GREAT OUTDOOR PROJECTS

one terrific trellis

This wall- or fence-hung trellis dresses up any outdoor area, providing an attractive background for a climbing plant. But the real beauty is in its simple construction.

Lay out and shape the uprights and crossbars

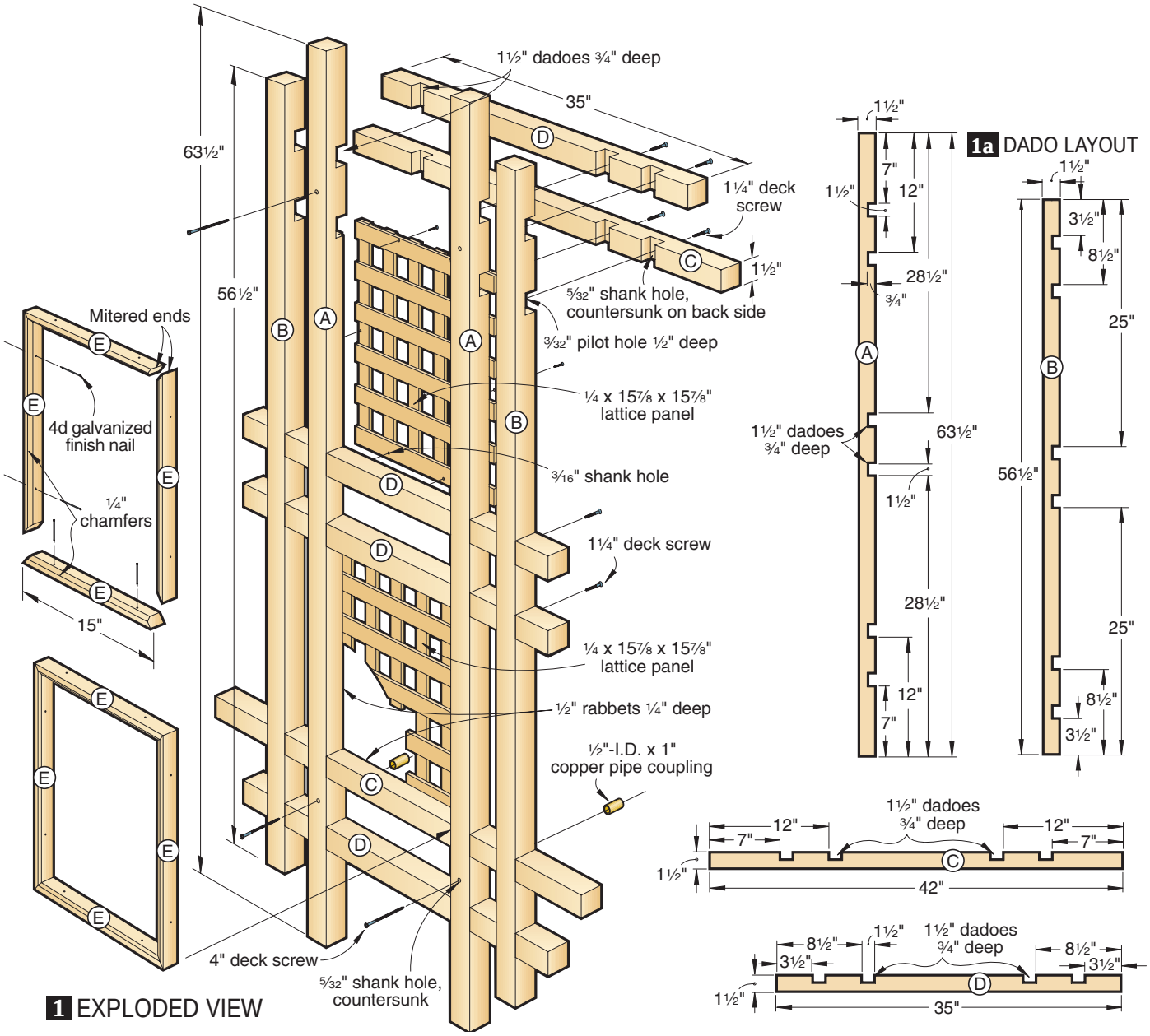
Note: *Begin your project at the lumberyard by selecting stock carefully. All the parts for the trellis frame come from two 10'-long cedar 2×4s. Look for boards with straight grain; with no warp or twist; and with no knots or small, tight knots that won't pop out. Also pick up a 4' cedar 1×4, and a 24×48" sheet of lattice. (We used plastic lattice in a square 1½" pattern, available in home centers.)*

