HOOP HOUSE USA

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Let's grow together

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Acknowledgment

Thank you for being a customer!, Now that you have received your hoop house structure starter kit please take the time to go over this manual. We will provide a basic outline of how to set up the main frame, all accessories and or add-ons are subject to interpretation as there are various options and tactics with these types of set ups.

Part Terminology

Post

Arch

Side-Wall Support Tubes
1 3/8" X 16 GA Tube

"V" Trusses Support Tubes
1 3/8" X 16 GA Tube

T-Connector

Cross Connector Clips

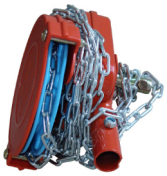
Wood Bracket

Self Tapping Screw

5/16" Bolt and Nut

Wiggle Wire with Channel

Hand Crank



Chain Hoist

Ribbon Bracket

"U" Bracket

Swedged Lineal Tube
1 3/8" X 16 GA Tube
(used for roll up sides, & support tubes / purlin)

Clear Plastic

Black-out Plastic (Panda)

"FC" Film Clamp

these are for terminology purposes, you might not have some of these parts depending on what your ordered

Safety Tips, and Recommended Tools

As with all types of construction or structure erection please take safety seriously. Gloves are recommended and safety glasses will provide extra protection when cutting, drilling or using the self taping screws.

Required Tools :

 Powered Drill or Impact Drill, with Hex Head Bit

 Measuring Tape

 Step Ladder

 Grinder with cutting Disk / cut off wheel
(you will have to cut off excess material)

 3/8" Drill bit

 Scissors or Box Cutter (for plastic)

if you decide to have aftermarket ad-dons please check which other tools you might need for those

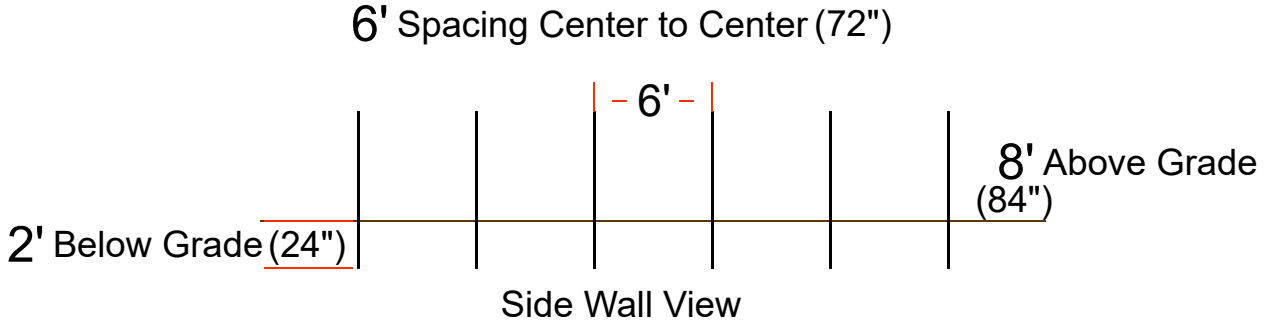
*Some drills / impact drills have a lot of torque, please test the self tapping screws on lower speeds to avoid stripping the screw or accidentally removing the hex-head if self tapping screws are used.

Post Dimensions and spacing

Depending on the size of hoop house structure that you purchased you will need to ensure enough space for the width and length and any other space around the structure you you want to have access to.

Post Dimensions :

- Recommended Post Length Spacing center to center 6'* feet (72" Inches)
- Recommended Post below grade (into ground) 2' (24" Inches) feet leaving 8' (84" inches) foot Post exposed
- Width Spacing will depend on the width of your hoop house structure.



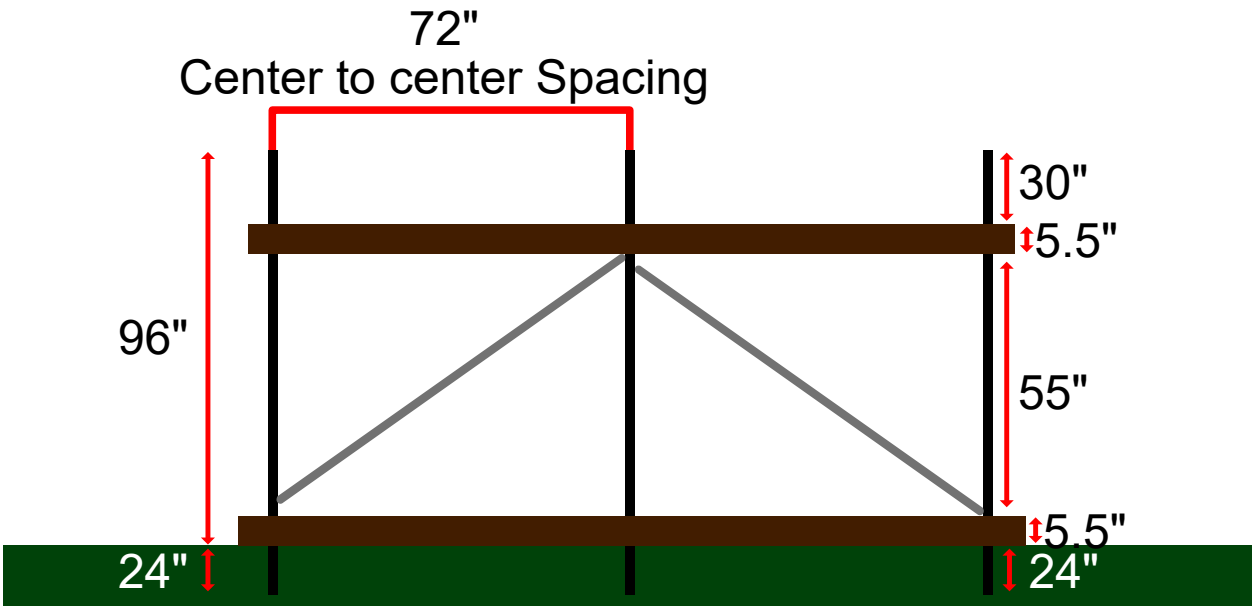
Side Wall View

Augers or Post hole diggers are recommended for making the post holes. 4-6” wide hole X 30”-32” inches deep.
Secure posts to ground using concrete or post setting mix to post holes, please check with local concrete distributors for concrete needs.

