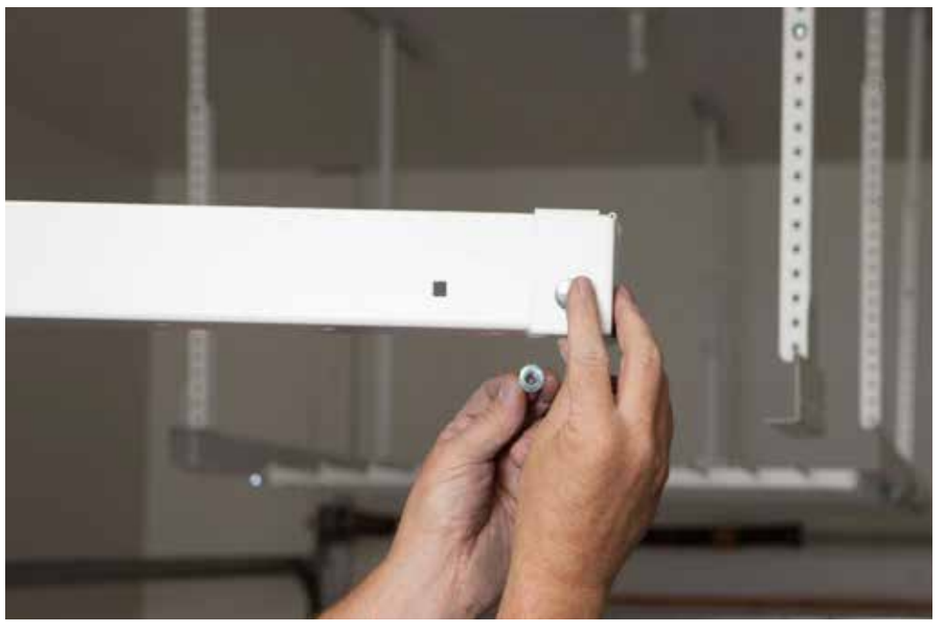
After completing installation of all ceiling mounts, finish installing remaining down tube assemblies in their proper orientation.

STEP #7

Slide or roll in “end” angles (4’ sides), lining up the middle holes. Slide corners in place over holes on both sides. Insert and hand tighten 3/4” x 5/16” carriage bolts.







STEP #8

Slide in remaining angles into middle T-brace (1/2 way each), lining up the carriage bolt holes, and also into the corner attached to 4’ ends. Insert and hand tighten 3/4” x 5/16” carriage bolts into all holes. Finish by tightening all bolts.

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STEP #9

Set in place “cross braces” by starting from the third hole in on each end as shown. Skip every other hole, and insert 3/4” x 5/16” carriage bolts into all holes. Note: ¾” x ¼” carriage bolts are included for installing through the T-brace if it is too tight. Finish by tightening all bolts.

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STEP #10

Place grid poles on cut out slots and slide against outside angle. Slide second set of grid poles up against first poles. Snap poles into the slots by pulling down on each side and putting both thumbs on the bottom of the cross braces.

