



DSA Structural Amendments under review are highlighted in Marginal Markings

**Template 15-08**

**2001 CBC - Chapter 15**

**ROOFING AND ROOF STRUCTURES**

**Section - TABLES**  
**Subsection(s) - Table 15-D-1.1**

**TABLE 15-D-1.1 [For DSA/SS, OSHPD 1, 2 & 4]—ROOFING TILE APPLICATION<sup>1</sup> FOR ALL TILES**

	ROOF SLOPE 2 <sup>1</sup> / <sub>2</sub> UNITS VERTICAL IN 12 UNITS HORIZONTAL (21% Slope) TO LESS THAN 3 UNITS VERTICAL IN 12 UNITS HORIZONTAL (25% Slope)	ROOF SLOPE 3 UNITS VERTICAL IN 12 UNITS HORIZONTAL (25% Slope) AND OVER
1. Deck requirements	Solid sheathing per Sections 2322A.2 and 2326A.12.9 [for OSHPD 1, 2 & 4] 2322B.2 and 2326B.12.9.	
2. Underlayment In climate areas subject to wind-driven snow, roof ice damming or special wind regions as shown in Chapter 16, Figure 16-1.	Built-up roofing membrane, three plies minimum, applied per Section 1507.6. Surfacing not required.	Same as for other climate areas, except that extending from the eaves up the roof to a line 24 inches (610 mm) inside the exterior wall line of the building, two layers of underlayment shall be applied shingle fashion and solidly cemented together with an approved cementing material.
Other climate areas		One layer heavy-duty felt or Type 30 felt side lapped 2 inches (51 mm) and end lapped 6 inches (153 mm).
3. Attachment <sup>2</sup> Type of fasteners See Section 1507.1.1	Copper, brass or stainless steel nails not less than No. 11 gage, <sup>5</sup> / <sub>16</sub> -inch (7.9 mm) head. Fasteners shall comply with the requirements of Chapter 23A [for OSHPD 1, 2 & 4] 23B, Division III, Part III. Fasteners shall be long enough to penetrate into the sheathing <sup>3</sup> / <sub>4</sub> inch (19 mm) or through the thickness of the sheathing, whichever is less. Attaching wire for clay or concrete tile shall not be smaller than 0.083 inch (2.11 mm) (No. 14 B.W. gage). Ring-shanked nails are required where sheathing is less than <sup>3</sup> / <sub>4</sub> -inch (19 mm) thick.	
Number of fasteners <sup>2,3</sup>	Two fastener per tile. For tile 8 inches (203 mm) in width or less and fastened at center of head, one fastener per tile. <sup>4</sup>	Two fasteners per tile. For tile 8 inches (203 mm) in width or less and fastened at center of head, one fastener per tile. <sup>4</sup>
4. Tile headlap	3 inches (76 mm) minimum.	
5. Flashing	Per Sections 1508.4 and 1509.	

<sup>1</sup>In snow areas, a minimum of two fasteners per tile are required.

<sup>2</sup>In areas designated by the building official enforcement agency as being subject to repeated wind velocities in excess of 80 miles per hour (129 km/h) or where the roof height exceeds 40 feet (12 192 mm) above grade, all tiles shall be attached as follows:

- 2.1 The heads of all tiles shall be nailed.
- 2.2 The noses of all eave course tiles shall be fastened with approved clips.
- 2.3 All rake tiles shall be nailed with two nails.
- 2.4 The noses of all ridge, hip and rake tiles shall be set in a bead of approved roofer's mastic.

<sup>3</sup>In snow areas, a minimum of two fasteners per tile are required, or battens and one fastener.

<sup>4</sup>On slopes over 24 units vertical in 12 units horizontal (200% slope), the nose end of all tiles shall be securely fastened.

<sup>5</sup>Tile must bear on sheathing, batten or stripping at the nail location.

<sup>6</sup>Approved wire ties may be used in lieu of each nail except as noted in Footnote 2.