** End frames will also need to be cemented into the ground / below grade, please see end frame section to add those during the cement / hole digging.
Spacing for hoop house structures 10 foot wide should be 4 feet apart for posts**

Post Dimensions and spacing (continued)

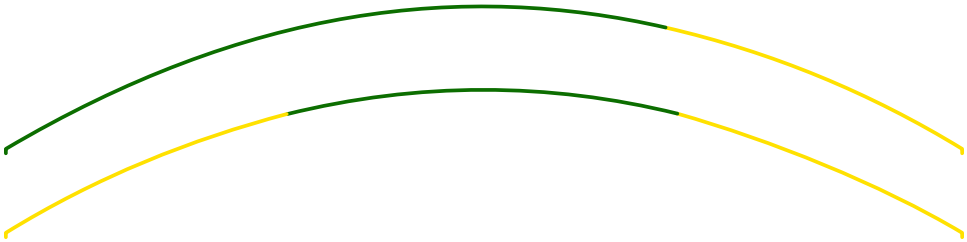
In higher wind areas it is suggested to drill a hole at the end of the post and put a piece of re-bar through so that post is more secure below grade



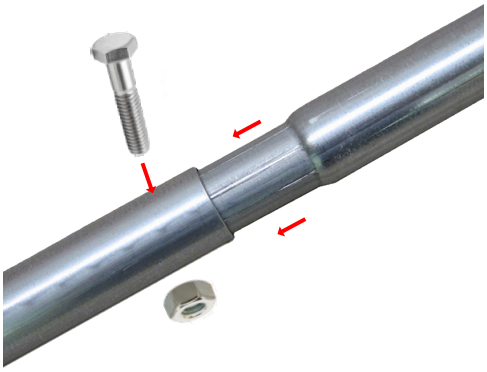
(Side View of Finished Side Wall)

Assembling Arches

Depending on the size of the hoop house structure that you ordered, the arches will come in two or three sections.

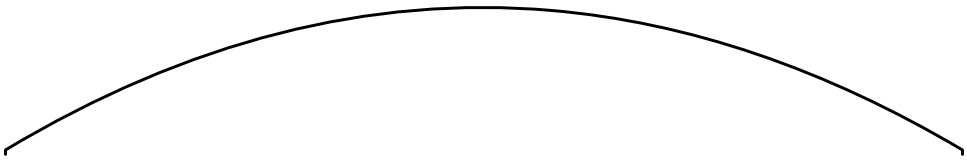


These arch sections easily slide into each other. Lay the arches on the ground to make it easier to assemble. It's recommended to use a 3/8" drill bit to make holes 1 1/2" inches down from female insert, and one 5/16" bolt per inserted section. Drill holes parallel to the ground to avoid bolts interfering with plastic later.



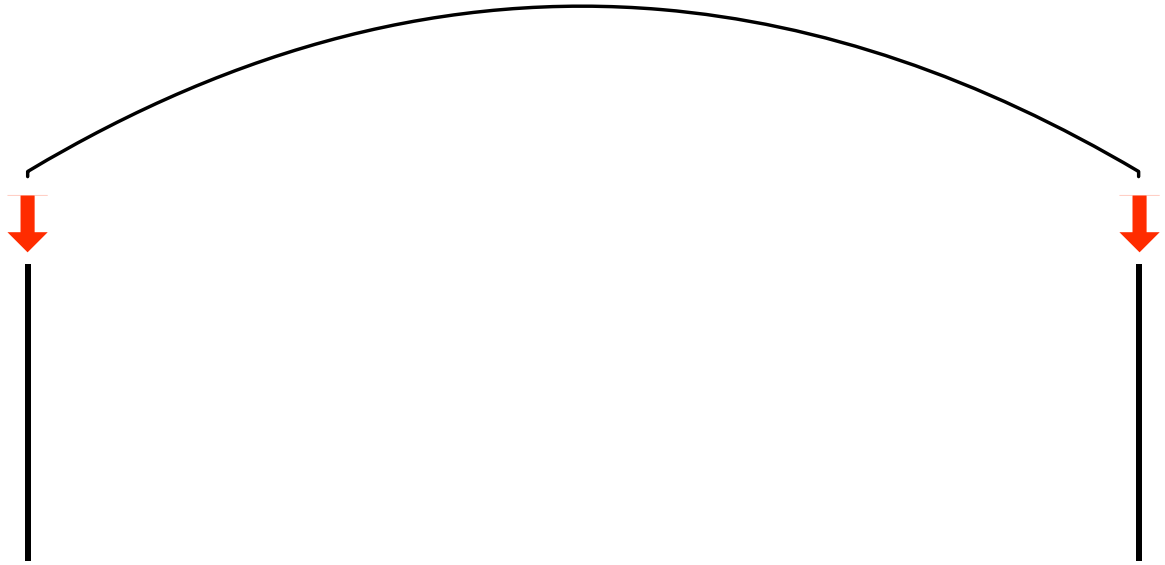
Self tapping screws are provided as place holders for temporary placement while installing

Once the arch is fully assembled it should have its final full form:

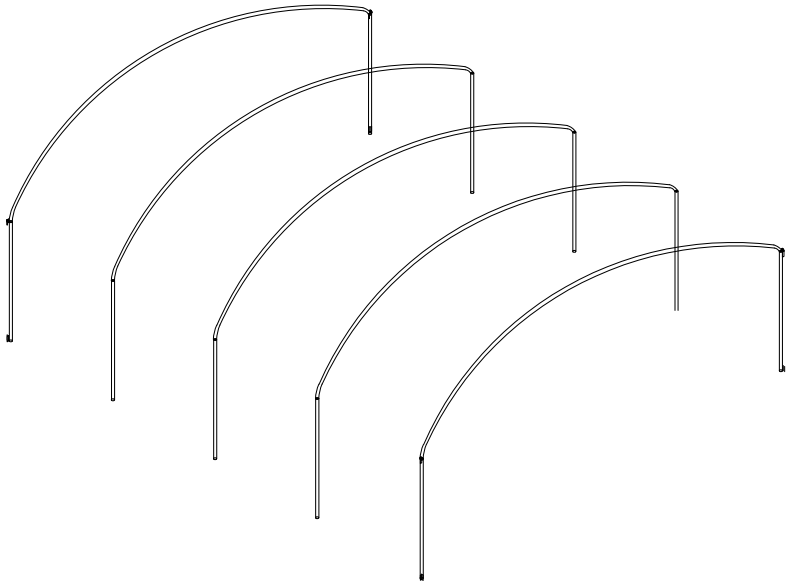


Placing Arches into posts

Once your posts are secured and you have your arches assembled it is time to mount the arches into the posts.