WALL MOUNTED SHELF INSTRUCTIONS

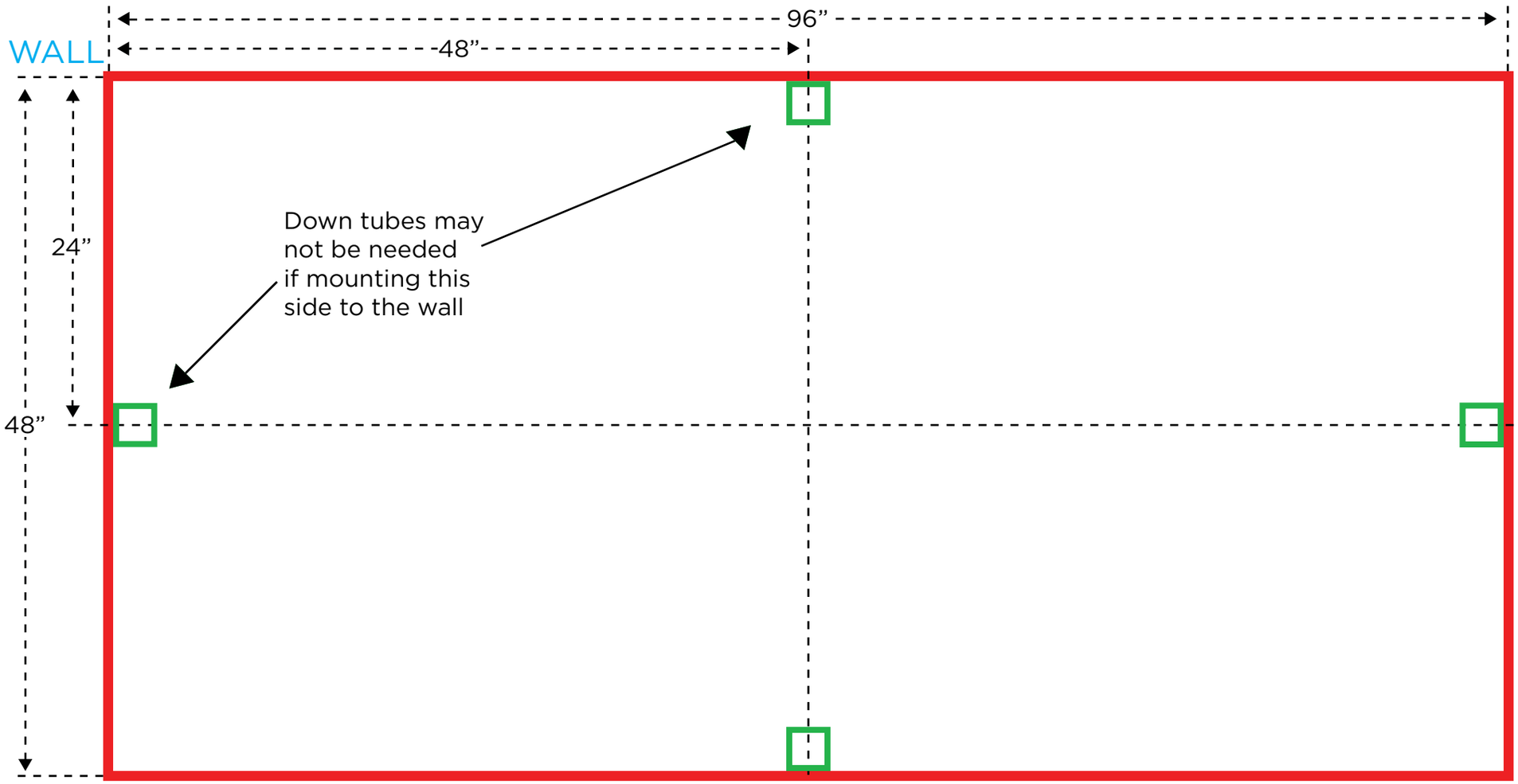
NOTE: The wall mount kit is sold separately and can be purchased online at www.monkeybarstorage.com.

GENERAL INFORMATION

For “wall mounting” the layout is exactly the same except there are no ceiling mounts, down tubes, or T-braces on any wall locations. Use the wall and perpendicular walls or structures to determine the position of the “down tubes.” Use this Layout as a guide to measure and mark locations.

