How to Build a Pyramid Trellis

This Old House
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TOOLS
Circular saw
Miter saw
Pneumatic nail gun fitted with 5/8-inch nails

MATERIALS
1/2x2-inch cedar strips to make the four sides
4x4-inch cedar post to make the finial

CUT LIST
Framing strips:
8 @ 58 inches from long point to short point. Set the miter saw to 10 degrees and cut the ends parallel. One of each pair of A-frame legs will need to be mitered again to fit flush against its partner at the peak. Hold the left side of the A against the nailing ledge with its outside edge flush with the finial's outside edge and angle; hold the right side with its outside edge flush with the end of the nailing ledge—leaving a gap for the adjacent side's A frame. Scribe the tip of the right leg where it overlaps the left and trim it off with a utility knife.

Crosspieces:
4 @ 21½ inches from long point to long point. Set the miter saw to 10 degrees in one direction and miter one end of the crosspiece. Set the saw to 10 degrees in the other direction and miter the opposite end of the crosspiece so that the two ends are not parallel.

Crosspieces:
4 @ 17 inches from long point to long point. Set the miter saw to 10 degrees in one direction and miter one end of the crosspiece. Set the saw to 10 degrees in the other direction and miter the opposite end of the crosspiece so that the two ends are not parallel.

Crosspieces:
4 @ 13¼ inches from long point to long point. Set the miter saw to 10 degrees in one direction and miter one end of the crosspiece. Set the saw to 10 degrees in the other direction and miter the opposite end of the crosspiece so that the two ends are not parallel.

Crosspieces:
4 @ 9¾ inches from long point to long point. Set the miter saw to 10 degrees in one direction and miter one end of the crosspiece. Set the saw to 10 degrees in the other direction and miter the opposite end of the crosspiece so that the two ends are not parallel..

Lattice:
4 @ 47 inches from straight cut to point. Clip the top corners at 45 degrees to create the point.

Lattice:
8 @ 20¾ inches from straight cut to point. Clip the top corners at 45 degrees to create the point.

4x4 finial:
1 @ 12 inches. First, rip material off two adjacent edges using a circular saw to create a 3-by-3-inch block. Then, mark a line 1½ inches from the bottom edge on each side of the block. Set the depth of a circular-saw blade to ½ inch and cut the line on each side. Stand the block on end, cut end up. Fix a clamp to its base, then clamp the clamp to your work table. Mark off a square on the bottom of the block inset ¼ inch from each edge. Change the saw depth to 1½ inches, adjust its angle to 10 degrees, and position the blade so that it's angled toward the center of the block. Cut each line to create angled notches of the nailing ledge. Finally, mark the center point of the top edge of two opposing sides of the block and make diagonal lines from those points to the corners above the notch. To hold the block in place, sandwich it between two short lengths of 2x4 and screw them down to your work table. Set the saw blade to 90 degrees at its maximum depth, and cut along the diagonal lines; the blade won't go all the way through. Pop the block out, rotate it 90 degrees, and put it back in place. Mark the same angles and cut the lines. Remove the block and finish the cuts with a handsaw to create a pyramid. Finish by sanding as necessary.