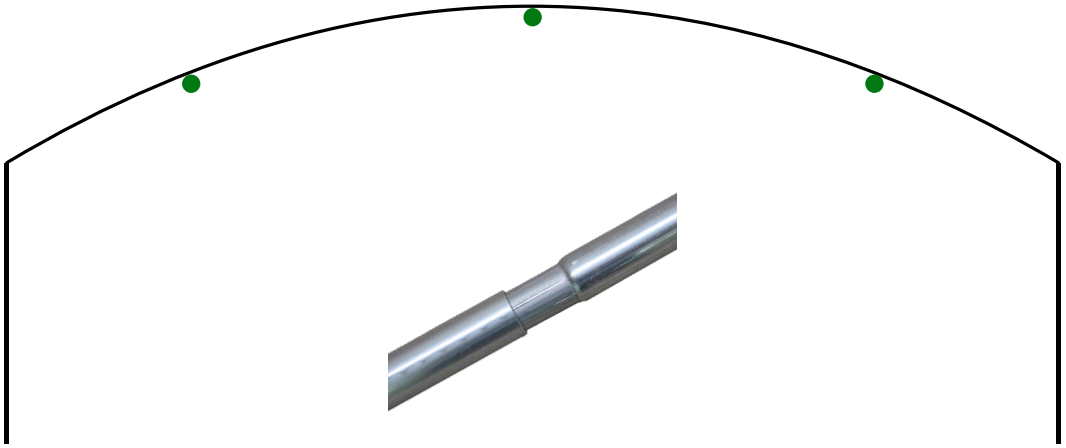


Using two people, the arches will easily fit into the posts, you can secure them using a 5/16" bolt or another preferred method, bolting / securing post to arch should be done AFTER adding width support tubes (As shown in “support tubes and “v” trusses Section)



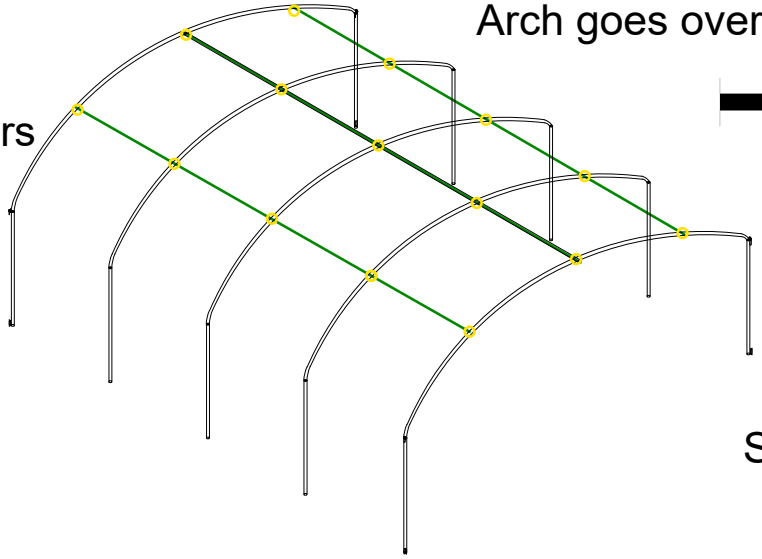
Support Tubes And Cross Connectors

Support tubes / “purlin” are to help your structure be more rigid and connect the overall structure together. Depending on the width of your greenhouse you will either have three or five purlins that will span the full length of the greenhouse.

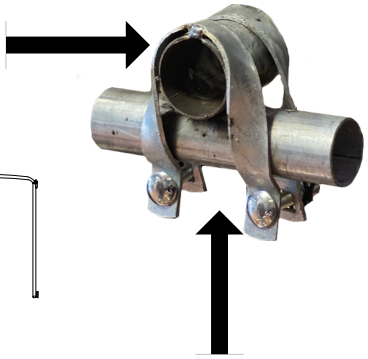


Support tubes / purlins easily slide into each other secure them using a self tapping screw at every crimped / swaged end. To secure the support tube to hoop house structure use the cross connector clips at every intersection where an arch meets a support tube:

