

inches (102 mm). For roof slopes of three units vertical in 12 units horizontal (25-percent slope) and over, the valley flashing shall have a 36-inch-wide (914 mm) underlayment of either one layer of Type I underlayment running the full length of the valley or a self-adhering polymer-modified bitumen sheet bearing a label indicating compliance with ASTM D1970, in addition to other required underlayment. In areas where the average daily temperature in January is 25°F (-4°C) or less or where there is a possibility of ice forming along the eaves causing a backup of water, the metal valley flashing underlayment shall be solidly cemented to the roofing underlayment for slopes under seven units vertical in 12 units horizontal (58-percent slope) or self-adhering polymer-modified bitumen sheet shall be installed.

1507.8.9 Label required. Each bundle of shingles shall be identified by a label of an approved grading or inspection bureau or agency.

1507.9 Wood shakes. The installation of wood shakes shall comply with the provisions of this section and Table 1507.8.

1507.9.1 Deck requirements. Wood shakes shall only be used on solid or spaced sheathing. Where spaced sheathing is used, sheathing boards shall be not less than 1-inch by 4-inch (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. Where 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 shall be installed between the sheathing boards.

1507.9.1.1 Solid sheathing required. Solid sheathing is required in areas where the average daily temperature in January is 25°F (-4°C) or less or where there is a possibility of ice forming along the eaves causing a backup of water.

TABLE 1507.8
WOOD SHINGLE AND SHAKE INSTALLATION

| ROOF ITEM | WOOD SHINGLES | WOOD SHAKES |
|---|---|--|
| 1. Roof slope | Wood shingles shall be installed on slopes of not less than three units vertical in 12 units horizontal (3:12). | Wood shakes shall be installed on slopes of not less than four units vertical in 12 units horizontal (4:12). |
| 2. Deck requirement | | |
| Temperate climate | Shingles shall be applied to roofs with solid or spaced sheathing. Where spaced sheathing is used, sheathing boards shall be not less than 1" × 4" nominal dimensions and shall be spaced on centers equal to the weather exposure to coincide with the placement of fasteners. | Shakes shall be applied to roofs with solid or spaced sheathing. Where spaced sheathing is used, sheathing boards shall be not less than 1" × 4" nominal dimensions and shall be spaced on centers equal to the weather exposure to coincide with the placement of fasteners. Where 1" × 4" spaced sheathing is installed at 10 inches, boards must be installed between the sheathing boards. |
| In areas where the average daily temperature in January is 25°F or less or where there is a possibility of ice forming along the eaves causing a backup of water. | Solid sheathing is required. | Solid sheathing is required. |
| 3. Interlayment | No requirements. | Interlayment shall comply with ASTM D226, Type 1. |
| 4. Underlayment | | |
| Temperate climate | Underlayment shall comply with Section 1507.1.1. | Underlayment shall comply with Section 1507.1.1. |
| 5. Application | | |
| Attachment | Fasteners for wood shingles shall be hot-dipped galvanized or Type 304 (Type 316 for coastal areas) stainless steel with a minimum penetration of 0.75 inch into the sheathing. For sheathing less than 0.5 inch thick, the fasteners shall extend through the sheathing. | Fasteners for wood shakes shall be hot-dipped galvanized or Type 304 (Type 316 for coastal areas) with a minimum penetration of 0.75 inch into the sheathing. For sheathing less than 0.5 inch thick, the fasteners shall extend through the sheathing. |
| No. of fasteners | Two per shingle. | Two per shake. |
| Exposure | Weather exposures shall not exceed those set forth in Table 1507.8.7. | Weather exposures shall not exceed those set forth in Table 1507.9.8. |
| Method | Shingles shall be laid with a side lap of not less than 1.5 inches between joints in courses, and no two joints in any three adjacent courses shall be in direct alignment. Spacing between shingles shall be 0.25 to 0.375 inch. | Shakes shall be laid with a side lap of not less than 1.5 inches between joints in adjacent courses. Spacing between shakes shall not be less than 0.375 inch or more than 0.625 inch for shakes and taper sawn shakes of naturally durable wood and shall be 0.25 to 0.375 inch for preservative-treated taper sawn shakes. |
| Flashing | In accordance with Section 1507.8.8. | In accordance with Section 1507.9.9. |

For SI: 1 inch = 25.4 mm, °C = [(°F) - 32]/1.8.