



DSA Structural Amendments under review are highlighted in Marginal Markings

Template 15-07

2001 CBC - Chapter 15

ROOFING AND ROOF STRUCTURES

Section - TABLES
Subsection(s) - Table 15-B-2

TABLE 15-B-2—WOOD SHINGLE OR SHAKE APPLICATION

ROOF SLOPE	WOOD SHINGLES	WOOD SHAKES
	Not Permitted below 3 Units Vertical in 12 Units Horizontal (25% Slope)	Not Permitted below 4 Units Vertical in 12 Units Horizontal (33.3% Slope) ¹
	See Table 15-C	See Table 15-C
1. Deck requirement	Shingles and shakes shall be applied to roofs with solid or spaced sheathing. When spaced sheathing is used, sheathing boards shall not be less than 1 inch by 4 inches (25 mm by 102 mm) nominal dimensions and shall be spaced on centers equal to the weather exposure to coincide with the placement of fasteners. When 1-inch-by-4-inch (25 mm by 102 mm) spaced sheathing is installed at 10 inches (254 mm) on center, additional 1-inch-by-4-inch (25 mm by 102 mm) boards must be installed between the sheathing boards. Sheathing shall conform to Sections 2312.2 and 2320.12.9 [for DSA/SS] 2322A.2 and 2326A.12.9 [for OSHPD 1, 2 & 4] 2322B.2 and 2326B.12.9.	
2. Interlayment	No requirements.	One 18-inch-wide (457 mm) interlayment of Type 30 felt shingled between each course in such a manner that no felt is exposed to the weather below the shake butts and in the keyways (between the shakes).
3. Underlayment Temperate climate	No requirements.	No requirements.
Severe climate: In areas subject to wind-driven snow or roof ice buildup	Two layers of nonperforated Type 15 felt applied shingle fashion shall be installed and solid cemented together with approved cementing material between the plies extending from the eave up the roof to a line 36 inches (914 mm) inside the exterior wall line of the building.	Sheathing shall be solid and, in addition to the interlayment of felt shingled between each course in such a manner that no felt is exposed to the weather below the shake butts, the shakes shall be applied over a layer of nonperforated Type 15 felt applied shingle fashion. Two layers of nonperforated Type 15 felt applied shingle fashion shall be installed and solid cemented together with approved cementing material between the plies extending from the eave up the roof to a line 36 inches (914 mm) inside the exterior wall line of the building.
4. Attachment Type of fasteners	Corrosion-resistant nails, minimum No. 14 ^{1/2} -gauge, 7/32-inch (5.6 mm) head, or corrosion-resistant staples, when approved by the building official. Fasteners shall comply with the requirements of Chapter 23 [for DSA/SS] 23A [for OSHPD 1, 2 & 4] 23B, Division III, Part III. Fasteners shall be long enough to penetrate into the sheathing 3/4 inch (19 mm) or through the thickness of the sheathing, whichever is less.	Corrosion-resistant nails, minimum No. 13-gauge, 7/32-inch (5.6 mm) head, or corrosion-resistant staples, when approved by the building official.
No. of fasteners	2 per shingle	2 per shake
Exposure Field of roof Hips and ridges	Weather exposures shall not exceed those set forth in Table 15-C. Hip and ridge weather exposure shall not exceed those permitted for the field of the roof.	
Method	Shingles shall be laid with a side lap of not less than 1 1/2 inches (38 mm) between joints in adjacent courses, and not in direct alignment in alternate courses. Spacing between shingles shall be approximately 1/4 inch (6.4 mm). Each shingle shall be fastened with two nails only, positioned approximately 3/4 inch (19 mm) from each edge and approximately 1 inch (25 mm) above the exposure line. Starter course at the eaves shall be doubled.	Shakes shall be laid with a side lap of not less than 1 1/2 inches (38 mm) between joints in adjacent courses. Spacing between shakes shall not be less than 3/8 inch (9.5 mm) or more than 5/8 inch (15.9 mm) except for preservative-treated wood shakes, which shall have a spacing not less than 1/4 inch (6.4 mm) or more than 3/8 inch (9.5 mm). Shakes shall be fastened to the sheathing with two nails only, positioned approximately 1 inch (25 mm) from each edge and approximately 2 inches (51 mm) above the exposure line. The starter course at the eaves shall be doubled. The bottom or first layer may be either shakes or shingles. Fifteen-inch or 18-inch (381 mm or 457 mm) shakes may be used for the starter course at the eaves and final course at the ridge.
5. Flashing Valleys Other flashing	Per Section 1508.5 Per Section 1509	

¹When approved by the building official [for DSA/SS, OSHPD 1, 2 & 4] enforcement agency, wood shakes may be installed on a slope of not less than 3 units vertical in 12 units horizontal (25% slope) when an underlayment of not less than nonperforated Type 15 felt is installed.