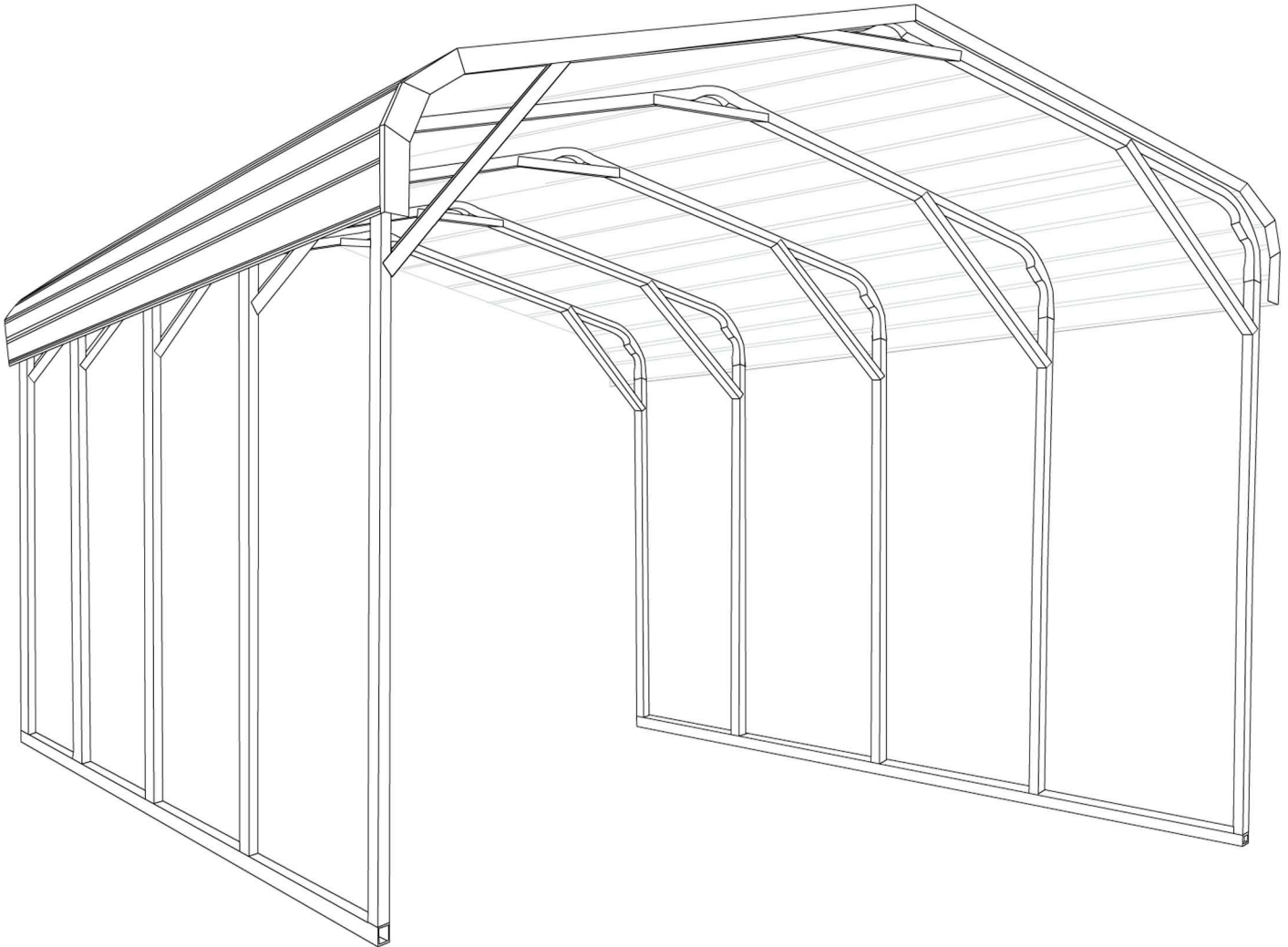


TUBE METAL SHOP

Regular Style Carport Installation Instructions



Page 2 - Tools

Page 3 - Parts List

Page 4 - Parts List

Page 5 - Baserail Setup

Page 6 - Stud and sleeve connect

Page 7 - Stud to truss connection

Page 8 - Peak and corner Bracing

Page 9 - Stud & truss to base rail connection

Page 10 - Measurement verification

Page 11 - Anchoring first baserail

Page 12 - Sheet metal connection - 1st piece

Page 13 - Sheet metal connection - Other pieces

Page 14 - Sheet metal trim

Page 15 - Anchoring final baserail & maintenance

If you decide to make this an enclosed carport

Page 16 - Sheet metal side walls

Page 17 - End wall framing

Page 18 - End wall sheet metal

Page 19 - Walk-in door & window installation

Page 20 - Garage Door installation

Page 21 - Sheet metal installation tips.

THANK YOU for your business!

We're committed to giving you the best quality at a price you can afford. We stand behind our products! so please don't hesitate to call with questions.

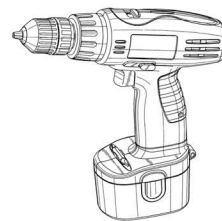
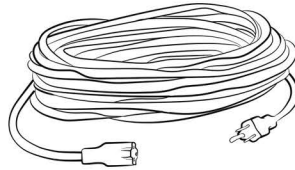
www.tubemetalshop.com

This is what you need to get started



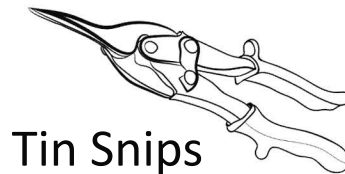
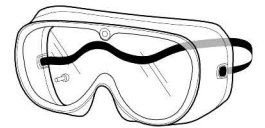
Ladder

Extension Cord



Power Drill

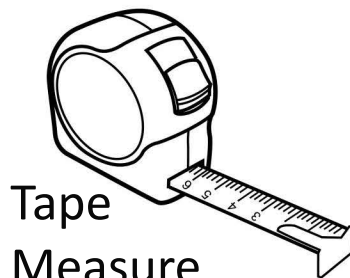
Safety Glasses



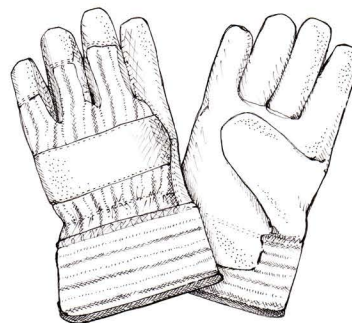
Tin Snips



Hand Saw



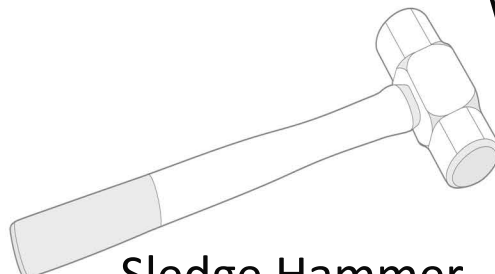
Tape Measure



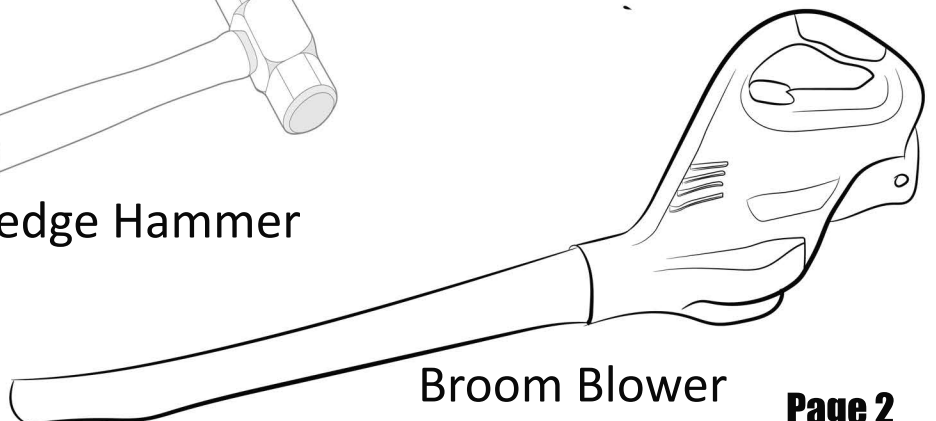
Work Gloves



Construction Level



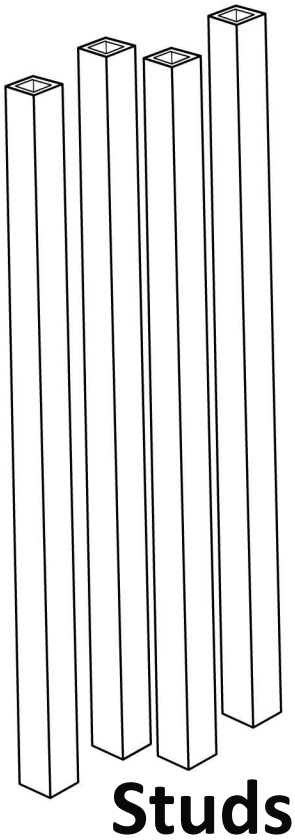
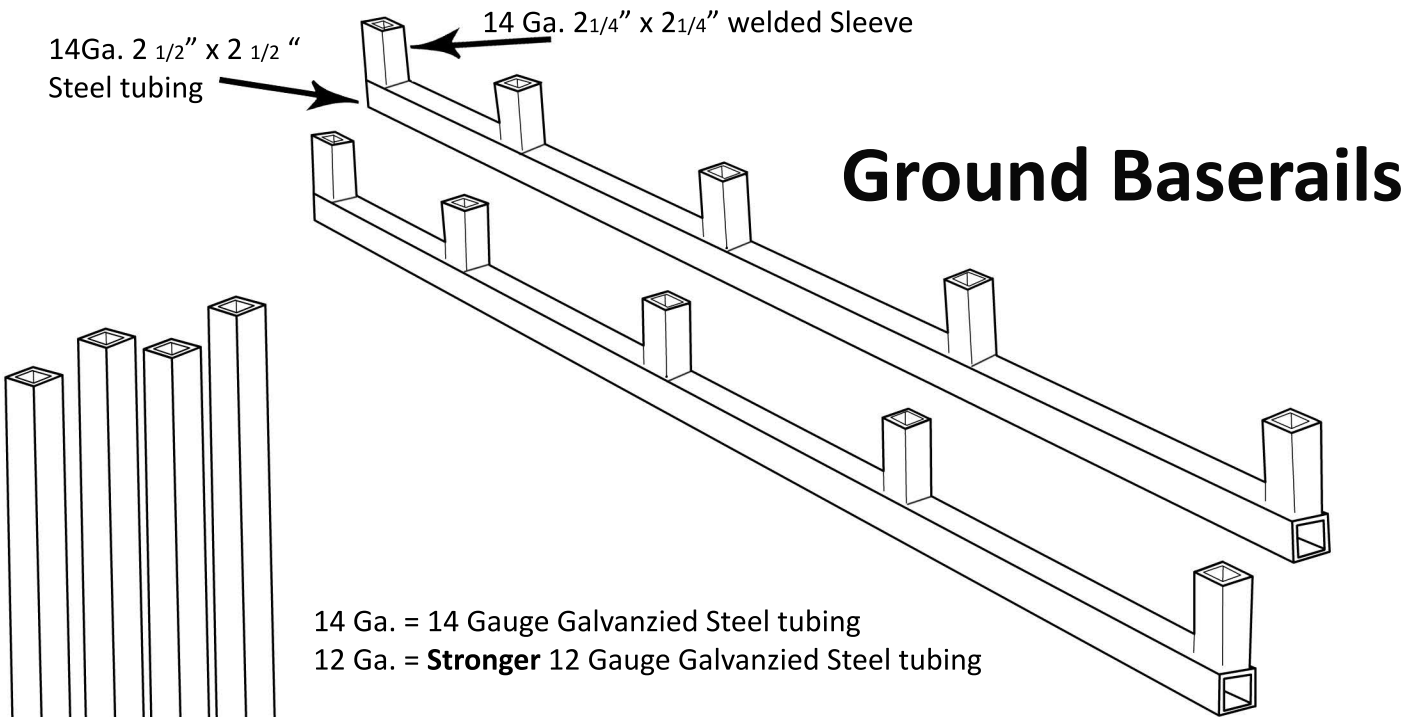
Sledge Hammer