Cross Connectors



Arch goes over support tube / purlin

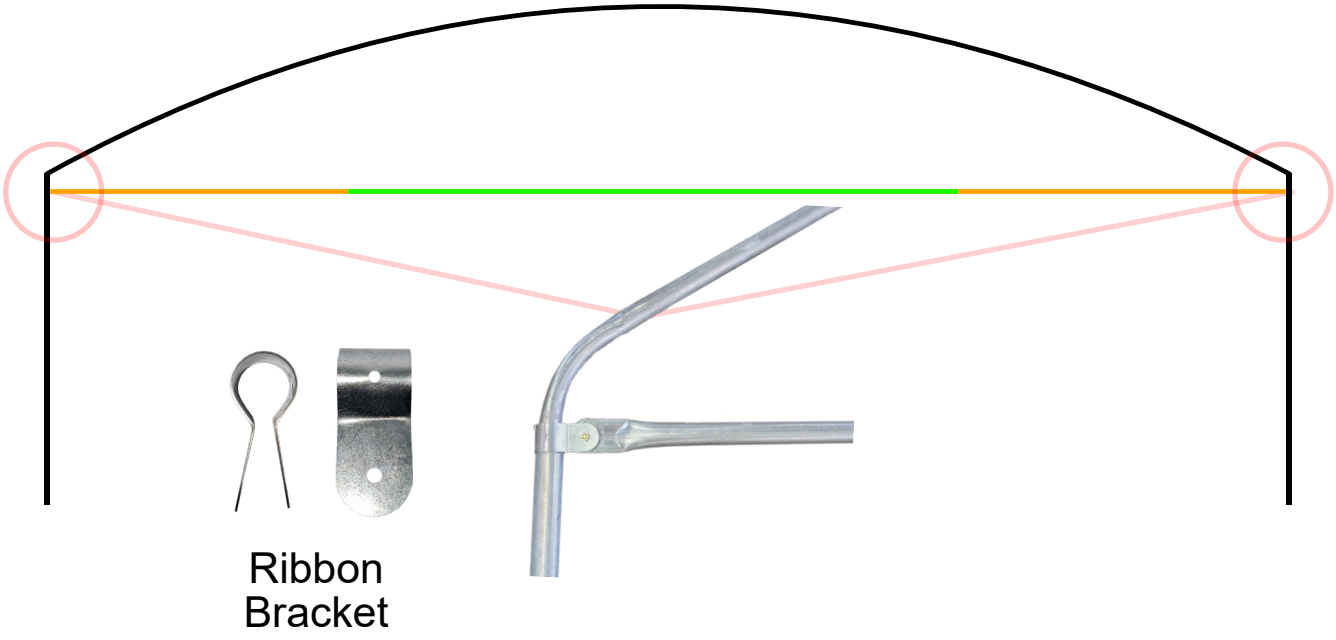


Support tube / purlin

It Is important to make sure the arches are OVER / on top of the purlins, this will ensure a tight plastic later when securing / adding plastic cover.

Support Tubes And V-Trusses

Each arch will be reinforced with “V-trusses” which include the support tube that spans the width. Start with the support tubes that span the width. These tubes will consist of three separate pieces, two ends and one middle tube that will slide into each other. You will need a drill, Ribbon Brackets, Nuts and Bolts.



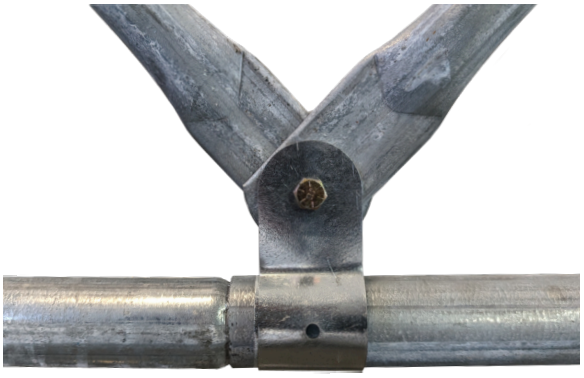
Ribbon Bracket

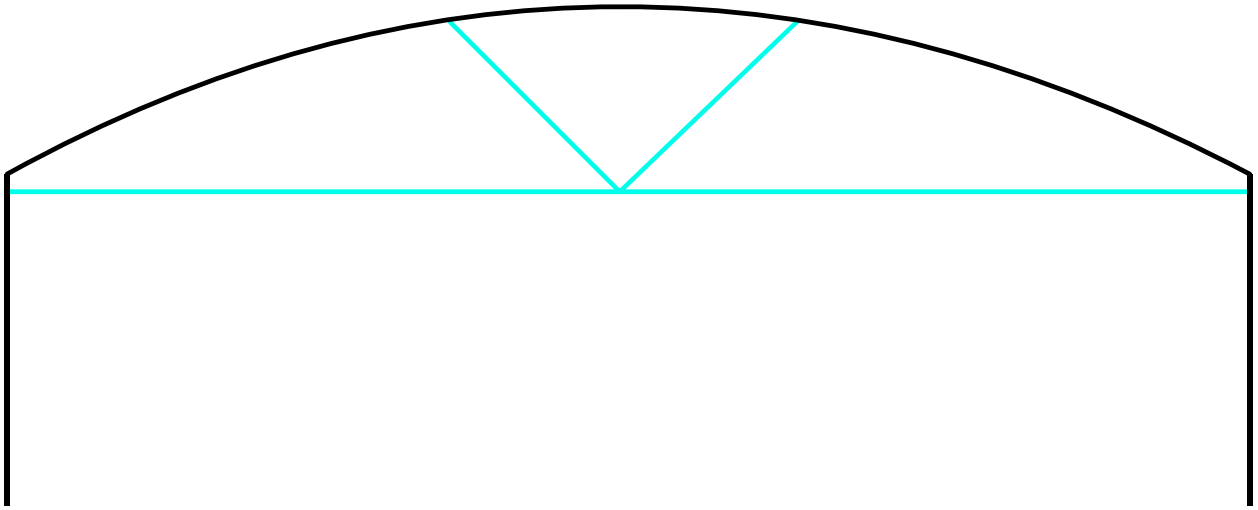
Secure the width support tubes using a ribbon bracket and nuts and bolts on each post at the highest point of the post to allow for maximum height for walking through the greenhouse, the middle section of the width support tubes will also need to be drilled and fastened / secured with a bolt and nut.

Support Tubes And V-Trusses (continued)

“V” Trusses will also utilize ribbon brackets, “V” trusses should be angled at a 45 degree angle and secured / fastened to arches and width support tube with ribbon brackets, bolts & nuts.

