

- Prep Materials:

1. [4] $4 \times 4 \times 10 \mathrm{ft}$ boards
2. [1] $2 \times 6 \times 10 \mathrm{ft}$ board
3. [4] $2 \times 2 \times 8 \mathrm{ft}$ boards
4. [1] $3 / 4 " x 4 x 8 f t$ lattice piece
5. Tools Needed:

- Miter saw
- Circular saw
- Safety glasses
- Pencil
- Tape measure
- Carpenter's square
- Chalk line
- Prep Steps:

1. Sort all materials into piles by like items to ensure you have materials needed to complete project.
2. Posts: Set aside the [4] $4 \times 4 \times 10^{\prime}$ boards. Do not cut.
3. Headers: Take the $2 \times 6 \times 10^{\prime}$. Cut [2] $2 \times 6 \times 60$ " pieces from the board.
i. Note: Due to the width of the saw blade and slight discrepancies in board lengths, the measurement may not be exactly $60^{\prime \prime}$ - make sure the two pieces are even in length rather than one 60 " and one slightly smaller.
4. Decorative roof: Take the [4] $2 \times 2 \times 8^{\prime}$ boards. Cut each into [3] $2 \times 2 \times 30^{\prime \prime}$ pieces, for a total of [12] $2 \times 2 \times 30$ " pieces.
5. Decorative lattice: Take the $4^{\prime} \times 8^{\prime}$ lattice sheet. Using the chalk line and circular saw, divide the sheet into [2] 24"x96" sheets of lattice.
6. Header angles: Take the [2] $2 \times 6 \times 60^{\prime \prime}$ pieces that you cut in step 3 . Cut $45^{\circ}$ angles off the ends to create [2] $2 \times 6 \times 60^{\prime \prime}$ trapezoids.

- Build Materials:

1. [4] $4 \times 4 \times 10 \mathrm{ft}$ boards
2. [2] $2 \times 6 \times 60$ " trapezoid pieces
3. [12] $2 \times 2 \times 30 "$ pieces
4. [2] $3 / 4 " \times 24 \times 96^{\prime \prime}$ lattice pieces
5. 1 lb of 6 d galvanized nails
6. 1lb of $3^{\prime \prime}$ deck screws
7. [4] 80lb bags of concrete
8. Tools Needed:

- Level
- Hammer
- Safety glasses
- $1 / 8^{\prime \prime}$ drill bit
- Drill
- Sandpaper
- String line
- Screwdriver bit to match deck screws
- Build Steps:

1. Sort all materials into piles by like items to ensure you have materials needed to complete project.
2. Set posts: Layout a space $24^{\prime \prime} \times 48^{\prime \prime}$ with a post in each corner. Measurements are from the outside corner of each post.
3. Dig holes: Holes need to be 24 " deep with an 8 " diameter.
4. Level and Plumb: Concrete the [4] $4 \times 4 \times 10$ ft posts in the ground. Posts need to be level both side-to-side and front-to-back. Posts also need to be properly aligned with each other - use the level and string line to be sure.
5. When the structure is sturdy enough (it does not need to be completely set), attach one of the $2 \times 6 \times 60$ in trapezoids to the top of the posts along the long side on the outside of the structure. Be sure the top of the $2 \times 6 \times 60$ in trapezoid is level. The bottom of the trapezoid should be even with the outsides of the $4 \times 4$ posts. Use three (3) 3in screws per joint.
6. Repeat this process, using the other $2 \times 6 \times 60$ in trapezoid to connect the other two $4 \times 4$ posts on the other 48 " side. Again be sure the top of the $2 \times 6 \times 60$ in trapezoid is level and that the bottom of the trapezoid is even with the outsides of the $4 \times 4$ posts. Use three (3) 3in screws per joint.
7. Next, install the 24 inx96in sheets of lattice to the outside of the posts on the 24 in sides (not the sides where you just installed the $2 \times 6$ headers). The edges of the lattice should be even with the outside of the $4 \times 4$ posts as well as the tops of the $4 \times 4$ posts. Use the 6D nails to attach the lattice to the $4 \times 4$ posts.
8. Lastly, install the $2 \times 2 \times 30$ in on top of the $2 \times 6 \times 60$ in trapezoids. The $2 \times 2 s$ will run perpendicular to the $2 \times 6 \times 60$ in trapezoids and over-hang them by $11 / 2^{\prime \prime}$ on each side. Place the first $2 \times 2$ even with the outside edge of the $2 \times 6$ and space the remaining $2 \times 2 \mathrm{~s}$ with about $33 / 4^{\prime \prime}$ in between them. Use the $1 / 8^{\prime \prime}$ drill bit to pre-drill the holes, then use 3in deck screws to make the attachment.