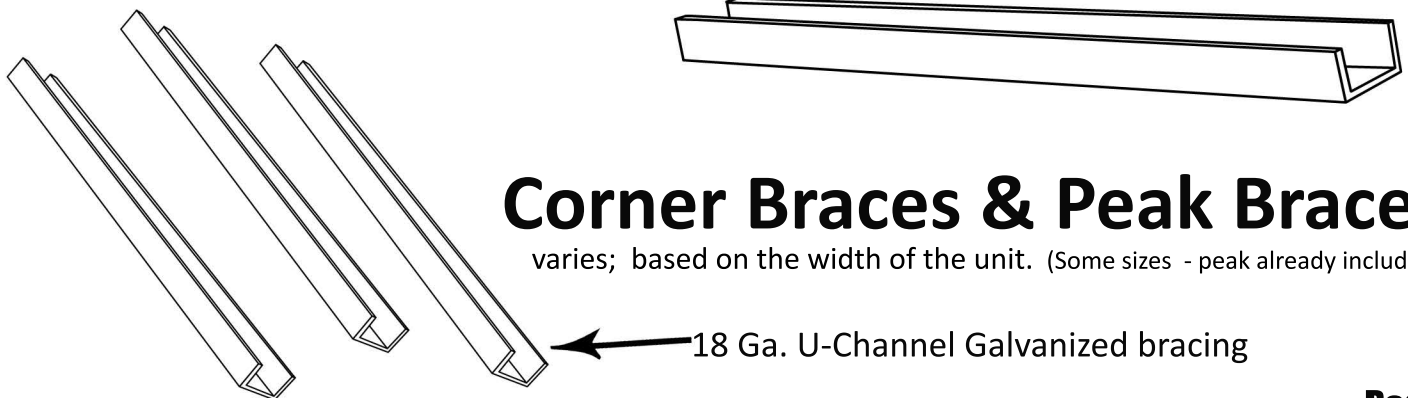
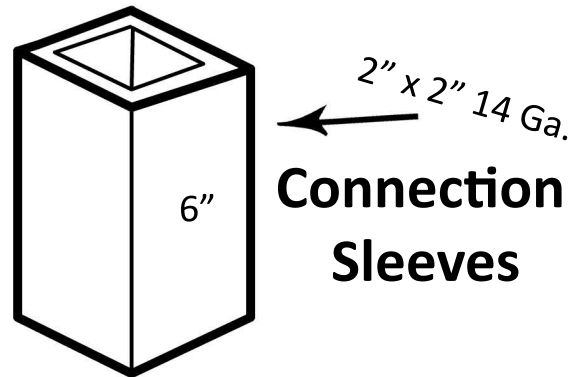
Broom Blower

PARTS LIST

These are the parts you'll be working with.



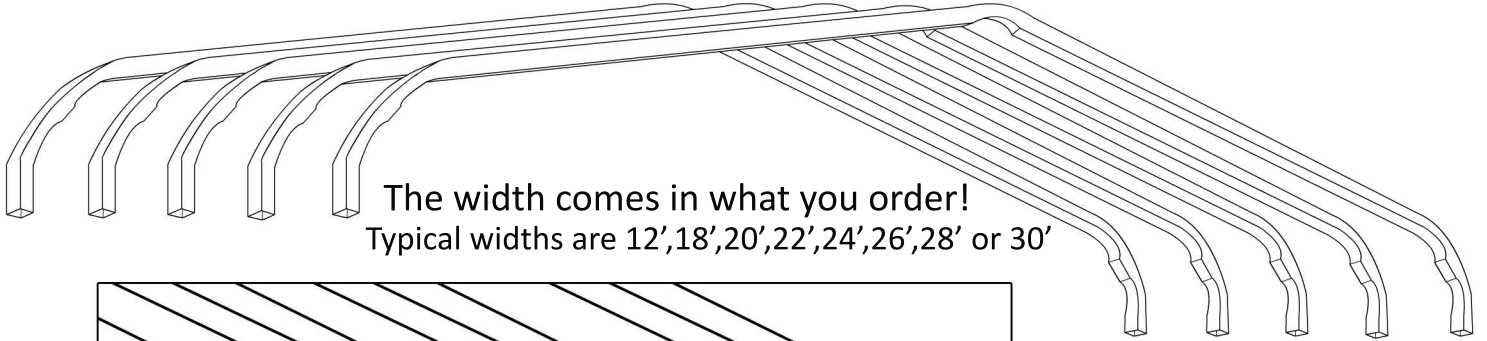
Studs come in two sizes
12 Ga. 2 1/4" x 2 1/4"
Or
14 Ga. 2 1/2" x 2 1/2"
Depending on what you buy!



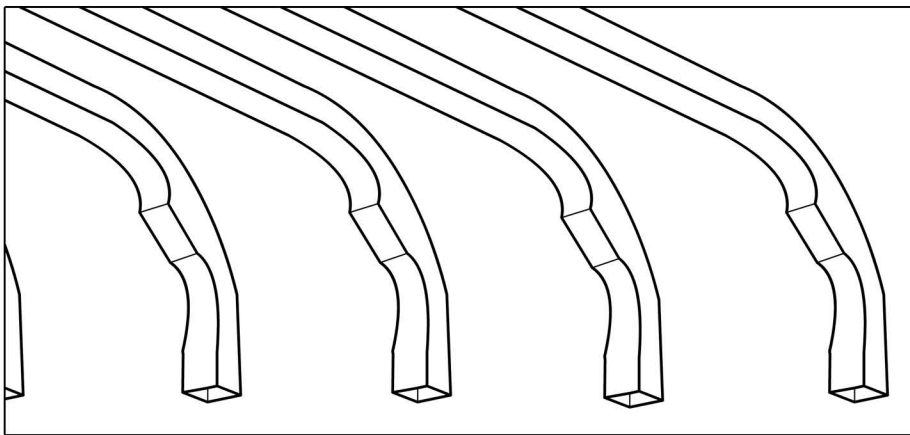
PARTS LIST

These are the parts you'll be working with.

REGULAR STYLE TRUSS



The width comes in what you order!
Typical widths are 12',18',20',22',24',26',28' or 30'



We use a crush bend on our regular style truss



MOBILE HOME ANCHORS

CEMENT BOLTS

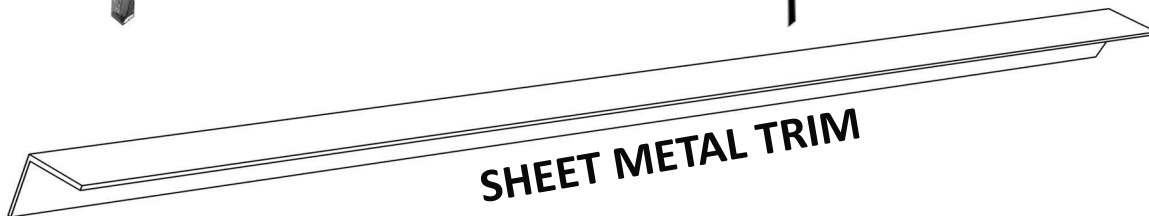
REBAR ANCHORS



Self Tapping Screws

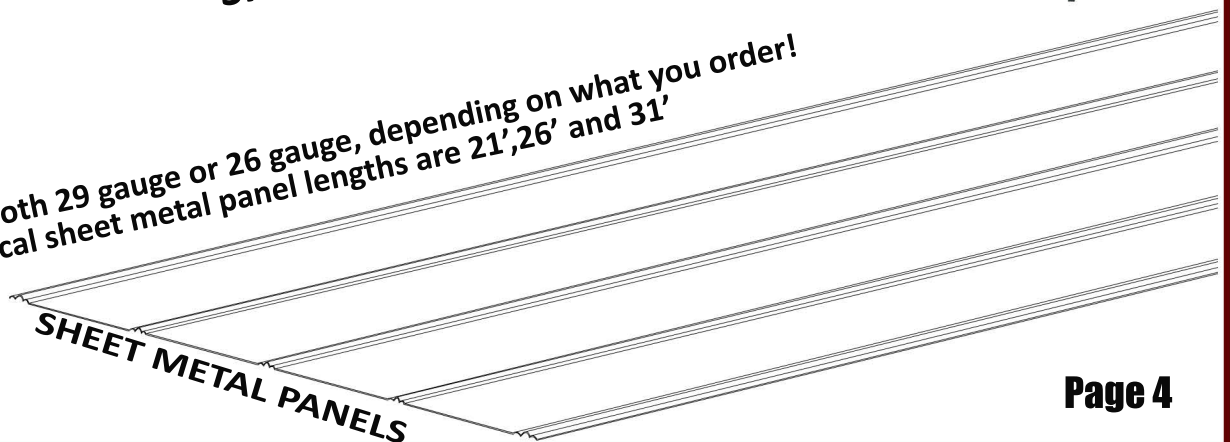


ASPHALT ANCHORS



SHEET METAL TRIM

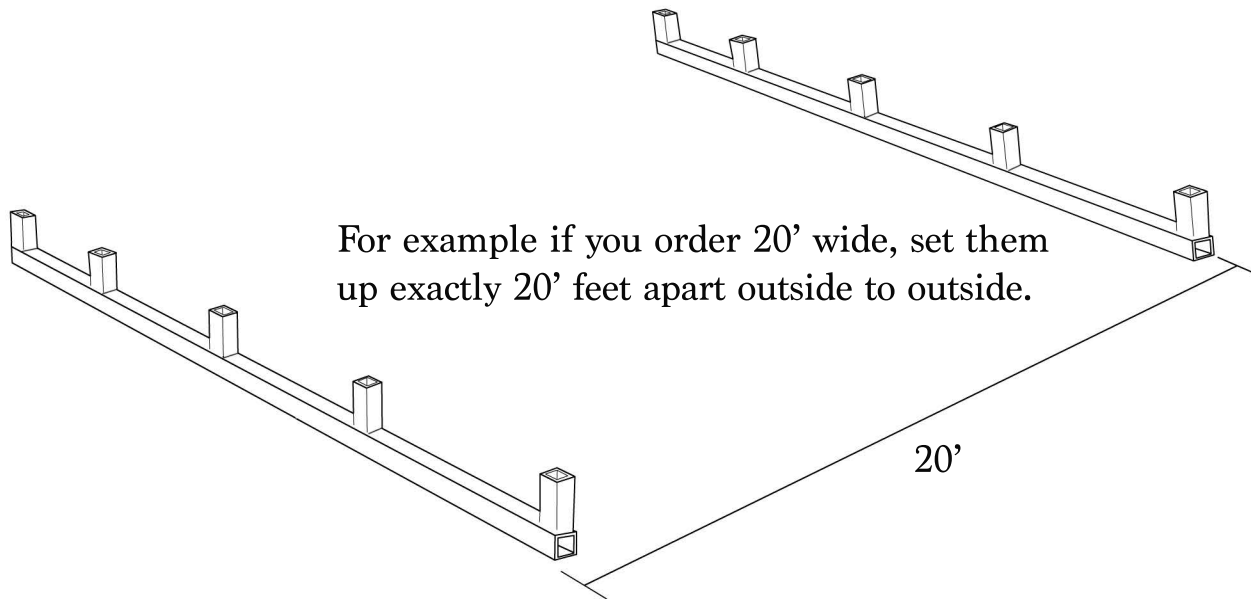
Comes in both 29 gauge or 26 gauge, depending on what you order!
Typical sheet metal panel lengths are 21',26' and 31'



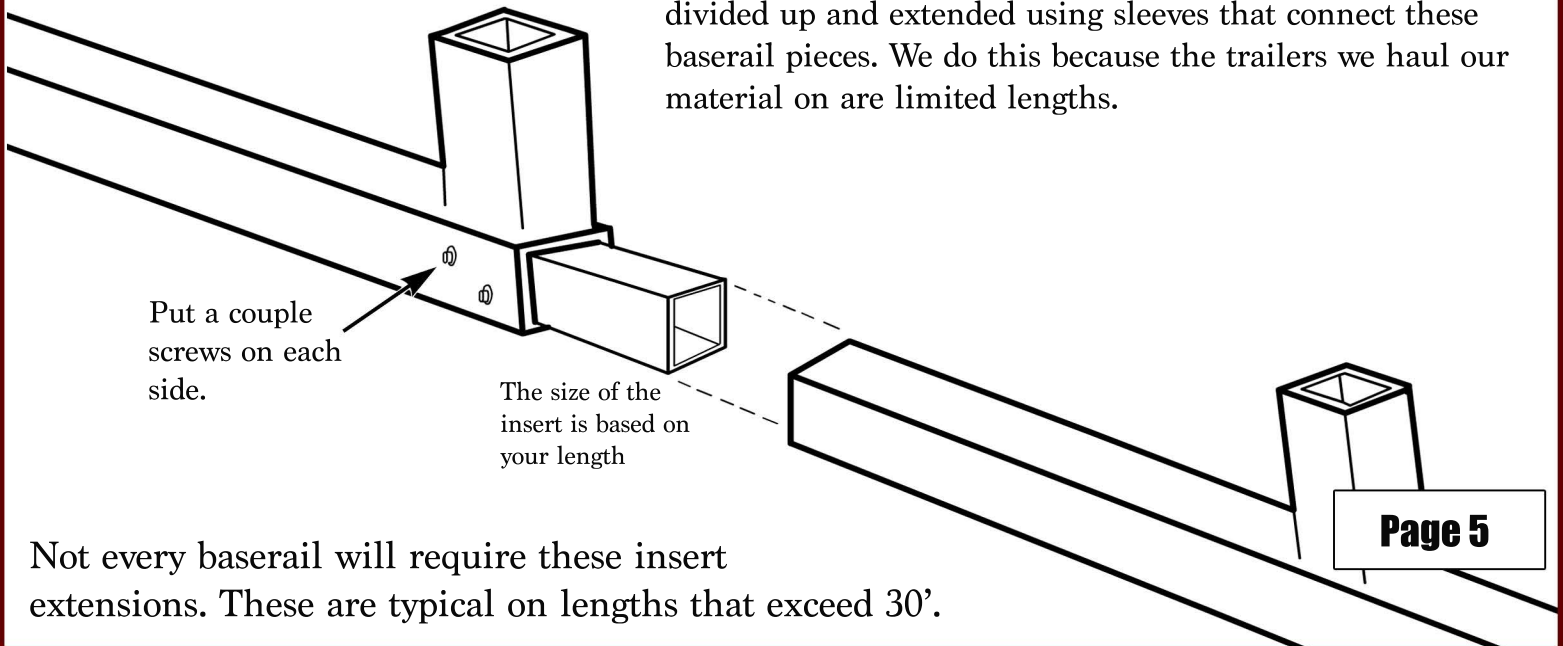
SHEET METAL PANELS

Step 1. Baserail positioning.