Ribbon Bracket

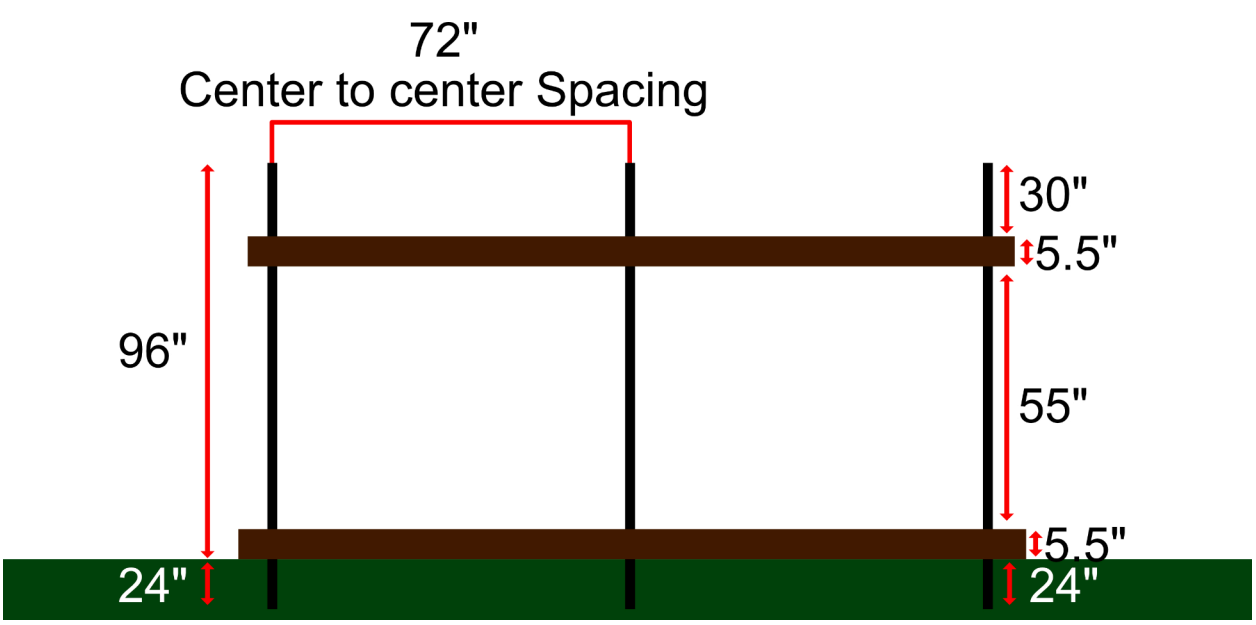




Wood placement

Add wood supports to each post using the wood brackets. The wood brackets have pre-made holes for self tapping screws. Make sure the wood brackets “lip” or bent side is on the bottom of the wood to support the wood.

Wood bracket

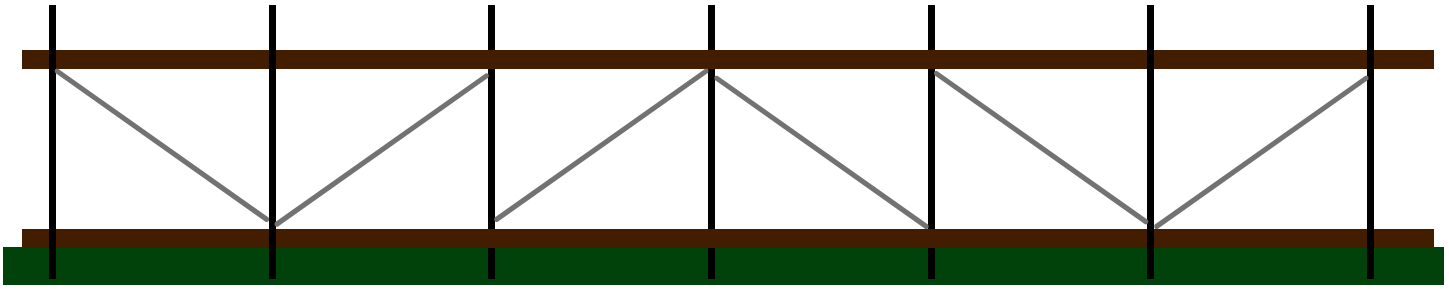


The top wood support should be at MAX 6 feet on center to give the hand crank the ability to roll up the sides when needed. It can be lower than 6 feet, but not exceed 6 feet high.

Side Wall Support Tubes

Add side wall support tubes to each post using support bracket / ribbon bracket and bolts. There's an extra hole in the ribbon bracket for a self-tapping screw or bolt to help with displacement / prevent the ribbon bracket from moving around or slipping.