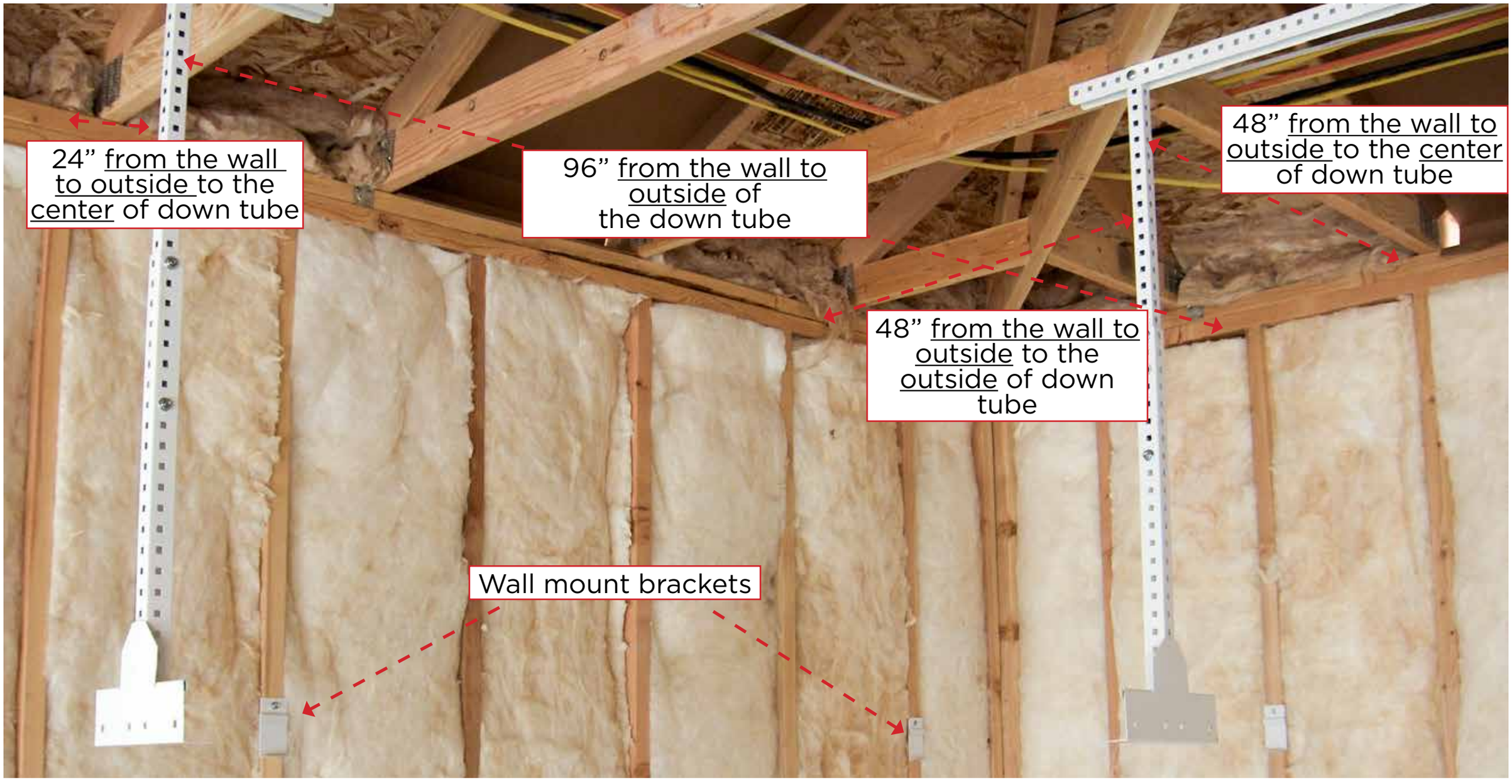
CEILING LAYOUT - 4’ X 8” PLATFORM

Ceiling “down tube” locations and measurements



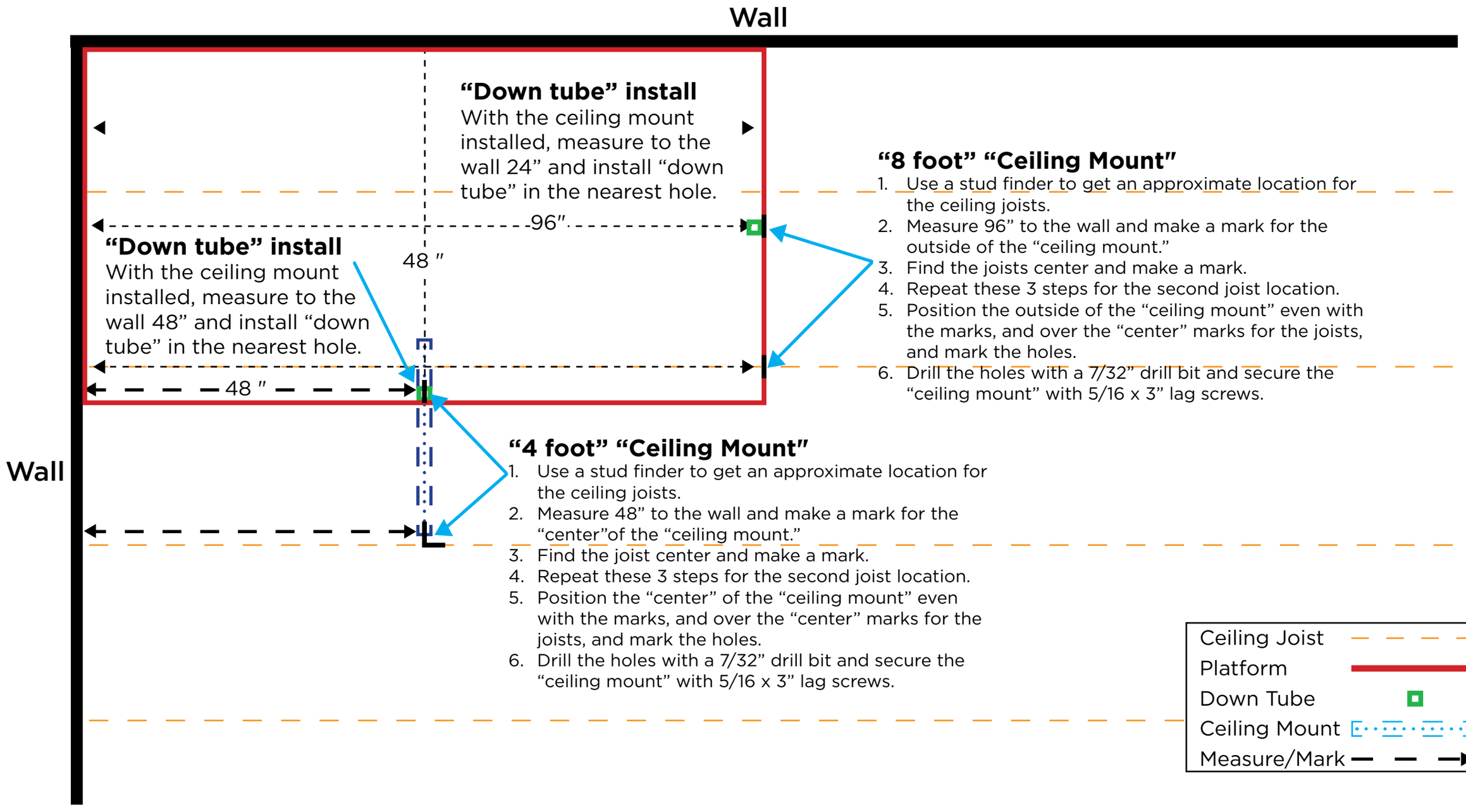
EXAMPLE OF CORNER MOUNT

Here is an example of a corner mount. The same method is used with one wall or two, using the wall bracket kit on one of the walls, level with the bottom of the T-Braces. Note the “down tube” to wall measurements.



GENERAL INFORMATION

With a typical “gable roof” the measurements are rather simple. Here is a corner mount scenario where we show the measurements for installing the “ceiling mounts” by applying the “Ceiling Layout.”



STEP #1

Determine location and direction of shelf. Use the same methods for measuring and ceiling joist locating as the previous instructions. The examples below are a common a “Hip” ceiling joist configurations, which are a little more difficult. The 4’ ceiling mount can go either direction as shown in the second “open frame” picture.

STEP #2

Slide or roll in “end” angles on 4’ side(s), lining up the middle holes. Slide corner(s) in place over holes on outside corner side(s) (do not install wall side corners). Insert 3/4” x 5/16” carriage bolts in all holes and tighten.

STEP #3

Mount two wall brackets on the wall a few feet in from each side. In corners, use the brackets on the 8 foot side. If mounting only a 4 foot side, use the closest studs in from the 4’ ends. Bottoms of platform and Wall brackets should be level with each other.

STEP #4

Using 3/4” x 5/16” carriage bolts, assemble wall side(s) including: wall kit joint for two 4 foot angles, 2 corners for one wall, or 3 corners for two walls (into a corner). Tighten all bolts.