Setup the baserails on a level surface parallel to each other. Position them exactly as wide (out side to out side) as your order.



Typical baserail lengths are 20', 25', 30', 35', 40' and so on. The amount of welded sleeves on a baserail depends on your state's average building code requirement. These welded sleeves are what the studs slide down onto. Orders needing baserails longer than 30' will have their baserails divided up and extended using sleeves that connect these baserail pieces. We do this because the trailers we haul our material on are limited lengths.



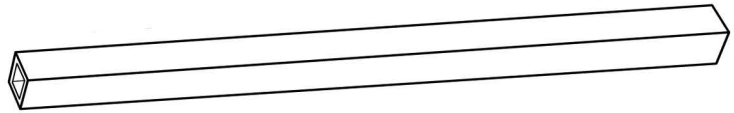
Not every baserail will require these insert extensions. These are typical on lengths that exceed 30'.

Step 2. Stud and sleeve connect.

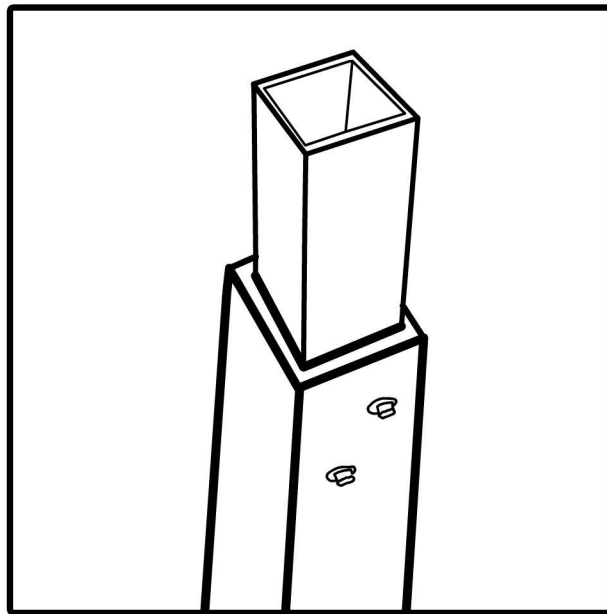
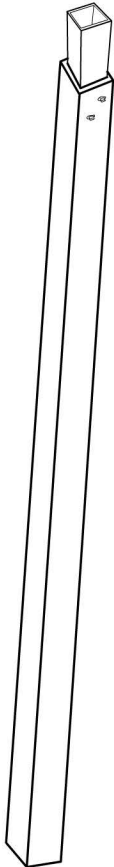
Insert the **Sleeve**



halfway into the **Stud**



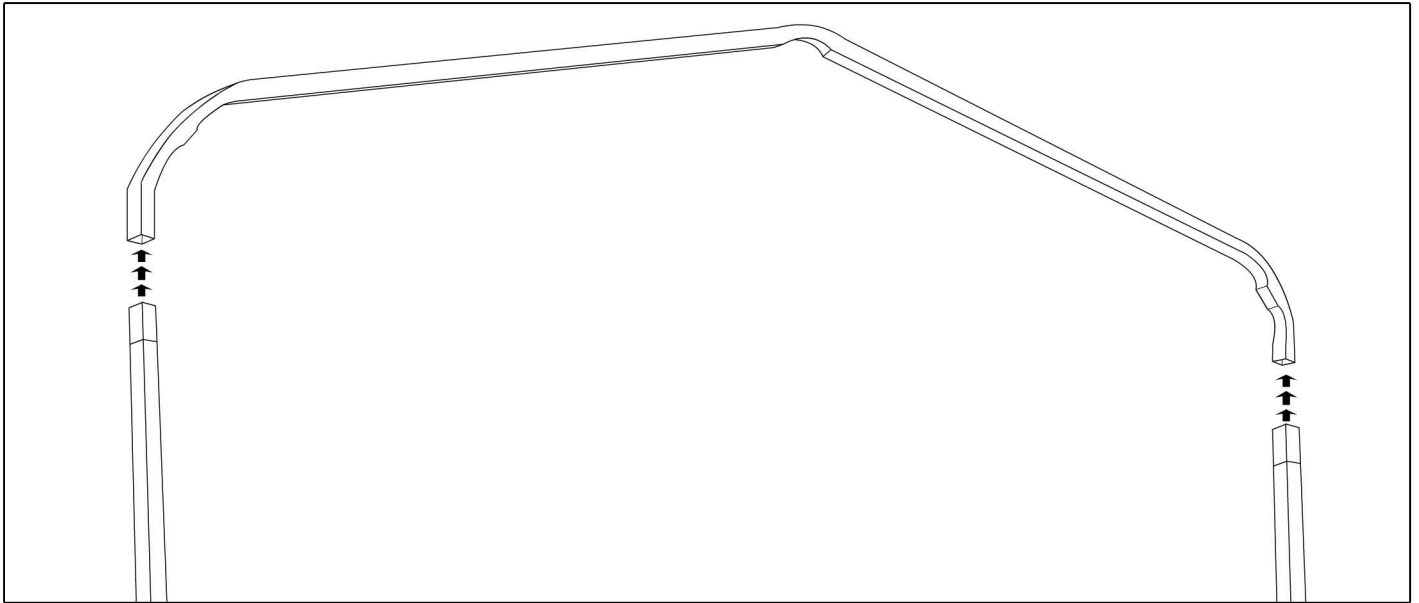
Secure with two self tapping screws on two sides.
(At least 4 screws total)



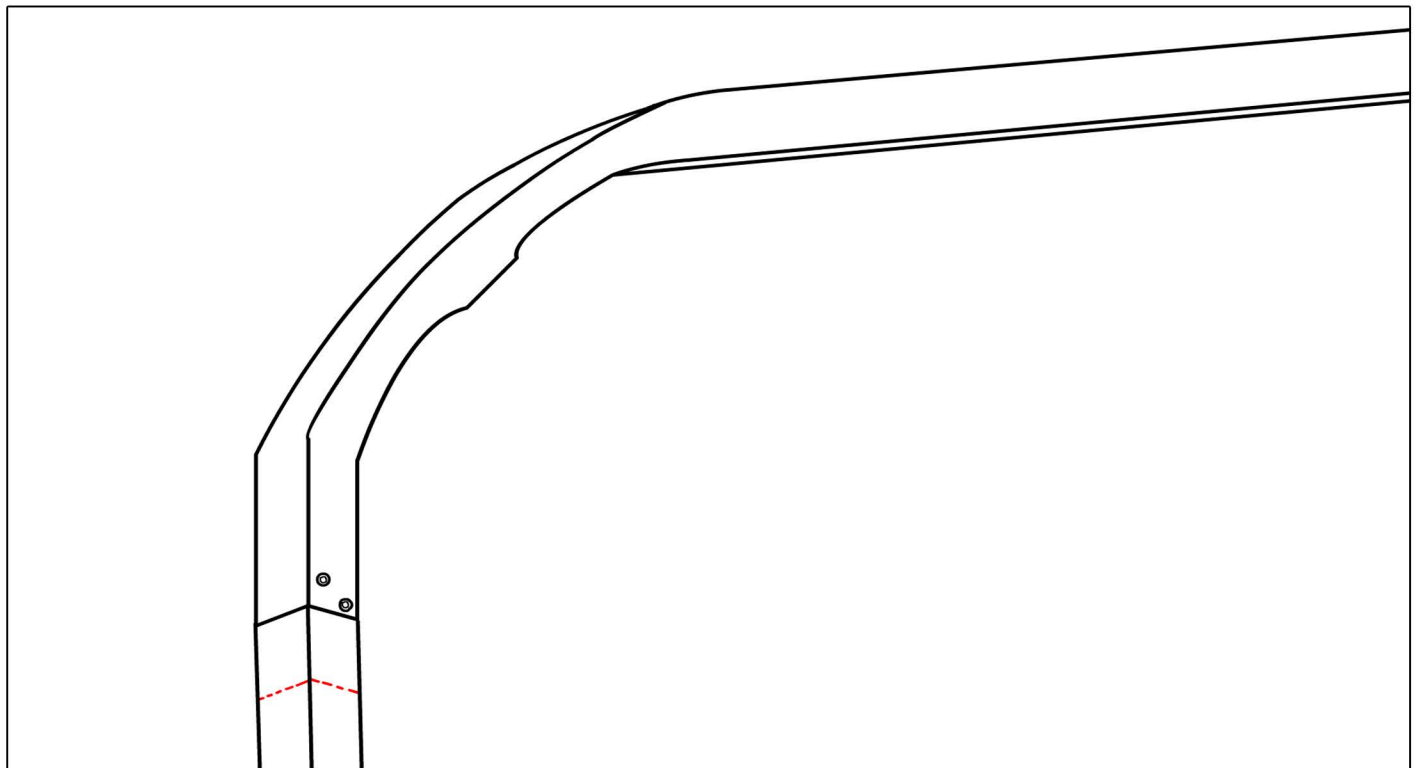
Repeat these steps for all of the studs. These studs with sleeves will slide into the trusses. See step 3 for more details.

Step 3. Stud to truss connection.

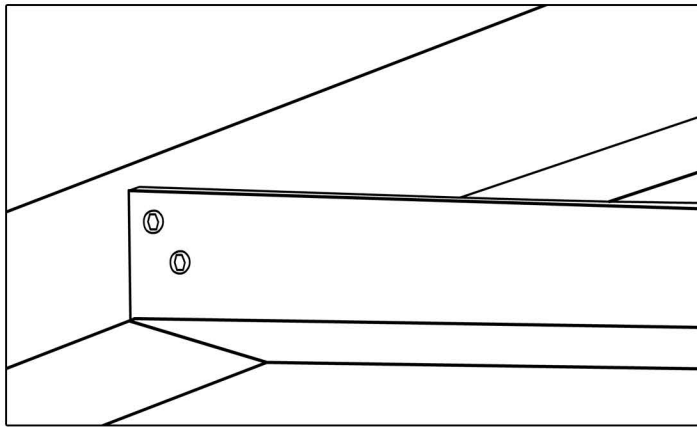
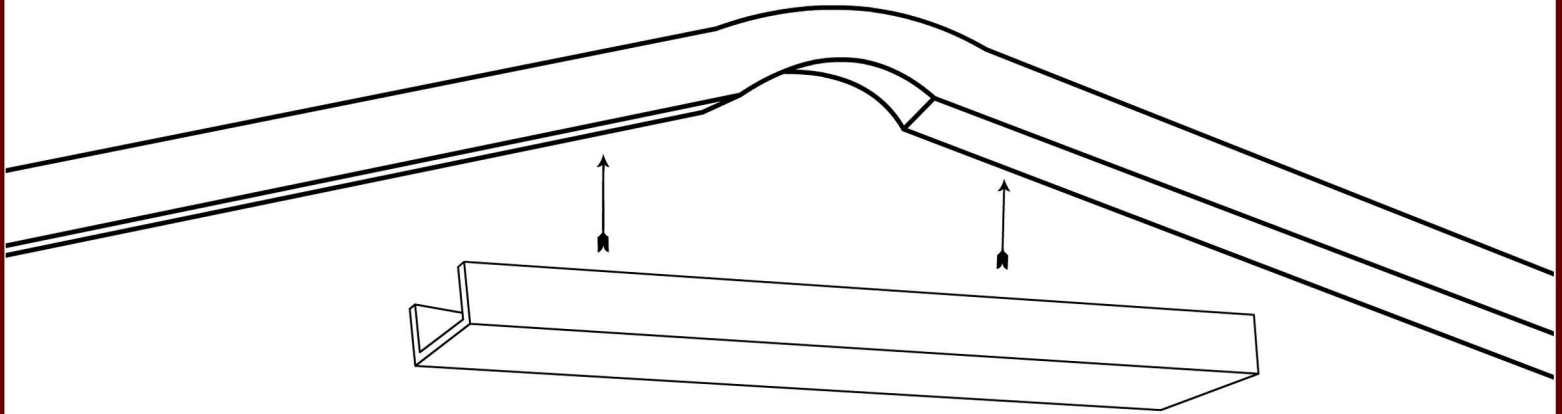
Connect the sleeved studs into the trusses.