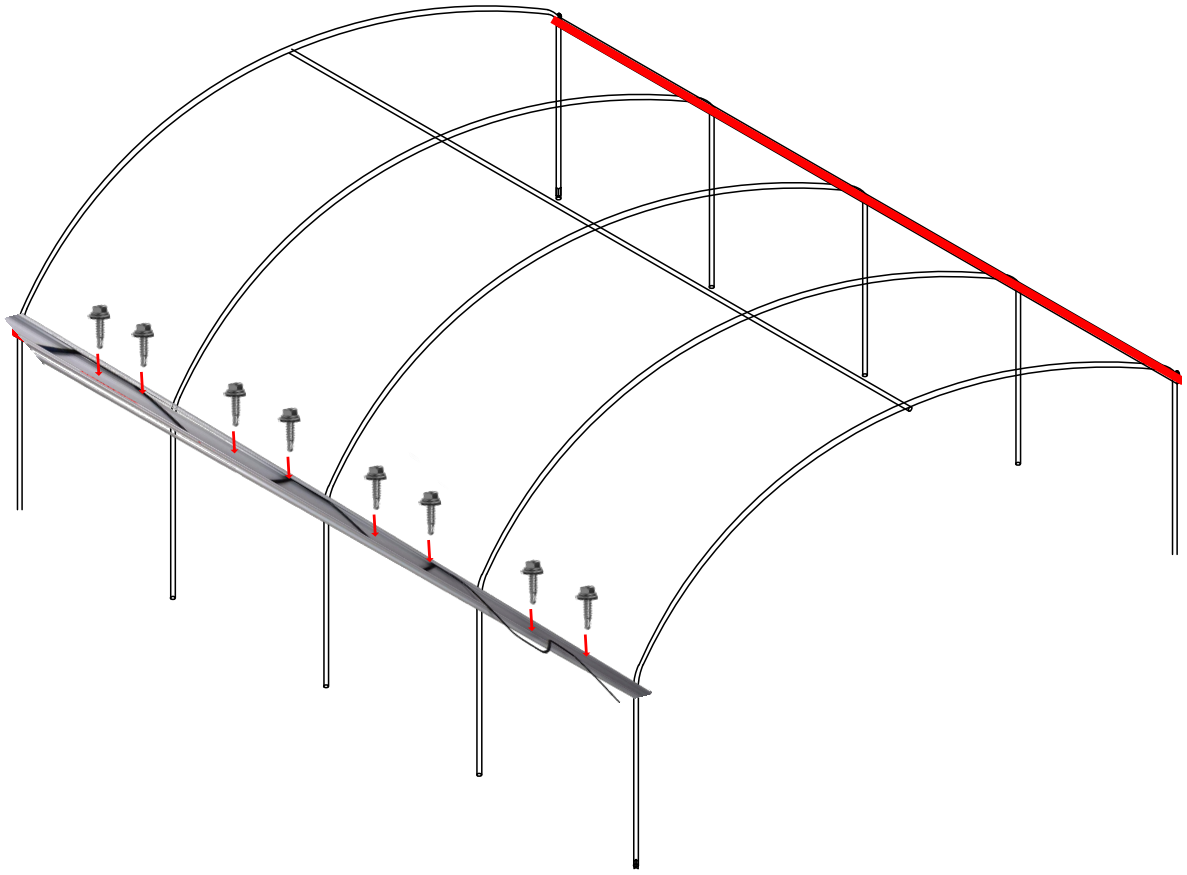
Ribbon Bracket



Ensure the first and last side wall support tube starts from the top part of the post to help with wind gusts.

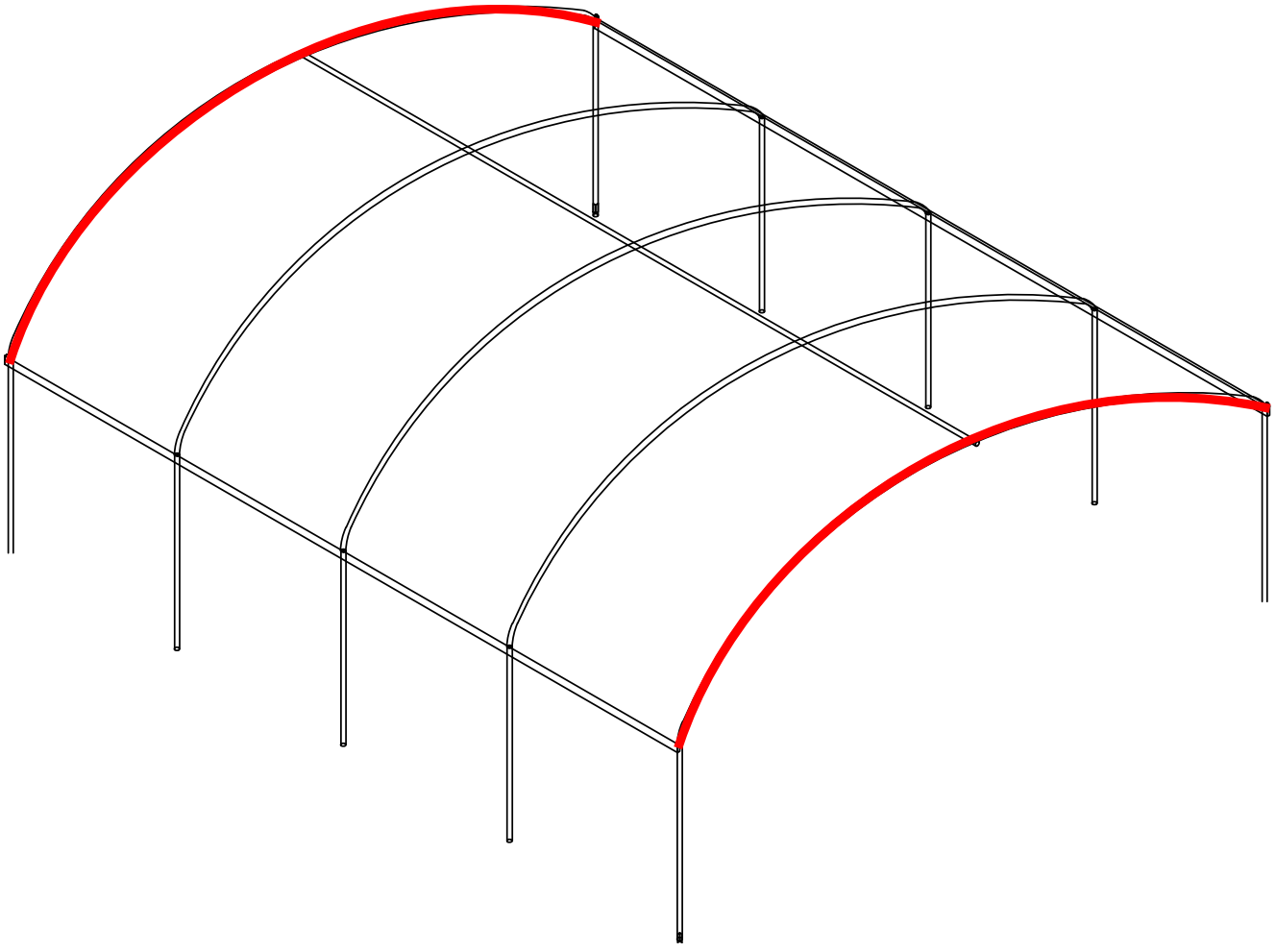
Wiggle Wire Channel

Wiggle wire W/ channel should be fastened to wood panels on the outside of the hoop house structure (remove the actual wiggle wire to fasten channel with self tapping screws to wood supports) should have a MAX height of 6’ feet (72” inches) on center on the wood supports.



