TRADECRAFT

Beaumont 12x12 pergola

Model 2405028, cedar, anchored on an existing concrete pad.

DRAFT V0.2, PENDING INSTALLER REVIEW

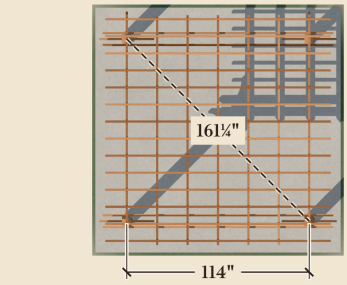
THE STEPS ON VIDEO

3 RULES

1 A level, square base

2 Hand-tight first, tight last

3 Anchors go in last

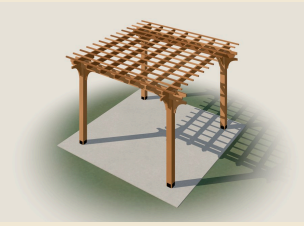


3D model to scale, color estimate (Cedar)

KEY NUMBERS

114"	a side, center to center, on the plates
161¼"	each diagonal: both equal
16	anchors in all, last
3/16"	concrete bit
7' 7⁄8"	clear height under the joists: tell the homeowner

A pad out of level leans the posts, racks the frame and the bolts won't go in: fixing it means taking it apart, unpaid. And the maker's wind claim holds only when the pergola is anchored as the manual says.



FINISHED LOOK

9' 6" × 9' 6"

Backyard Discovery Beaumont 12x12 Pergola, model 2405028: all-cedar kit, 6x6 posts on steel anchor plates (4 anchors per post), doubled joists sandwiching the posts, 7 slotted joists, 14 purlins, curved corbels

49 pieces

4 whole, 4 whole, 4 whole, 16 whole, 7 whole, 14 whole

Colour: Cedar (Beaumont 12x12 manual INS-2405028-A: an all-cedar kit (start prompt; beaumont-kits.md))

STOP AND CHECK

Before you open a carton. Later it means taking it apart.

- The pad isn't level under a post: no shims
- A plate hangs past the edge or on cracked concrete
- The top or the height hits eaves, gutters, fences or lines
- It's a wood deck: other hardware and support; this job is the concrete pad only

STEPS

1 The pad

- 24" level where each post stands
- Whole plate on sound concrete
- Clear: 12' ⅛" top, 7' 11 3/16" high

Check: The bubble centers at every post.

2 Joists hand-tight

- Feet: ⅛" pilot holes first
- T-nuts, the nuts that sit inside the wood, before it closes
- Overlap and curved corbels, as the manual's drawing shows

Check: Every bolt still turns by hand.

3 The frames

- Doubled joist sandwiches the post top
- Corbel lag screw in its pilot hole
- Bolt sticks: clear the sawdust, never force

Check: Posts square to the joists before tightening everything.

4 The top

- Slotted joists: joints alternate, in pilots
- Purlins: joints alternate, pilots lined up
- Pilot: ⅛" bit, drilled ⅛" deep

Check: No split at any joint.

5 Square

- Anchoring plate outside, post plate inside
- 114" center to center, on the plates
- Equal diagonals: 161¼"

Check: Diagonals equal, posts plumb.

6 Anchors

- 3/16" concrete bit, through the plate
- Hole ½" deeper; vacuum it
- 4 per post, 16 in all, with washers

Check: No plate moves.

THE 3 COSTLIEST MISTAKES

✕ Hardware from the wrong bag: a weak joint	✕ Measuring edge to edge: corners off	✕ Purlin hanging from its joint: it snaps or falls
✓ Sort by number; exactly what each step calls for	✓ 114" center to center, diagonals equal	✓ Purlin level, a hand under the joint

This job's local rule: Some cities and counties need a permit for a pergola by size or height, and set the distance to the property line, the house or a fence. An HOA can also limit height or placement.

Hard-surface limit: _____ Water goes to: _____ Permit? yes / no

STAY SAFE

- Look up: keep long boards and ladders clear of power lines.
- Stepladder on firm, level ground; never stand on the top steps; move it instead of reaching. 3 people to stand the frames.
- Silica dust when drilling concrete: vacuum the hole and the dust, and wear a dust mask and glasses.
- Outdoor-rated cords on a GFCI. Hearing protection.

Sources: Backyard Discovery, Beaumont 12x12 pergola assembly manual (INS-2405028-A). Anchor hole depth: trade standard for concrete screw anchors. Green Maestro's answers.

Educational content from the Manos de Oro program. Each Maestro is an independent contractor and manages the risks of their own work.