Add at least four screws, two on two different sides. Repeat this for every truss you have.



Step 4. Peak and corner braces.

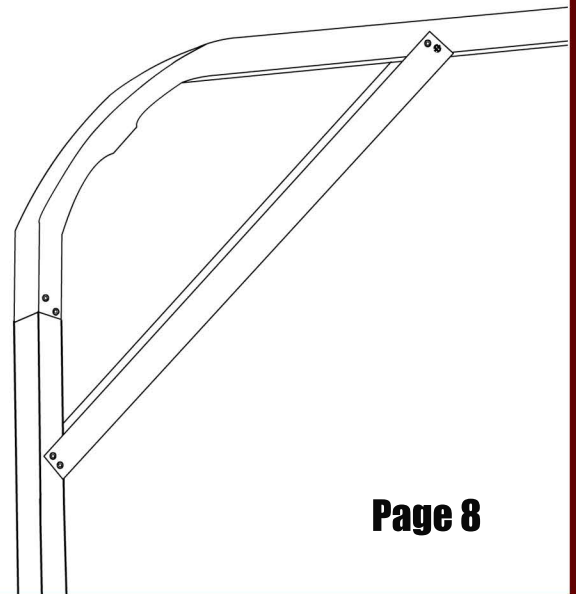


Connect the peak braces using atleast two screws on each connection point.

Repeat this for all of the trusses with studs.

The peak brace size provided by American Steel Carports will depend on the size of your truss. Typical peak braces are 2', 4' or 6'.

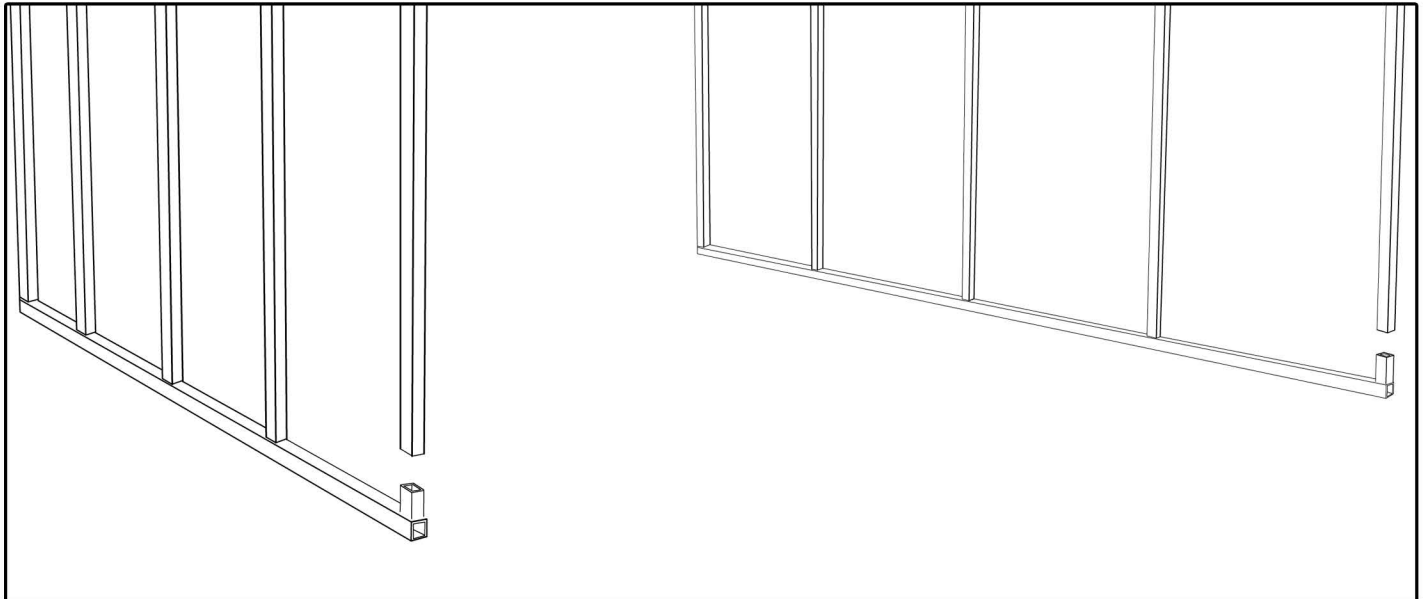
Add the corner braces to the stud and truss. Add two screws on each connection point.



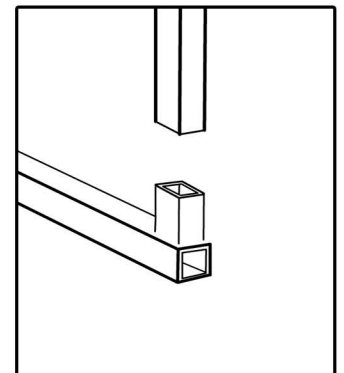
Repeat this for all of the trusses with studs.

If your unit is enclosed, skip the four corners.

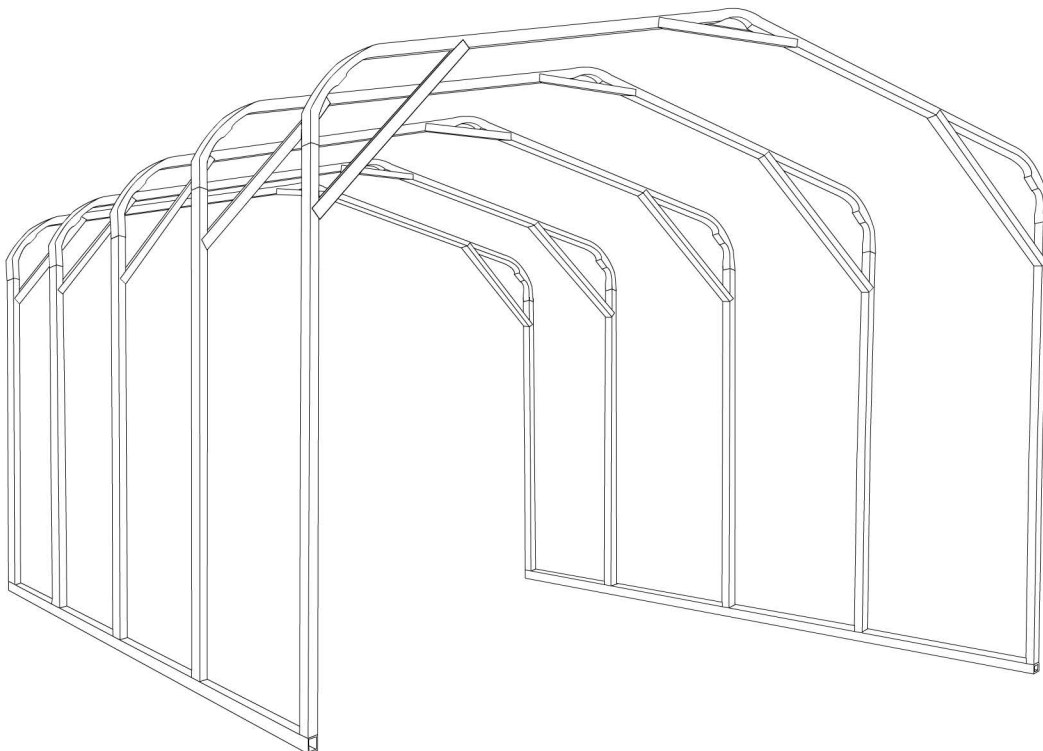
Step 5. Stud and truss to baserail connection.



Slide all braced trusses with studs down over the baserail sleeves.



The studs may have to be pounded down some to slide over the sleeve.



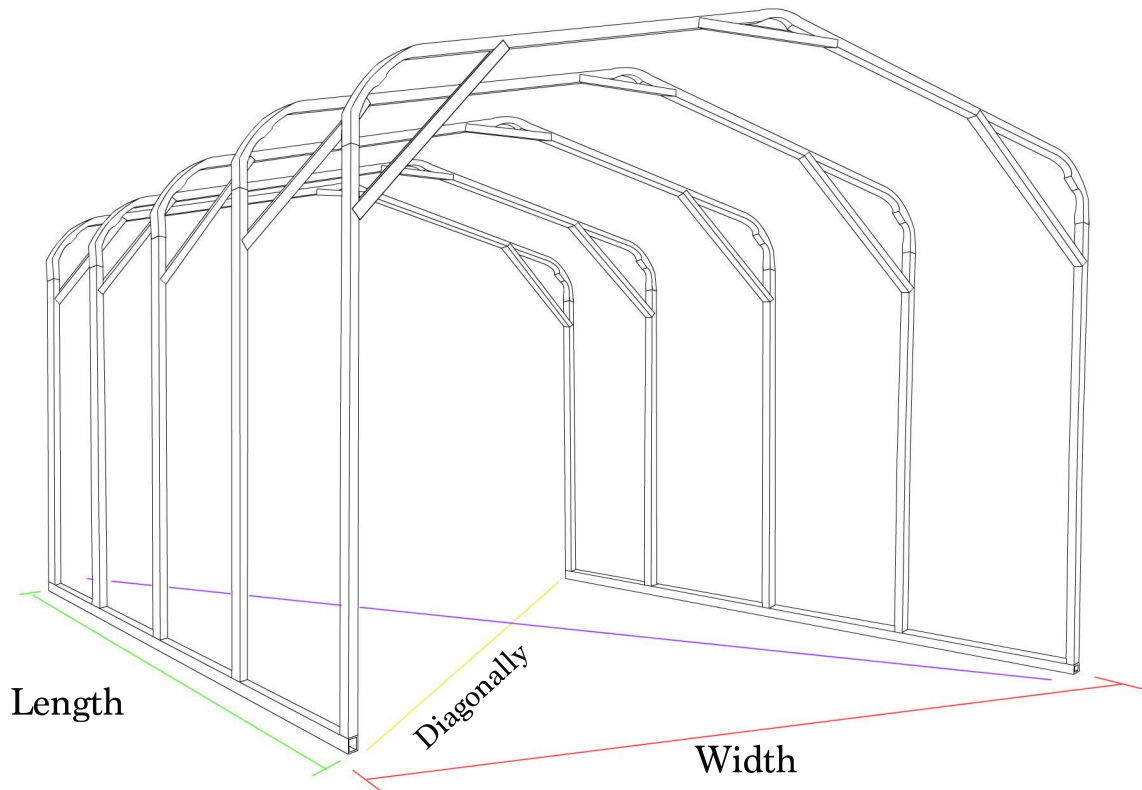
Do not install screws yet.

Step 6. Measurement verification.

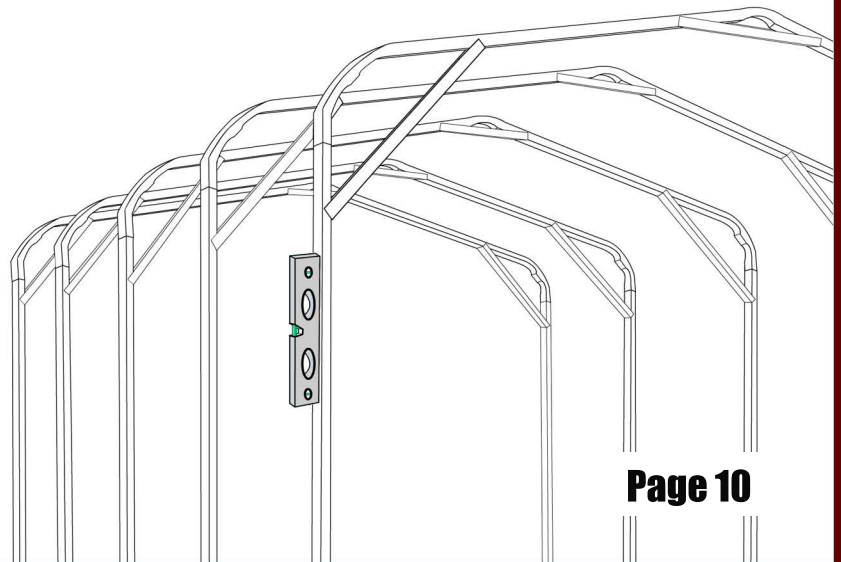
6.A Measure the width on both ends to verify it's your proper width.

6.B Measure the length on both sides to verify it's your proper length.

6.C Cross measure diagonally both ways, the measurements should be the same.



Use a construction level to be sure
all studs are level.



Step 7. Anchoring the first baserail.