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STEP #5

Position “wall assembly” under tabs on wall brackets and “roll” it under and on bottom support of brackets.

STEP #6

Slide angles into corner brackets.

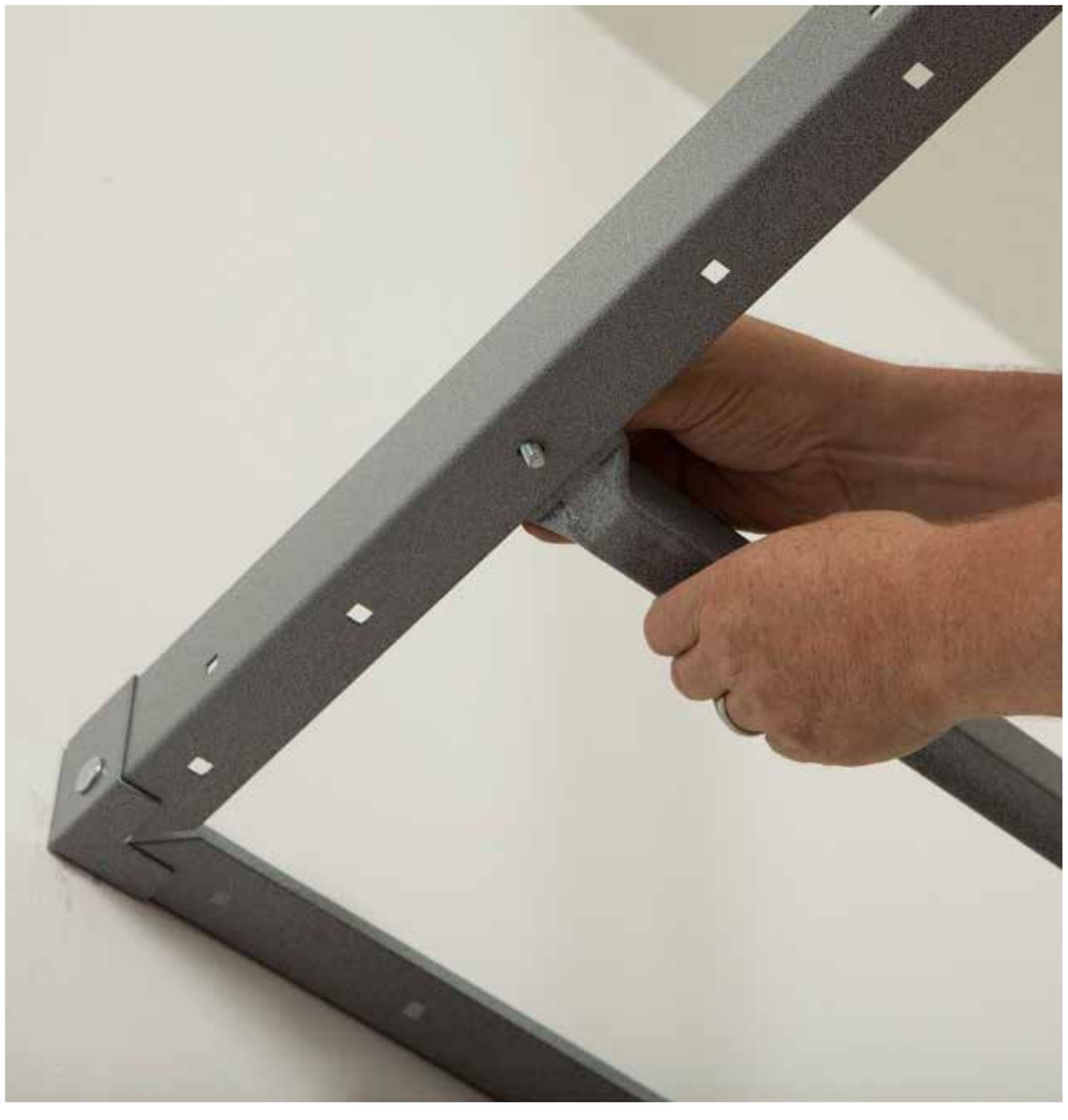
STEP #7

With corner installs, find the closest stud to the end shelf. If it is near an existing hole with the platform level, drive a ¼” x 2” wood screw (with washer) in the hole. Locate any other holes that may be located over a stud. If there are none either drill ¼” holes in angles over stud locations or use wall brackets.

