

Trellis Bar Kit

Last Rev. 01/02/23

Trellis bars can be installed after the plastic has been installed. It is the final step in construction. It will be easier if installed before the plastic. **It is recommended at minimum, you have a truss for every 20' span, to support the trellis cable. (i.e. one truss for a 20' long green house, 2 truss for a 40' long green house.

Before installing your Wire Trellis Kits, determine where your beds will be located. The most common way to trellis for a bed is a single line in the middle of each bed. Common bed spacing width-wise is 2 to 3 feet from the edge of the sidewalls and 3 feet between rows.

1. Horizontal Bar

Included Parts

14' & Under - (6) 72" x 1½" horizontal bar, (4) 6" x 1¼" bar splice, (50) #10 Self Tap Screws, (8) ¾" x 3½" Hex Bolt with Nut & Washer

20' - (8) 72" x 1½" horizontal bar, (6) 6" x 1¼" bar splice, (100) #10 Self Tap Screws, (8) ¾" x 3½" Hex Bolt with Nut & Washer

2. Determine Horizontal Bar Sizing



This kit is installed onto end wall vertical uprights. This allows independent placement of wire trellis anywhere along the width of the structure (not just where vertical supports are located.) You will need a tape measure, level, and marker/center punch for this step.

Height

Stand flat-footed in a comfortable working stance. Determine the height at which you can easily squeeze roller hooks during lower and lean operations. The trellis

bar should be 4"-6" above this measurement. It is common for this height to be within 10" of the top of the door frame.

*The horizontal bar must be placed above the door frame at a minimum. Measure and mark desired height with center punch or marker.

Width

Using your marked height, measure the width from the outer edges of the hoop. Use a bubble level to ensure the bar will be installed level.

The trellis bar should span the width of the hoop house, ending just shy of touching the end wall hoops on the top corners.

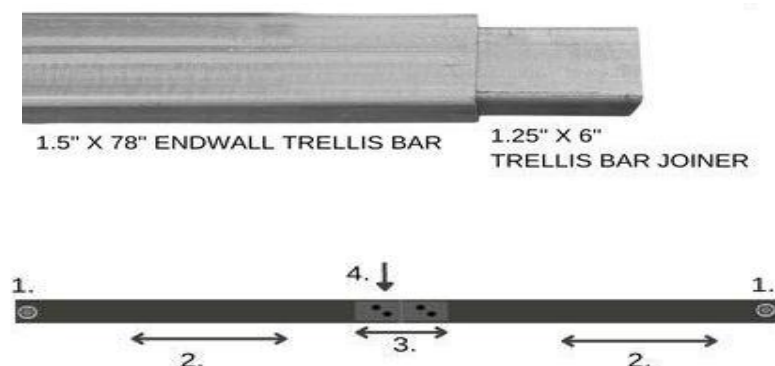
3. Installing Horizontal Bar to Endwall

After determining the desired length, the horizontal bar kit can be attached to the end wall using your marks from the previous step.

Tools Needed: Bubble Level, Drill, $\frac{3}{8}$ " Drill Bit, $\frac{1}{2}$ " Drill Bit, Ratchet Wrench & Sockets, Tape Measure, Metal Saw, Safety Goggles & Gloves, Clamps, Step Stool, Center Punch, String line at least the length of your hoop house and hanging level.

Parts Needed: #10 Self-tap screws, $\frac{3}{8}$ " x 3 $\frac{1}{2}$ " hex bolt with washer & nut, 1 $\frac{1}{2}$ " x 72" endwall trellis bar, 1.25" x 6" trellis bar joiner

Horizontal Bar Assembly

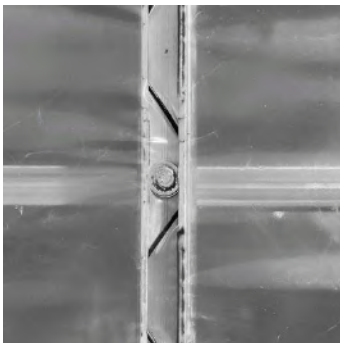


Pictured: 1. $\frac{1}{2}$ " Access holes, 2. horizontal bar, 3. trellis bar joiner, 4. #10 self-tap screws

1. Slide the Endwall Trellis Bars 3" into the Trellis Bar Joiner from each end and secure with (4) #10 Self Tap in the pattern pictured above.
2. Continue the process until you make a bar longer than needed.
3. Cut down to desired length from the previous step with a metal saw. Be sure to only cut the open side to adjust length for desired height.
4. Drill a 1/2" access hole on either end of the assembled bar 1/2" from each end. Drill on the inside face of the bar through one wall of the bar but not both. This will be the guide hole for attaching the bar to the hoop in the next step.

