

## Patio Cover Building Guidelines

This section provides general information and installation instructions for the following:

1) Post Assembly; 2) Beam Assembly; 3) Rafter Assembly; 4) Slats Assembly.

**Note: The maximum span from post to post is 8'x12'.** For larger patio cover dimensions, or patio cover covered with plastic sheet, please consult with your engineer and follow local building codes, and obtain a building permit where necessary.

### Installing the Post Assembly

The Nexwood 4x4 post-sleeve is designed to act as a sleeve to slide over a 4x4 pressure treated lumber post.

To install the post assembly:

1. Measure, mark, and cut the corner posts to the appropriate length (maximum 8 feet above the ground, since the length of the 4x4 Nexwood sleeve is 8 feet).
2. Slide the Nexwood 4x4 post-sleeve down the 4x4 pressure treated lumber post.
3. Set the posts in the deck substructure and attach with bolts, or anchors. NOTE: You can also use an individual foundation instead of a deck substructure.
4. Use a level to ensure that posts are plumb.
5. Secure the posts in position by attaching two temporary braces to the deck with each post. NOTE: Leave the temporary braces in place until permanent braces are installed.
6. Mark the height of the two 2x6 Nexwood beam on one corner post, using a combination square.
7. Stretch a string between posts.
8. Use a line level to transfer this mark to other corner posts.

### Installing the Beam Assembly

Install the two 2x6 Nexwood beams between posts, parallel to the house.

**The maximum spacing between the beam supports is 12 feet.**

To install the beam assembly:

1. Measure, mark and cut the beam boards to the appropriate length. See Isometric drawing (page 35).
2. Stand the beam boards together on edge, ends flush.
3. Measure and mark the outlines of the rafters on the top edges of the boards, using a combination square as a guide.
4. Hold each beam in position on the corner post.
5. Mark the screw locations and drill holes on the beam boards.
6. Secure the beams to the corner posts with four #8x3" Nexwood full thread trim head stainless steel screws (each side). Before attaching 4x4 bracing, **push/lift upward at the middle of the beam 1"-1.5" for anti deflection** and then fasten from the bottom side of 4x4 bracing using one wood screw # 10x4" and three #8x3" Nexwood full thread trim head stainless steel screws on each side at the upper part. See Detail A (page 35.)
7. Cover the 2x6 Nexwood beam's open profile with the 2x6 Nexwood end caps.

### Installing the Rafter Assembly

Install the rafters perpendicular to the house. Rafters may overhang from the beam by a maximum of 1.5 feet. ***The maximum span of the rafter is 8 feet.***

To install the rafter assembly:

1. Measure, mark and cut the 2x6 Nexwood rafters to the appropriate length.
2. Set the rafters in position.
3. Attach the outer rafter to the posts with #8x3" Nexwood full thread trim head stainless steel screws. See Detail A (page 35.)
4. Attach the inner rafters to the beams, using 2x2x1/8" steel angle. See Detail B (page 36.)
5. Install the braces to provide lateral support for the canopy. Attach a sandwich board between the corner posts and the side braces (2x6). (The side braces fit the rafters and the sandwich boards). See Detail A (page 35.)
6. Cut 16" of 2x6 Nexwood for sandwich boards and use at least four #8x3" Nexwood full thread trim head stainless steel screws to the corner posts. See Detail A (page 35.)
7. Cut the side braces (2x6) at 45° angles on both ends and secure those using three #8x3" Nexwood full thread trim head stainless steel screws at each ends. See Detail A (page 35.)
8. Position the side brace - the upper end flush with the top of the rafter boards and lower end flush against the sandwich board.
9. Follow the above steps to install the remaining rafters.

### Installing the Slats Assembly

To install the slats assembly:

1. Measure, mark and cut the 2x2 or 2x3 Nexwood slats to the appropriate length.  
***The maximum span is 5 feet and the maximum overhang is 1.5 feet.***
2. Attach the back slat directly above the back rafter board.
3. Attach the remaining slats at 4" intervals; fasten them with #8x3" Nexwood full thread trim head stainless steel screws. See Detail C (page 36.)
4. Use double flat caps (join them together using glue, small bolts & nuts) for 2x2 slats butt-joint or add 2x3 Nexwood support for 2x3 slats butt joint. See Detail C (page 36.)
5. Use 2x2 (Pyramid, 45 degree, flat end caps) or 2x3 Nexwood End Caps (to be cut from 2x6 End Caps) to cover the open ends of the slats. Insects will nest inside hollow profiles if left uncovered.