The baserail needs to be secured to the ground and stabilized for the remaining steps.

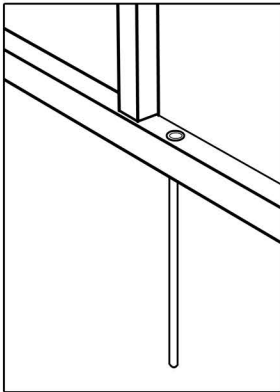
Anchor **just one** of the baserails using the provided anchors. The other baserail will be anchored in step 15.

If your purchase came with a set of blue prints refer to those for anchor point locations.

If your baserail came with pre-drilled holes then use those for anchor points.

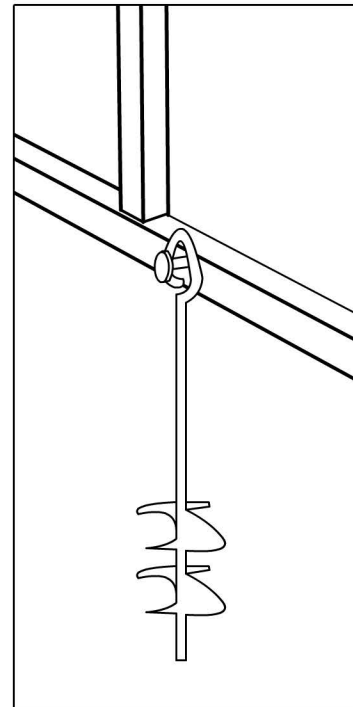
If your baserail doesn't have pre-drilled holes, then you will need a power drill to create them. They are typically installed with-in 6 inches of every other stud.

Rebar Anchors (Ground Installation)



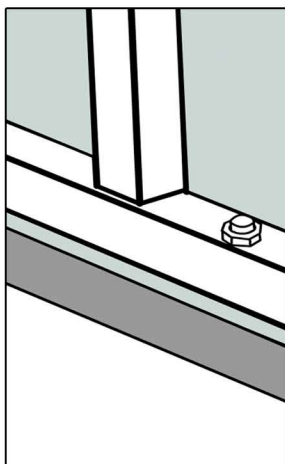
Use a sledge hammer to pound the re-bar anchors through the anchor holes, into the dirt.

Mobile Home Anchors & Asphalt Anchors



Install the anchor close to the baserail then bolt it through the loop into the side of the baserail. You will need to drill a hole the bolt size through the side of the baserail.

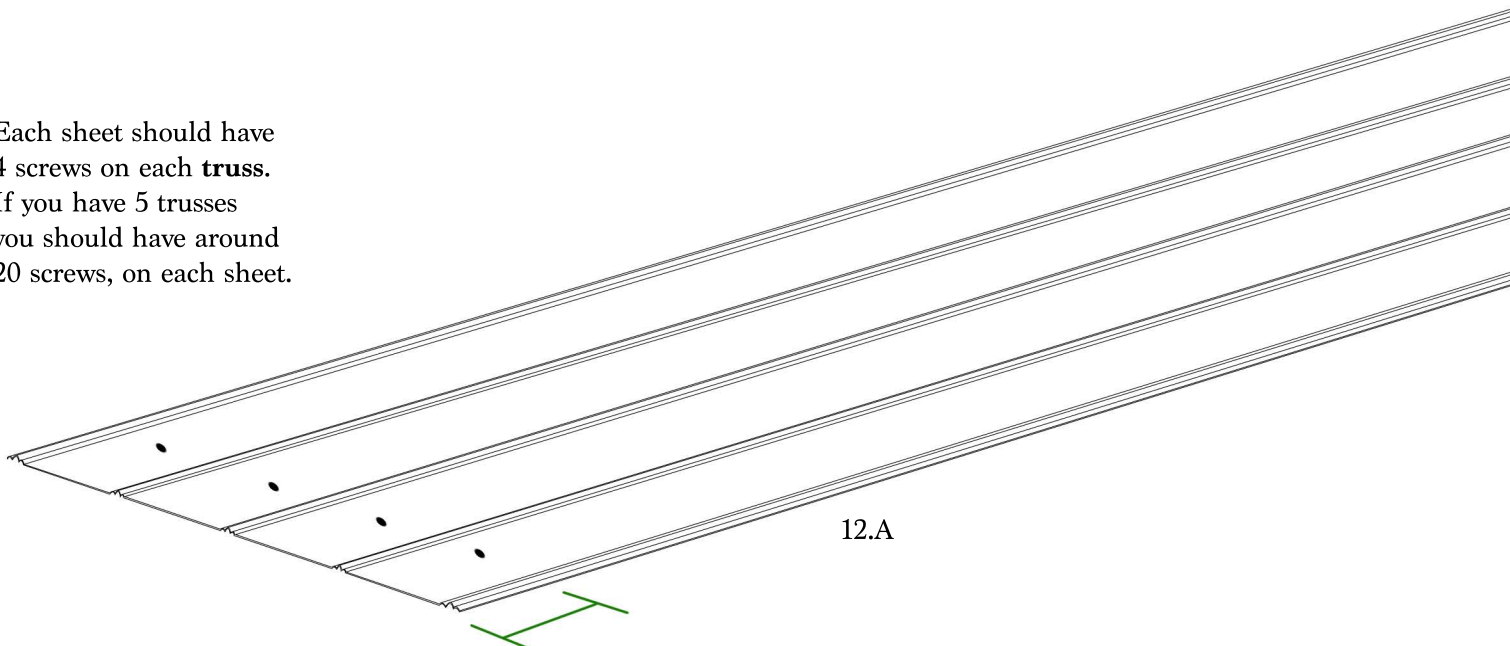
Cement Expansion Bolts (Cement installation)



Refer to expansion bolt manufacturer's installation instructions.

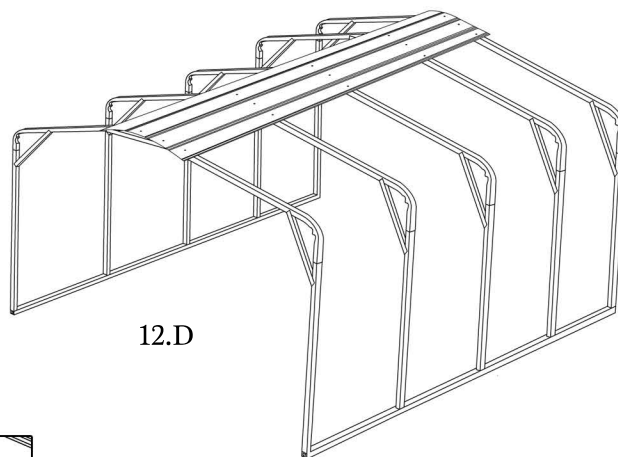
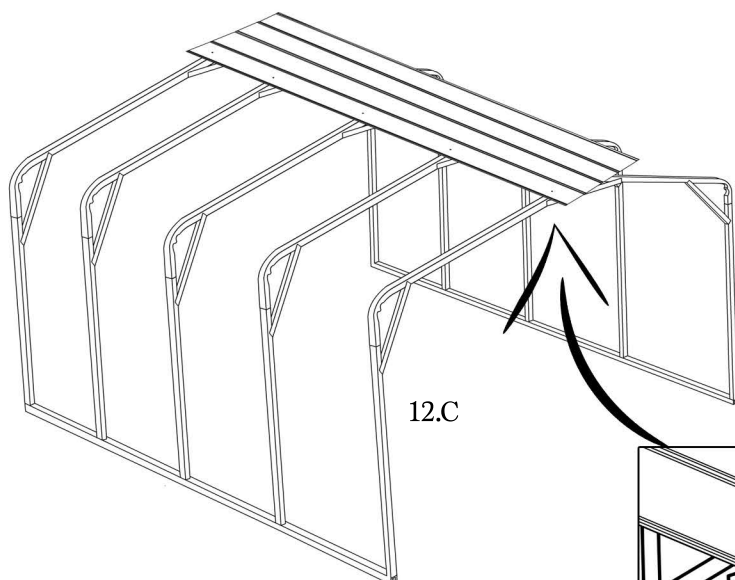
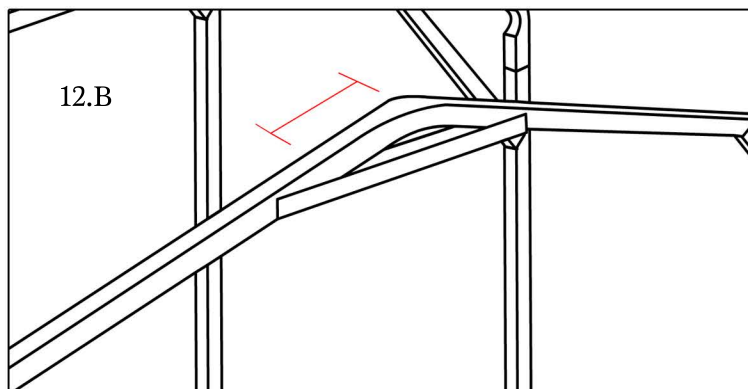
Step 8. Sheet metal connection

Each sheet should have
4 screws on each **truss**.
If you have 5 trusses
you should have around
20 screws, on each sheet.



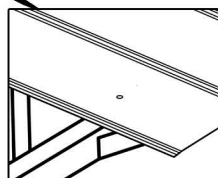
Mark 6 inches on the front of the first piece and 6 inches on the back. This will be your carport's over hang.

From the peak measure 10 inches down on each truss and mark it. This will help keep the sheet metal in the best possible alignment.

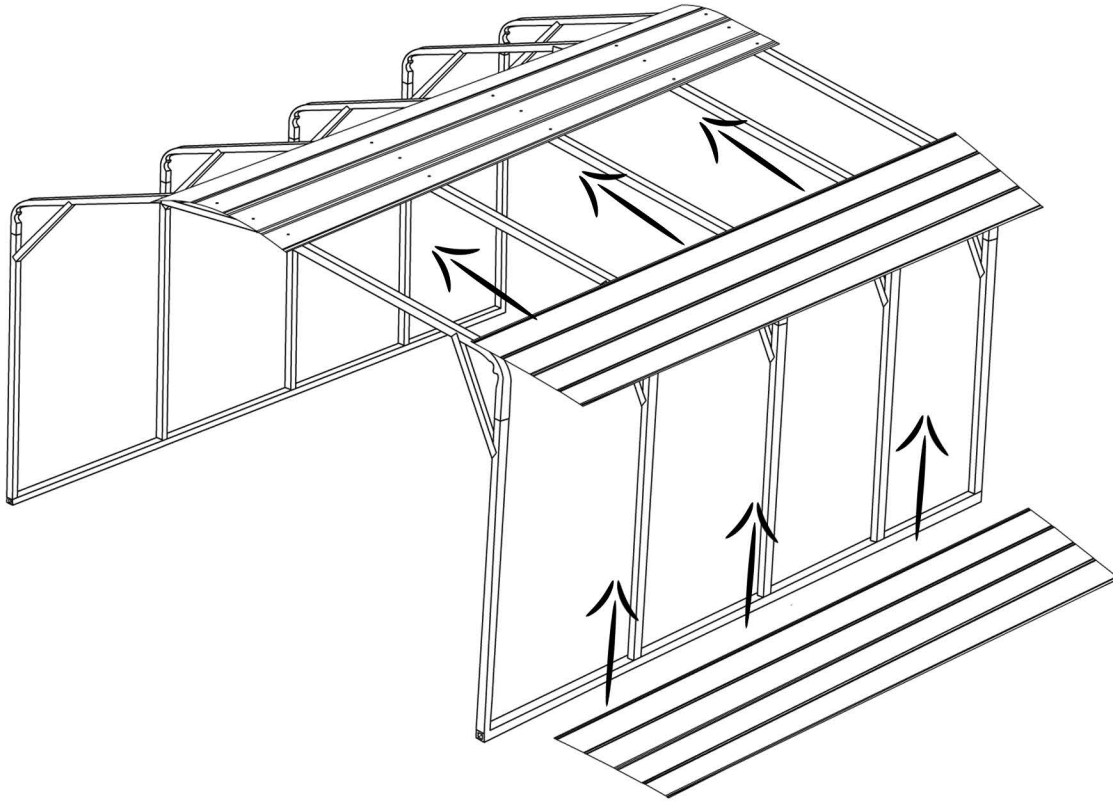


Add the first piece along the marks and screw the panel to the frame on each truss.

Then pull the other side of the first sheet over so that it's flush with the truss and screw that side to each truss.