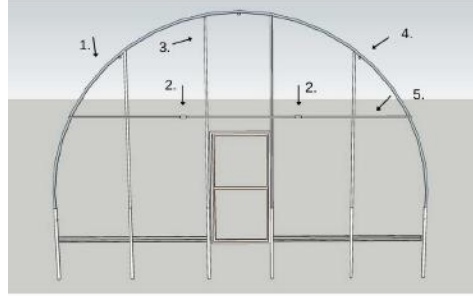
Horizontal Bar Attachment

1. Clamp Horizontal Bar into place inside your house using your marks as a guide.
2. Secure the bar to vertical uprights with $\frac{3}{8}$ x 3 $\frac{1}{2}$ " hex bolts by drilling holes through the middle of the existing lock channel and vertical supports on the outside of end wall. (Drilled and installed outside to inside)
3. Secure end of bar to the hoop with #10 Self Tap through the 1/2" access hole.
4. Repeat the entire process for the opposite side of the hoop house ensuring that the two bars are installed at the same height.



Trellis Bar Layout

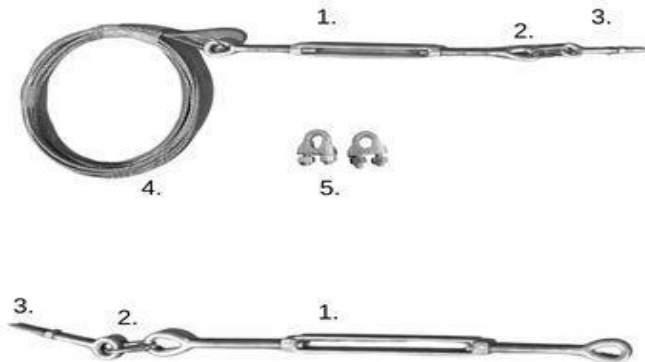
1. 20' endwall hoop
2. Trellis bar joiner
3. 78" ridgepole
4. Optional purlin
5. Horizontal trellis bar



Wire Trellis Kit (Optional)

Upon receiving your kit, get started by checking your parts list. If anything is missing, reach out to our customer service department for assistance.

Included Parts for Each Row



1. 9" Turnbuckle (2)
2. Quick link (2)
3. $\frac{3}{8}$ " x 4" Eye bolts with nut & washer (2)
4. $\frac{1}{4}$ " 7x19 CABLE 304 Galvanized SS pre-cut to your specified length. (barrel crimp on one end)
5. $\frac{1}{4}$ " Wire Crimps (2)

Determining Trellis Wire Row Spacing

Trellis can be placed anywhere beds are required along the width of the hoop house.

Once the center of the rows is determined, drill a $\frac{3}{8}$ " hole through the face of the Trellis Bar along the center of the bar through both side walls.

*If your $\frac{3}{8}$ " drill bit is over 3" long, use a backer board to avoid puncturing your greenhouse plastic.

Repeat for each row and again on the opposite end wall.

Installing Trellis Wire Turnbuckles

Tools Needed: Drill, $\frac{3}{8}$ " Drill Bit, $\frac{1}{2}$ " Drill Bit, Wrenches, Ratchet & Sockets,

1. Turn all turnbuckles to fully open before installation.
2. Place the eye bolt through the trellis bar and secure the nut between the greenhouse plastic and the trellis bar.
3. Carefully uncoil the wire rope to the opposite side.
4. Install the eye bolt of the second turnbuckle into the horizontal bar on the opposite side as you did on the first side.
5. Coil loose wire through Turnbuckle. Pull as tight as possible to remove slack in the cable.
6. Use two wire clamps to secure the wire rope, one near the turnbuckle and the other to secure additional cable out of the way. Turn one side's turnbuckle until the wire is tight. Once all lines are installed, adjust for even tightness. Wrap the ends of the wire with electrical tape to avoid scratching.



As the season progresses and plants are trellised, growing, and bearing fruit you can adjust for weight and slack in the wire by tightening the turnbuckles.