TABLE 1507.1.1(2) UNDERLAYMENT APPLICATION

| UNDERLAYMENT APPLICATION | | | |
|---------------------------------------|---------|---|---|
| ROOF COVERING | SECTION | MAXIMUM BASIC DESIGN WIND SPEED, V < 140 MPH | MAXIMUM BASIC DESIGN WIND SPEED, V≥ 140 MPH |
| Asphalt shingles | 1507.2 | For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied as follows: Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. End laps shall be 4 inches and shall be offset by 6 feet. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches, Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet. | Same as Maximum Basic Design Wind Speed, $V < 140$ mph except all laps shall be not less than 4 inches |
| Clay and concrete tile | 1507.3 | For roof slopes from two and one-half units vertical in 12 units horizontal (2¹/₂:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be not fewer than two layers applied as follows: Starting at the eave, a 19-inch strip of underlayment shall be applied parallel with the eave. Starting at the eave, a 36-inch-wide strip of underlayment felt shall be applied, overlapping successive sheets 19 inches. End laps shall be 4 inches and shall be offset by 6 feet. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. End laps shall be 4 inches and shall be offset by 6 feet. | Same as Maximum Basic Design Wind Speed, $V < 140$ mph except all laps shall be not less than 4 inches |
| Metal roof panels | 1507.4 | Apply in accordance with the manufacturer's installation instructions | For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied as follows: Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. End laps shall be 4 inches and shall be offset by 6 feet. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches. End laps shall be 4 inches and shall be offset by 6 feet. |
| Metal roof shingles | 1507.5 | | |
| Mineral-sur- faced roll roofing | 1507.6 | | |
| Slate shingles | 1507.7 | | |
| Wood shakes | 1507.8 | | |
| Wood shingles | 1507.9 | | |
| Photovoltaic shingles | 1507.17 | For roof slopes from three units vertical in 12 units horizontal (3:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied as follows: Apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. End laps shall be 4 inches and shall be offset by 6 feet. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied as follows: Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet. | Same as Maximum Basic Design Wind Speed, $V < 140$ mph except all laps shall be not less than 4 inches |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm; 1 mile per hour = 0.447 m/s.