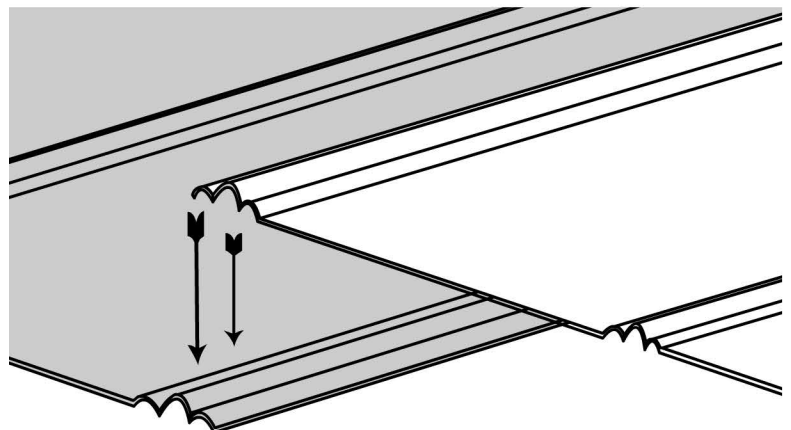
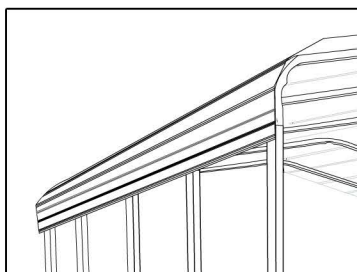
Step 9. Sheet metal connection other pieces.



Add the other sheets by overlapping the ribs. The sheets will interlock perfectly. Screw each sheet to the trusses.

Depending on the size you ordered the sheets should wrap around and come down the side walls some.

Typical over hangs come down the side wall with-in 6-10 inches.



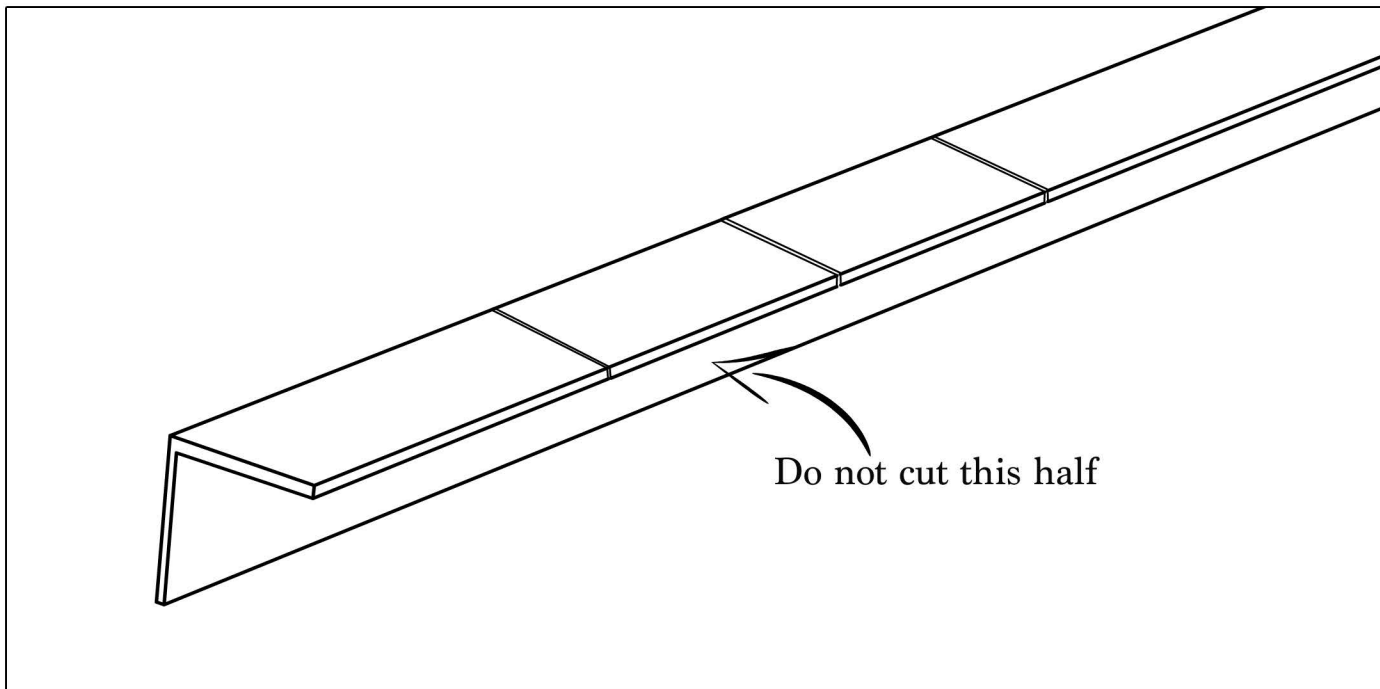
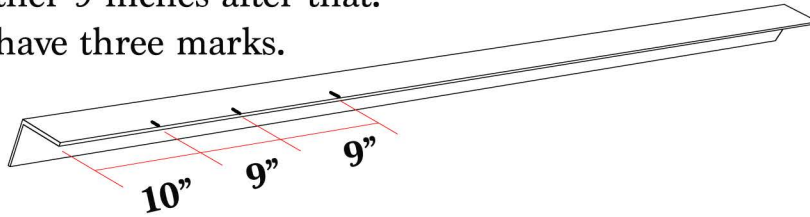
Step 10. Sheet metal trim.

Take a piece of trim and mark it 10 inches in.

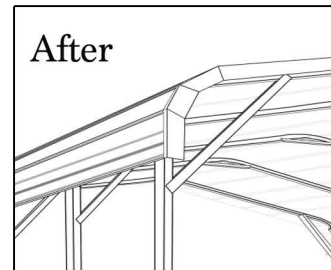
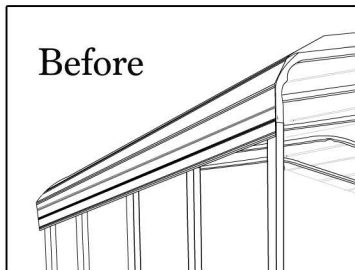
Mark it 9 more inches after.

Mark it another 9 inches after that.

You should have three marks.

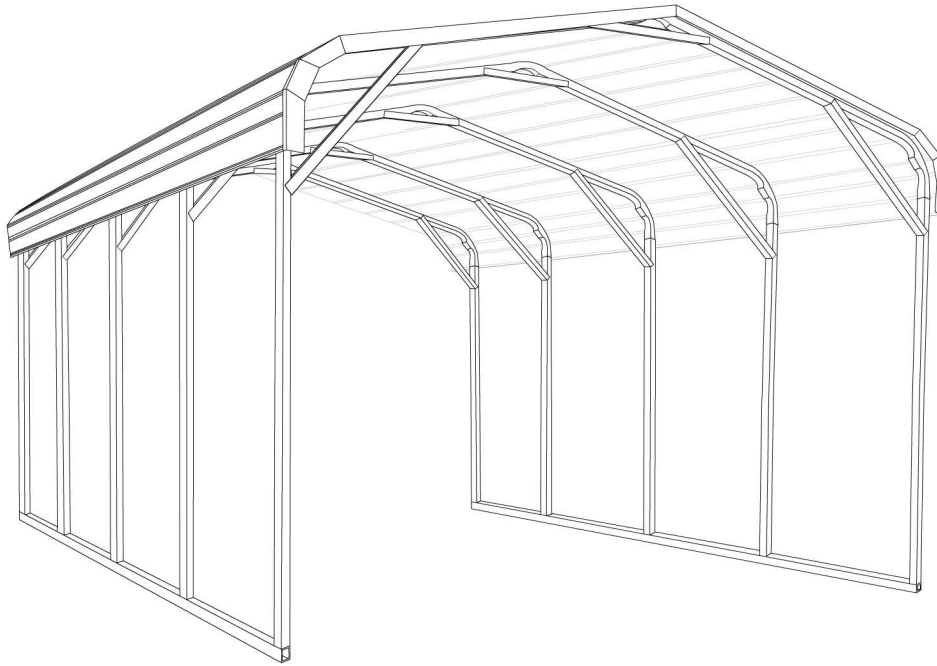


Use the tin snips to cut those marks only on one side of the L. DO NOT CUT THE TRIM INTO PIECES, JUST A SLIT. Cut to the corner.



Bend the trim to conform to the corner. Add a screw through the trim and into the larger ribs in the sheet metal. Repeat this for both of the ends.

Your carport should now look like this! It's almost done!



Step 11. Finish anchoring

Repeat step 7 on page 11 for the final baserail.

You're finished with your carport installation!

Maintenance and care.

Galvanized metal is a specially made material that provides added protection against corrosion and oxidation, characterized by an outer coating of zinc oxide. The zinc acts both as a physical barrier for the metal and as a chemical one. Properly cleaning galvanized metal not only keeps it looking new, but also keeps the zinc oxide barrier strong and intact. Here are a few steps to use to effectively clean galvanized metal.

Rinse with a hose.

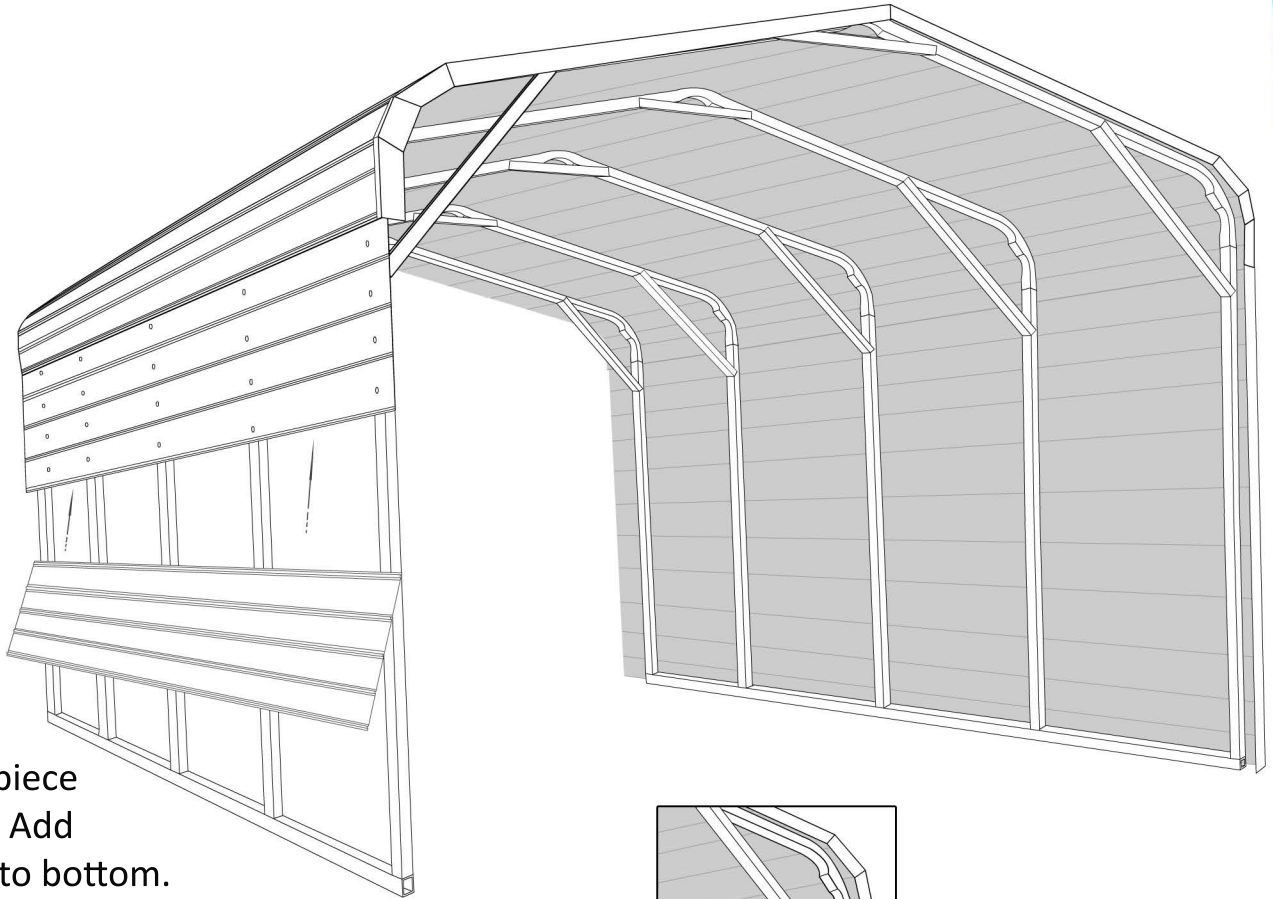
Clean and scrub with warm water.

Dry with soft cloth.