There needs to be two screws, or two wall brackets for every 4 feet of shelf.

STEP #8

7. Set in place “cross braces” by starting from the third hole in on each end as shown. Skip every other hole, and insert 3/4” x 5/16” carriage bolts into all holes. Note: ¾” x ¼” carriage bolts are included for installing through the T-brace if it is too tight. Finish by tightening all bolts.



STEP #9

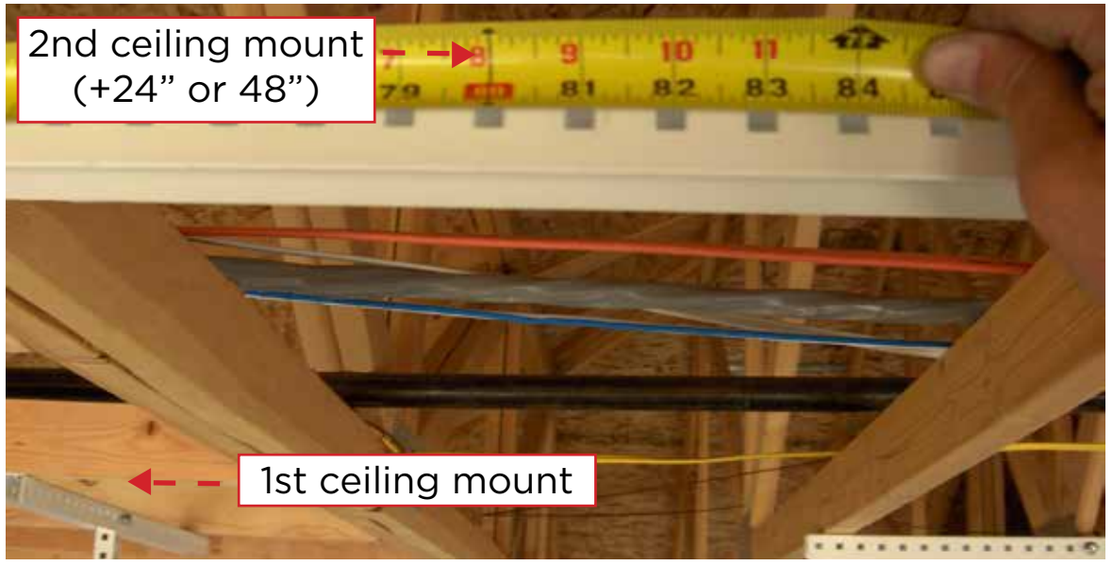
8. Place grid poles on cut out slots and slide against outside angle. Slide second set of grid poles up against first poles. Snap poles into the slots by pulling down on each side of the cross braces.

EXAMPLE OF 16’ SHELF

To continue the shelves, you simply repeat like you would be doing the center of the 4’ by 8’ platform with two cross braces at each T-brace (see gray example below). The only thing extra needed is one more cross brace for every 8 feet of shelf (provided in overhead kits).

STEP #5

Measure for remaining “ceiling mounts.” Use nearest walls to measure from to determine “ceiling mounts.” Measure from the same wall add 24” or 48” for 4’ or 8’ sides.
(see “Ceiling Layout”) (i.e. this example shows the first wall is 56 ½” to the fi)



Measure from other installed brackets, 48” or 96,” outside to outside as indicated in the “CEILING LAYOUT” drawing. If opposite side is in the same position, just count holes and install the down tube.

GENERAL INFORMATION

Here is an example of a corner mount. The same method is used with one wall or two, using the wall bracket kit on one of the walls. Wall mounted shelf installing is included later in these instructions.

STEP #3

Determine the first down tube location (see “Ceiling Layout”) and install the first “ceiling mount.” The first “ceiling mount” is the one nearest a wall or structure to measure from. Line up the ceiling mount and mark holes. Drill holes using 7/ 32” drill bit and fasten with 5/16” lags.