

Trellis Planter Bench

- Prep Materials:
 - [2] 2x6x10ft boards
 - [5] 2x4x8ft boards
 - [19] 4x4x8ft boards
 - [2] 4x4x10ft boards
 - [7] 2x2x8ft boards
 - [1] 4x8' lattice
 - Tools Needed:
 - Miter saw
 - Circular saw
 - Chalk line
 - Tape measure
 - Pencil
 - Carpenter's square
 - Safety glasses
- Prep Steps:
 1. Sort all materials into piles by like items to ensure you have materials needed to complete project.
 2. Take [8] of the 4x4x8ft boards. Cut each into [3] 31" pieces, for a total of [24] 4x4x31" pieces.
 3. Take [7] of the remaining 4x4x8ft boards. Cut each into [4] 24" pieces, for a total of [28] 4x4x24" pieces.
 4. Take the [5] 2x4x8ft boards. Cut each into [3] 31" pieces, for a total of [15] 2x4x31" pieces.
 5. Take the [7] 2x2x8ft pieces. Cut each into [3] 32" pieces, for a total of [21] 2x2x32" pieces.
 6. Take the 4x8ft lattice. Using the chalk line to mark and the circular saw to cut, cut [2] 24"x66" pieces of lattice.
 7. Do NOT cut the following pieces:
 - a. [4] 4x4x8ft boards
 - b. [2] 2x6x10ft boards
 - c. [2] 4x4x10ft boards
- Build Materials:
 - [2] 4x4x10ft boards
 - [24] 4x4x31" pieces
 - [28] 4x4x24" pieces
 - [4] 4x4x8ft boards
 - [14] 2x4x31" pieces
 - [2] 2x6x10ft pieces
 - [21] 2x2x32" pieces
 - [2] 24"x66" lattice pieces

- o 1lb 2 ½" deck screws
- o 10lbs 60d 6" galvanized nails
- o [8] ½"x6" galvanized lag screws
- o [8] ½"6" galvanized carriage bolts
- o [16] ½" galvanized washers
- o [16] ½" galvanized nuts
- o 7cf fill material
- o 6cf potting soil
- o Plants
- o Tools Needed:
 - Tape measure
 - Hammer or mini-sledge
 - Long ½" drill bit
 - ¼" drill bit
 - Screwdriver bit
 - Drill
 - ¾" socket with ratchet or ¾" open-ended wrench
 - Safety goggles
- Build Steps:
 1. Sort all materials into piles by like items to ensure you have materials needed to complete project.
 2. Build the planter squares. Create 12 planter squares using (2) 4x4x24in and (2) 4x4x31in. Attach these 4x4s using 6in nails and a hammer (Indicated by dots shown in Step 3). You will want to pre-drill the holes with the 1/4" drill bit to avoid bending the nails.
 3. Build the planter bases. Using 6 of the squares you just made, build 2 planter bases, each 3 levels (or squares) high. Attach one level at a time, rotating each level 90° so the 31" pieces always sit on top of 24" pieces. Use 6in nails to make two connections per level, one connection in the middle of each 31in piece.
 4. Connect the Planter boxes. Connect the two planter bases with the 4x4x10ft beams, sandwiching 24in pieces between them as pictured.
 5. Build three more levels on top of the 4x4x10ft beams to complete the planters (each planter should be a total of 7 courses high). Use the same rotation method from Step 3, using 6in nails for the connections.
 6. Using the 2 ½in screws, attach the 2x4x31in pieces to the 10ft beams, leaving even-spaced gaps (about 1/4in) between the pieces and between the end pieces and the planters.
 7. Attach two (2) verticals per planter for a total of four (4) per bench. Secure each beam with two (2) 6in lag screws, driven through at a right (90 degree) angle to one another. Tip: Measure where the lag screws will go, mark it on the 4x4, and remove the 4x4s to pre-drill the holes.
 8. Next, attach the 2x6x10ft headers to the 4x4x8ft vertical posts. One at a time, you'll need to level the headers at the top. Note that the verticals may not be at exactly the

same height, so get the headers leveled as close to the tops as possible. Once level, attach the headers with (2) 6" carriage bolts, nuts, and washers on each side.

9. Attach the twenty-one (21) 2x2x32in louvers to the top of the headers using the 2 ½in deck screws. They should be evenly spaced with one spanning flush with the end of each rafter and approximately 4.5in apart.
10. Lastly, attach the lattice sections to the vertical beams. Each pair of vertical beams will get (1) 66inx24in section of lattice. Use 2 ½in screws or nails, spread about 12in apart, to attach the lattice.