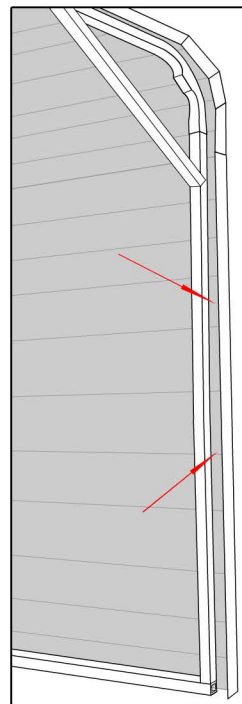
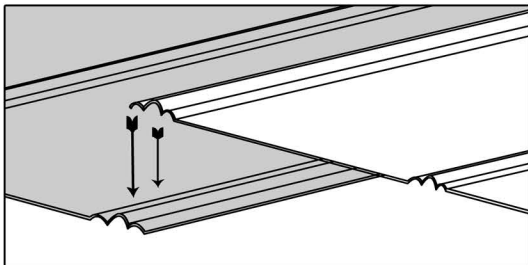
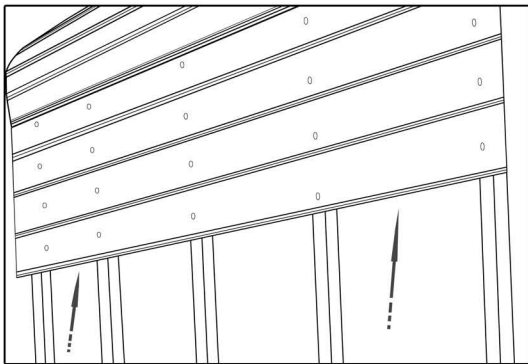
Apply Wax - When trying to keep galvanized metal shining throughout the years, the occasional coat of metal polish or paste wax is welcome.

Step 12. Sheet metal side walls.

If you purchase side walls continue adding the sheet metal by overlapping and screwing the self tapping screws.



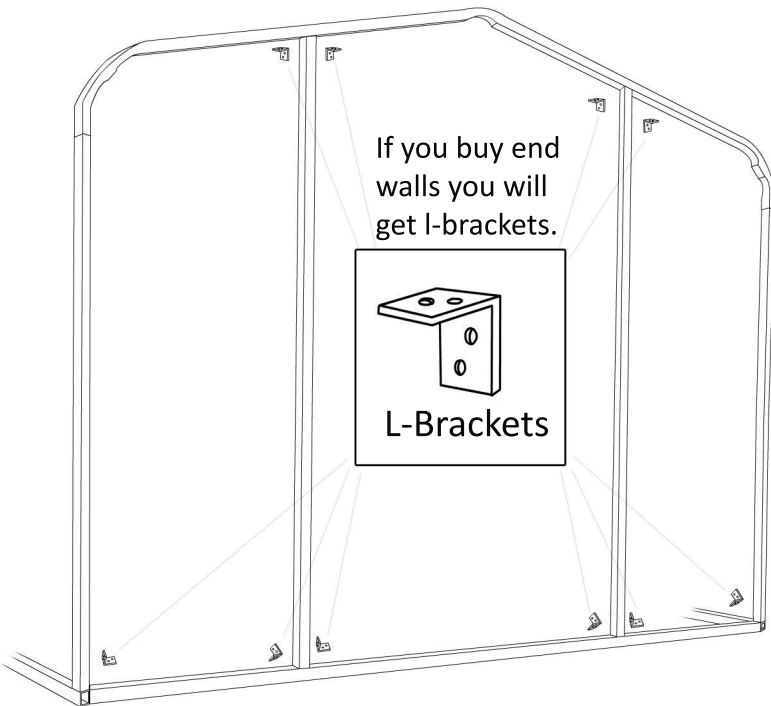
Add one piece at a time. Add from top to bottom.



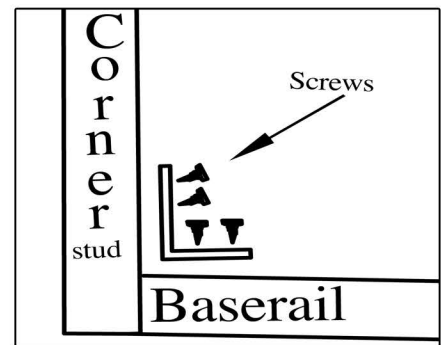
Add the trim work by screwing onto the larger ribs on the sheet metal.

Step 13. Framing for an end wall.

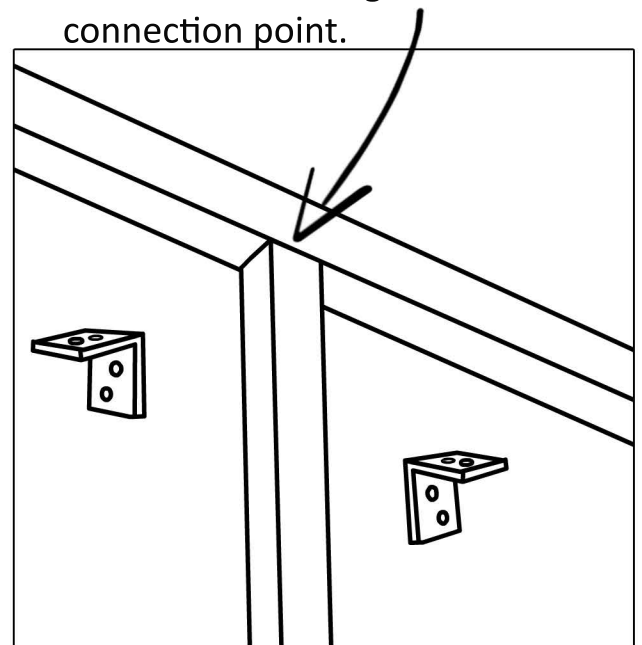
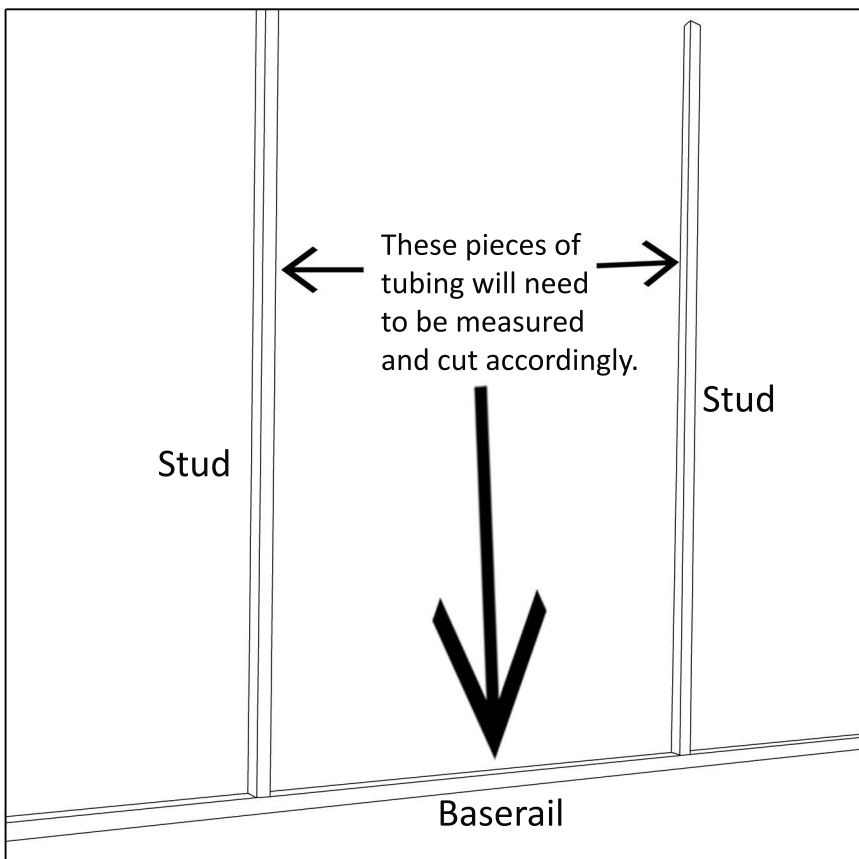
End walls will always have a baserail on the ground and studs going up to the truss. If the end wall doesn't have doors, that end's interior studs are usually set 4' to 8' apart. It all depends on your order's size. See your order's part list for a list of end wall pieces.



Secure the baserail to the corner stud using an I-Bracket on both the left and right sides.



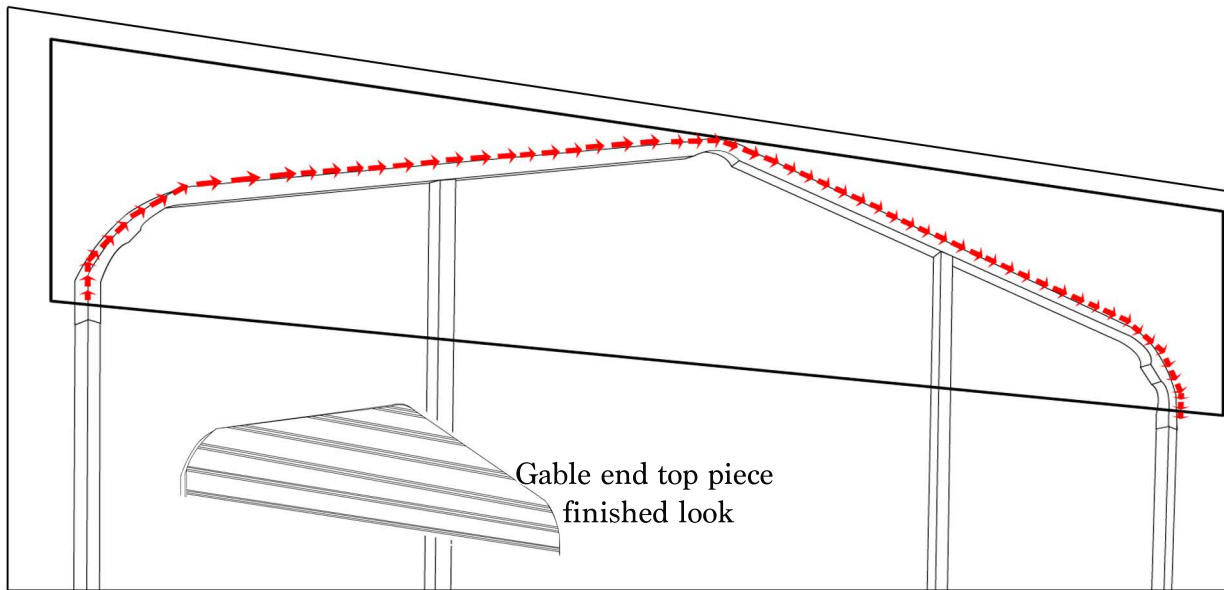
The top of the stud will need to be cut at the same angle as it's truss connection point.



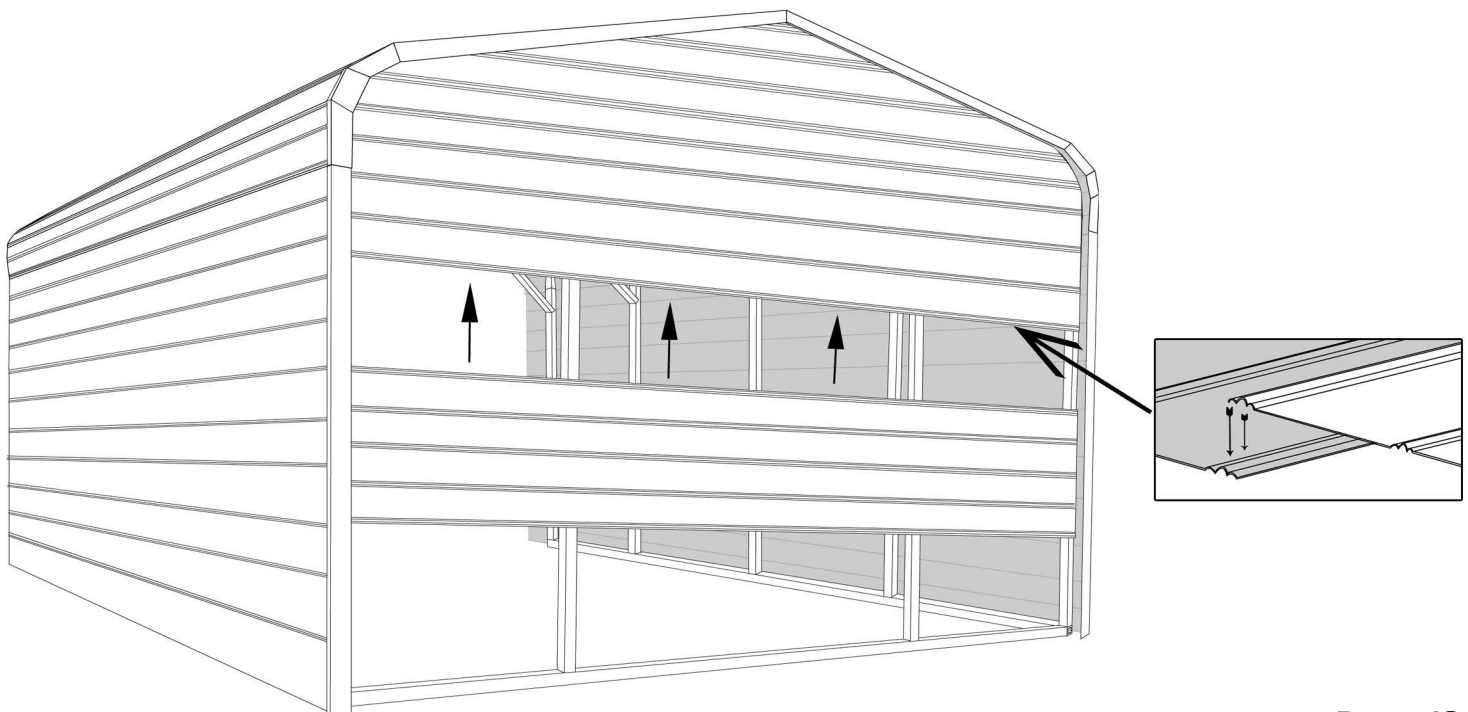
L-brackets will need to be bent some to conform to the angle. Use the screws to attach the I-brackets.