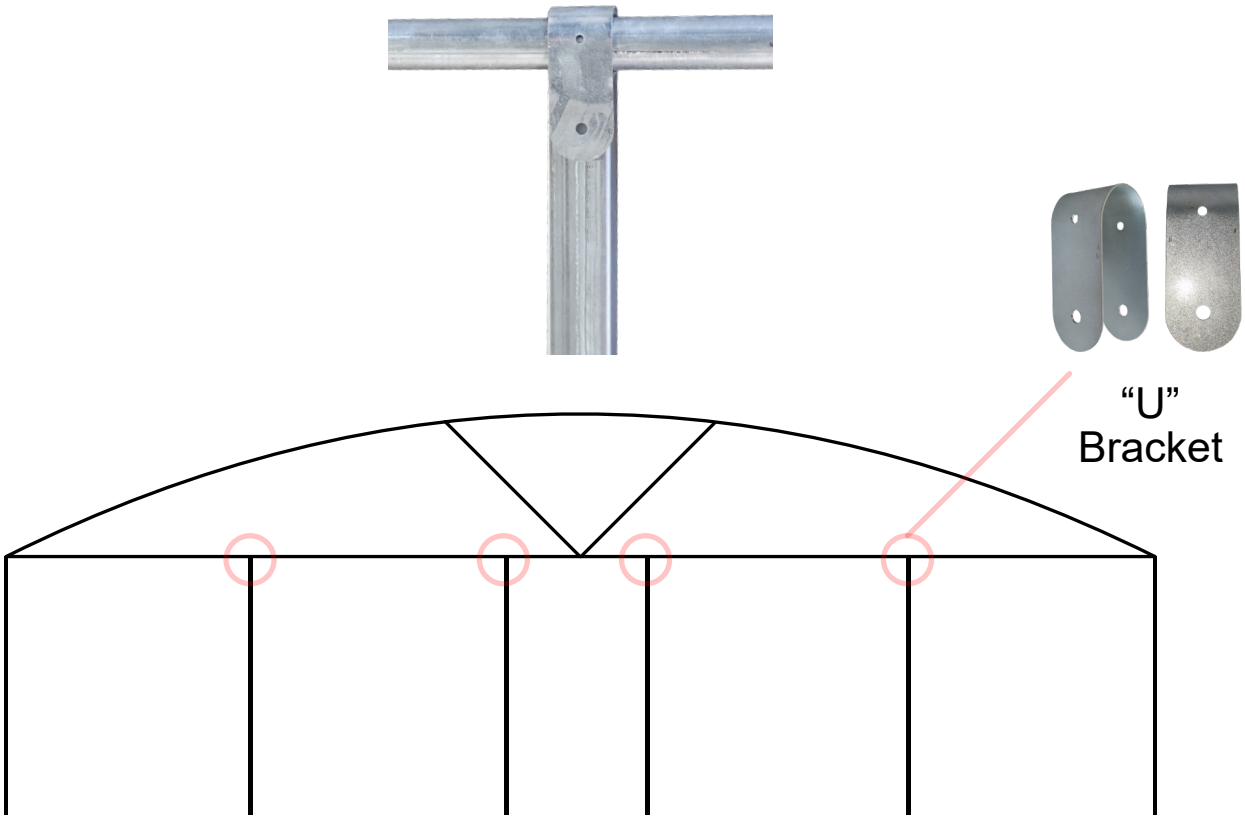
Wiggle Wire Channel (continued)

Wiggle wire channel needs to also be secured / fastened to each end or beginning arch with self tapping screws. The wiggle wire is malleable enough to bend and form with the arch. It is recommended to start fastening / screw in a self tapping screw at one end (possible two to help with the bending) and start bending / forming the channel with the arch in small increments about 1 ½’ (18” inches) - 3’ (36” inches) feet increments and add another self tapping screw at each bend / increment until wiggle wire channel covers the full length of the arch.



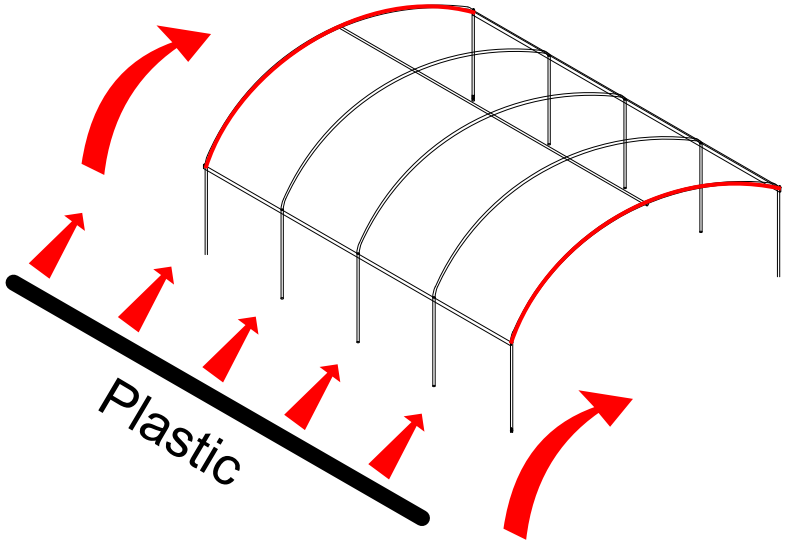
“End Frames”

End Frames are your entrances or back of the greenhouse, These will also need to be cemented / secured into the ground / below grade.Tubes will comes at 10’ foot length (10 feet) same as the posts before, you will need to get these posts at least 24 5/8” inches below grade to compensate for the width support tubes diameter. You will need to use “U” brackets bolts and nuts to secure / drill into the tubes to secure / fasten the end frame to the main greenhouse frame. The spacing between each 2” sq tube should be evenly spaced AFTER door width / entrance is allocated for (door width will be at users / customers desire)

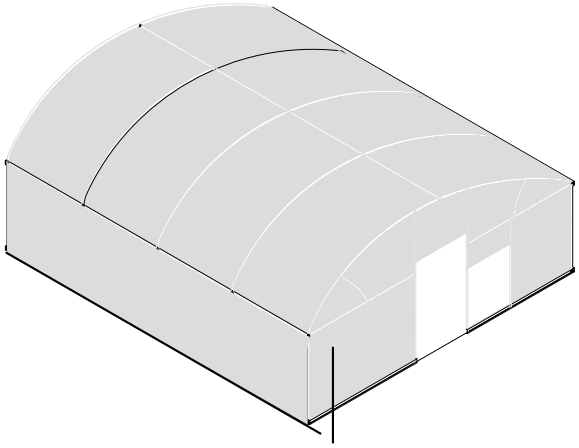


Adding Plastic to hoop house

There are plenty of methods to add the plastic to your hoop house structure. Through customers insights we have gathered, The following method seems to be one of the easiest.