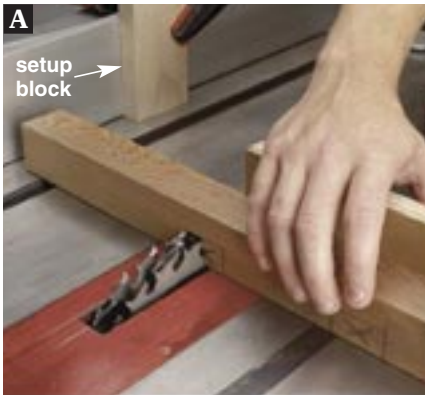
1 Rip two 10' 2×4s into 1½×1½"-wide strips. Then crosscut the strips to the lengths listed in the Materials List and **Drawing 1a** to create the uprights (A, B) and crossbars (C, D).

2 Lay out and mark the locations of the dadoes in each piece, where dimensioned in **Drawing 1a**. Mark the area to be removed with an "X" to prevent confusion when you machine the dadoes.

3 Install a ¾" dado blade in your tablesaw, and clamp a ¾"-thick setup block to the fence, about 3" ahead of the blade. Also, attach an auxiliary extension to your miter gauge to help support the long workpieces.

Now cut the first dado in one of the long uprights (A). To do this, position the fence so the setup block is the appropriate distance from the blade (7" for part A). Butt the end of the workpiece against the setup block, then make one pass over





Butt the workpiece against the setup block, holding it securely against the miter gauge. Then make the first cut.

For the second pass, butt the workpiece against the fence. This doubles the dado width without a setup change.

the blade, as shown in **Photo A**. Pull the workpiece and miter gauge back, slide the workpiece against the fence, and make another pass to complete the dado, as shown in **Photo B**. Flip the piece end-for-end and repeat the process. Then cut the matching dadoes in the other long upright using the same setup.

4 Reposition the fence/setup block and cut the rest of the dadoes in the long uprights (A) using the same procedures. Then dado the short uprights (B), long crossbars (C), and short crossbars (D).

Note: *The locations of the first two dadoes in the long uprights (A) match those in the long crossbars (C). Cut*

these pieces consecutively to eliminate extra fence setups. The dadoes in the short uprights (B) and the short crossbars (D) match one another as well.

Assemble, add lattice panels, and mount

1 Predrill 5/32" countersunk shank holes through the long crossbars (C) and short crossbars (D) before gluing them to the uprights. Center these holes in the dadoes, where shown in **Drawing 1**.

2 Lay the long uprights (A) on a flat surface, about 16" apart and with the dadoes facing up. This will be the back side. Lay the short uprights (B) just outside the long uprights. Now spread an exterior-grade glue in the dadoes. Join the long and short crossbars to the uprights with the dadoes facing down to lock the pieces together. Using the shank holes in the crossbars as guides, drill 3/32" pilot holes into the uprights. Then secure each joint with a 1¼" deck screw.