Step 14. End Wall Sheet metal.

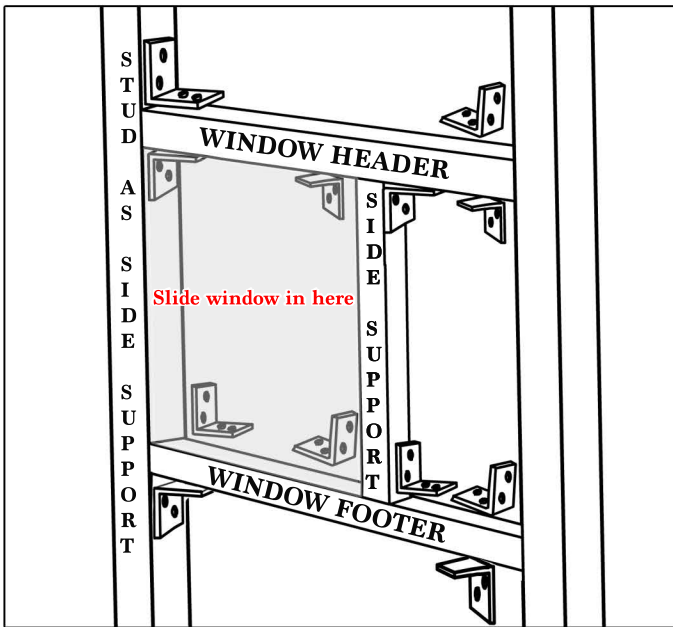
The gable end top piece of an end wall is easiest to manage if you get this piece of sheet metal added while you are putting up your trusses during **step 5**.



Use the tin snips to cut the gable end's sheet metal to conform. The over hang and trim will cap this area off but try to make the cuts as accurate as possible for the best finished look.



Step 15. Walk-in door and window instructions.



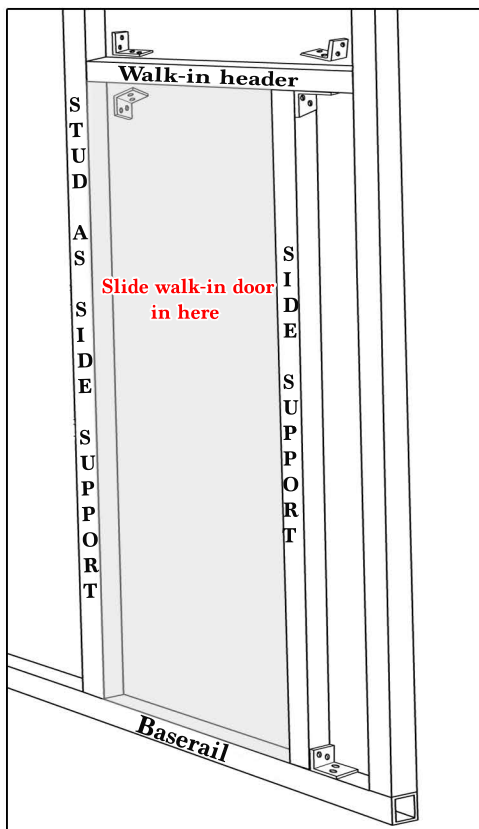
L-bracket attachments are used to connect headers/footers.

Measure the distance between two studs. Cut two pieces of steel tubing one for the window header and one for the window footer.

Cut one or two pieces of steel tubing the same height as the window. This will be the window's side support. You can also use the stud as a window's side support.

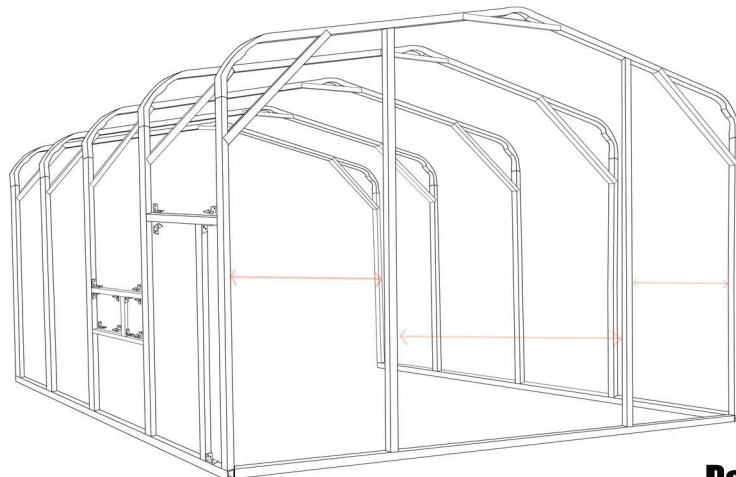
Use L-brackets and screws to connect and position all of the components together. The location for the window should be the same width and height as the window.

You will have to measure and cut some sheet metal. To side the area around the window/door. You will also have to measure and cut some trim to cap off the edges of the sided window/door frame out. See page 21 for example.



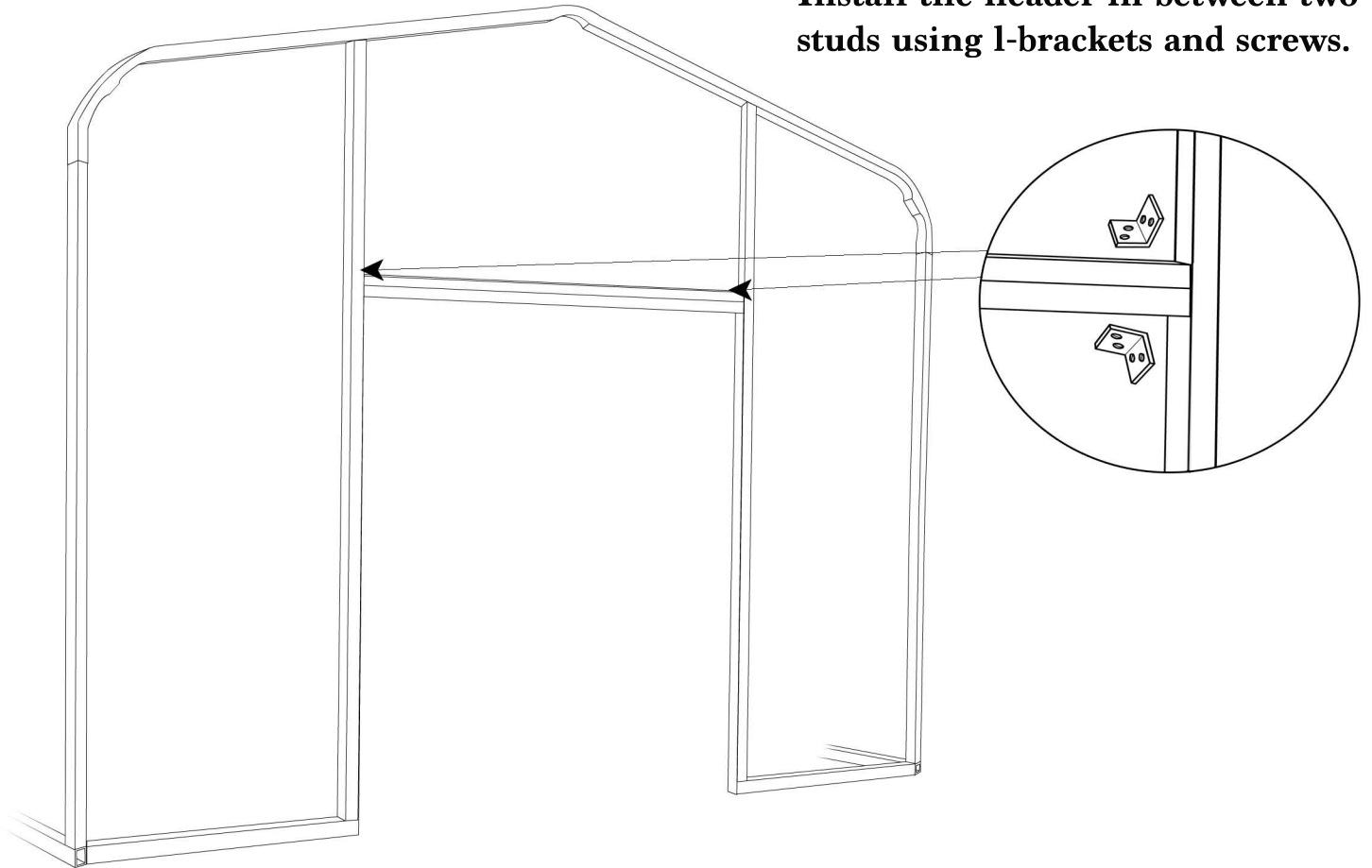
Do the same thing for the walk-in door but just use the baserail as the footer.

This guide shows the methods and materials we use to install doors, windows, headers, frame outs, etc. There are many different potential scenarios for our products. You will get the required materials for your specific scenario.



Step 16. Garage door header installation.

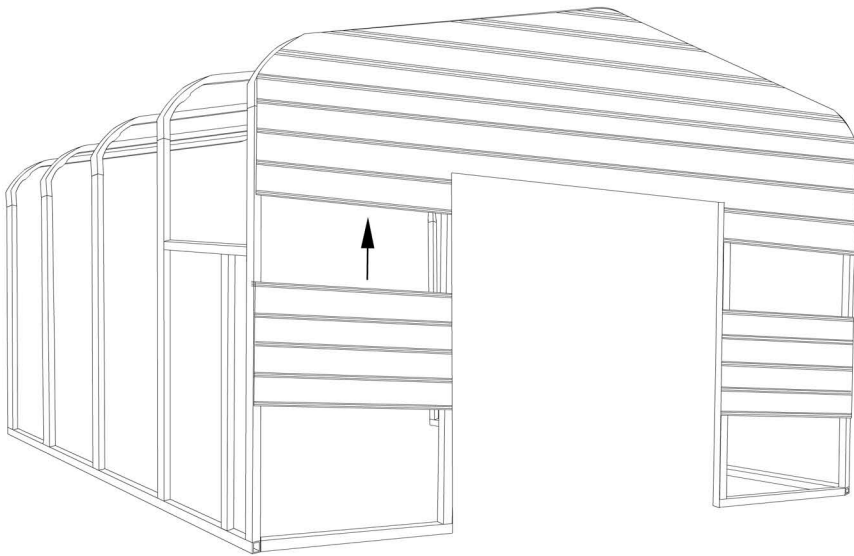
Install the header in between two studs using l-brackets and screws.



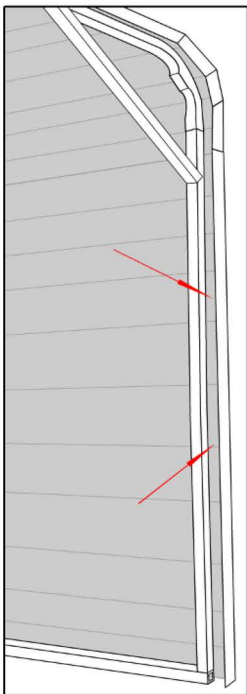
Garage doors are installed on double welded headers. The garage door frame will screw into the header and the garage door tracks will be screwed into the two studs that are holding the header up.

Refer to the garage door manufacturer's installation instructions for proper door installation. Our provided headers will be the size you specify on your order.

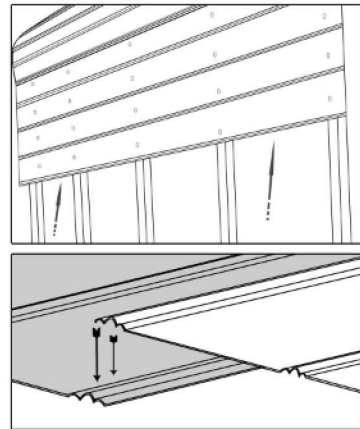
Sheet metal installation tips



You will need to cut your sheet metal into smaller pieces and puzzle them onto your structure. You can use tin snips or an electric saw.



Add the trim work by screwing onto the larger ribs on the sheet metal.



Measure the perimeter of the door or window frames and cut the trim into smaller pieces to puzzle them around your frame out.