Place plastic roll on the ground next to the hoop house and roll out the plastic a few feet over the length of your hoop house structure, select a corner where you can tie a knot using the plastic with enough space to pull a rope through the knot and secure the rope on the plastic. Using the rope and you can now pull the plastic over the frame, (will require two people for this) you will have extra plastic on the sides but that will come in handy when setting in the wiggle wire & the roll up tube.



Wiggle Wire and Plastic

Now that the plastic is on your hoop house structure you can fasten the plastic with the wiggle wire. On one side you can fasten the plastic with the wiggle wire, ensure to leave enough slack on each side for the roll up tubes.

On the other side of the greenhouse you'll need to use a pull and fasten method, the plastic needs to be TIGHT, while fastening the plastic on the final side you'll need to pull on the plastic and then fasten it per every section to ensure a TIGHT plastic fitting. The plastic needs to be as tight as possible with no slag or droopy sections to avoid damage to the overall structure.

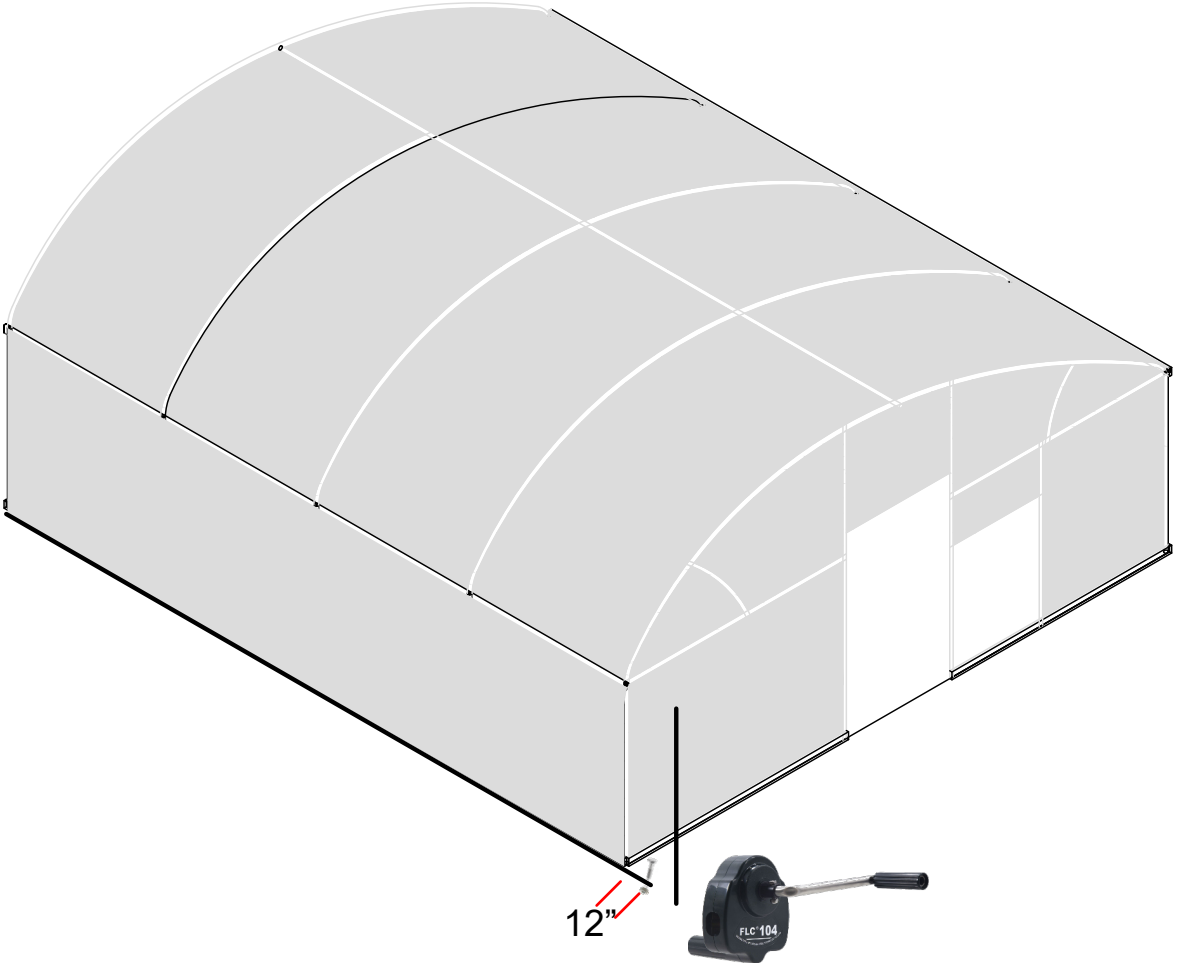
Plastic and Roll Up Tubes

Roll up tubes will be swadged / crimped and will easily slide into each other, use a self tapping screw to secure / fasten the tubes at each intersection for the entirety of the length of your hoop house structure. On the side you plan on having your hand crank be sure to leave at least 1’ foot of tube to reach the hand crank at that end, do not cut off excess roll up tube until the very end of installing hand crank (hand crank on next page)

Using the “FC” / Film Clamps roll plastic and around the roll up tubes and secure plastic to tube using the “FC” / Film Clamps. Ensure that theres enough length for the tube to meet up with the Hand crank. Hand Crank - theres a 1” round tube to guide hand crank up and down, this 1” round tube will be 8’ feet long and should be also dug into the ground 2 feet, and leave exposed 6 feet to guide the hand crank. Secure the roll up tubes to the hand crank using a bolt and nut.

Hand Crank And rolling plastic up

There will be 1 pc of 1” round tube at 8 feet. You will need to also secure this tube just like the posts, 1-1 1/2’ feet into the ground (below grade) and 1’ foot away from the greenhouse secured with concrete or post foam or driven in ground Make sure to leave a little over six feet Above grade / clear to guide the hand crank.



To secure the roll up tube to the hand crank, You’ll need to bolt it to the hand crank, you’ll need to drill a hole at the end of the roll up tube. The hand crank has a max height of 6’ feet do not over crank / roll up side wall more than 6’ feet.