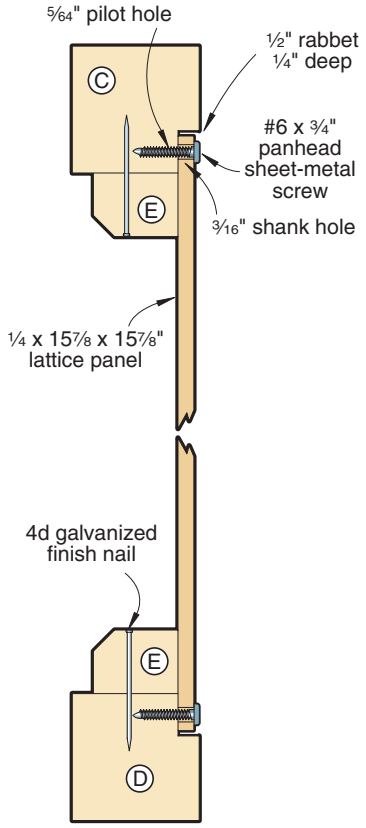
3 Chuck a ½" rabbeting bit in your handheld router, and set it to make a ¼"-deep cut. Rabbet the square areas of the trellis frame to receive the lattice panels, where shown in **Drawing 1**. Square up the corners using a chisel. Cut lattice panels to fit the rabbeted openings, but don't install them yet.

4 Use your handheld router, equipped with a chamfering bit, to rout a ¼" chamfer along each edge of the 4'-long 1×4. Then rip a 1"-wide strip from each edge of the board. Chamfer and rip one edge of the remaining 1×4 again so you end up with three ¾×1×48" chamfered strips. Miter-cut the strips to length to create the lattice stops (E). Attach the stops to the trellis frame using 4d galvanized finish nails, where shown in **Drawing 2**.

5 Stain or paint the trellis as you prefer. (We painted ours to match the exterior trim on the house where it is installed.) Then mount the lattice panels to the frame, where shown in **Drawing 2**.

6 To mount the trellis to the wall, first drill 5/32" countersunk shank holes through the long uprights for the mounting screws, where indicated in **Drawing 1**. Temporarily position the trellis, then push an awl or long nail through the pilot holes to mark the locations of pilot holes on the wall. To hold the trellis away from the wall, we used spacers made from standard copper plumbing-pipe couplings (½" inside diameter × 1" long) purchased at the local hardware store.

2 LATTICE/STOP INSTALLATION



Attach all four mounting screws loosely at first, then snug them down to hold the trellis firmly to the wall.

Hold the spacers between the trellis and wall, and secure the trellis with 4" deck screws, as shown in **Photo C**.

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Photographs: **Baldwin Photography**
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materials list

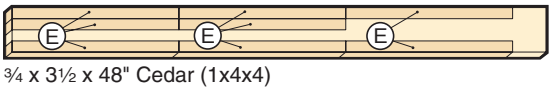
Trellis	FINISHED SIZE T	W	L	Matl.	Qty.
A* long uprights	1½"	1½"	63½"	C	2
B* short uprights	1½"	1½"	56½"	C	2
C* long crossbars	1½"	1½"	42"	C	2
D* short crossbars	1½"	1½"	35"	C	4
E* lattice stops	¾"	1"	15"	C	8

*Parts initially cut oversize. See the instructions.

Material Key: C–cedar.

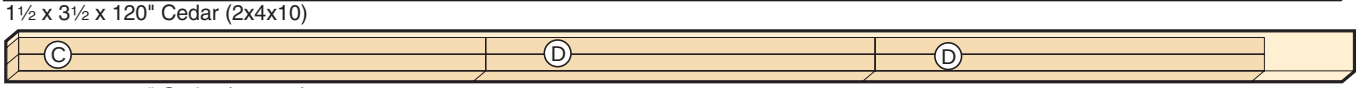
Supplies: Exterior wood glue, exterior paint or stain, 15⅞×15⅞" lattice panels (2), 4d galvanized finish nails (16), 1¼" deck screws (24), 4" deck screws (4), #6×¾" panhead sheet-metal screws (12), ½"-I.D.×1" copper pipe couplings (4).

cutting diagram



¾ x 3½ x 48" Cedar (1x4x4)

1½ x 3½ x 120" Cedar (2x4x10)



1½ x 3½ x 120" Cedar (2x4x10)