- **1506.3 Material specifications and physical characteristics.** Roof-covering materials shall conform to the applicable standards *listed* in this chapter. In the absence of applicable standards or where materials are of questionable suitability, testing by an *approved* agency shall be required by the *building official* to determine the character, quality and limitations of application of the materials.
- **1506.4 Product identification.** Roof-covering materials shall be delivered in packages bearing the manufacturer's identifying marks and *approved* testing agency labels required in accordance with Section 1505. Bulk shipments of materials shall be accompanied with the same information issued in the form of a certificate or on a bill of lading by the manufacturer.

## SECTION 1507 REQUIREMENTS FOR ROOF COVERINGS

- **1507.1 Scope.** Roof coverings shall be applied in accordance with the applicable provisions of this section and the manufacturer's installation instructions.
- **1507.2 Asphalt shingles.** The installation of asphalt shingles shall comply with the provisions of this section.
  - **1507.2.1 Deck requirements.** Asphalt shingles shall be fastened to solidly sheathed decks.
  - **1507.2.2 Slope.** Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (17-percent slope) or greater. For roof slopes from two units vertical in 12 units horizontal (17-percent slope) up to four units vertical in 12 units horizontal (33-percent slope), double underlayment application is required in accordance with Section 1507.2.8.
  - **1507.2.3 Underlayment.** Unless otherwise noted, required underlayment shall conform to ASTM D 226, Type I, ASTM D 4869, Type I, or ASTM D 6757.
  - **1507.2.4 Self-adhering polymer modified bitumen sheet.** Self-adhering polymer modified bitumen sheet shall comply with ASTM D 1970.
  - **1507.2.5 Asphalt shingles.** Asphalt shingles shall comply with ASTM D 225 or ASTM D 3462.
  - **1507.2.6 Fasteners.** Fasteners for asphalt shingles shall be galvanized, stainless steel, aluminum or copper roofing nails, minimum 12 gage [0.105 inch (2.67 mm)] shank with a minimum  $^{3}/_{8}$  inch-diameter (9.5 mm) head, of a length to penetrate through the roofing materials and a minimum of  $^{3}/_{4}$  inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than  $^{3}/_{4}$  inch (19.1 mm) thick, the nails shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.
  - **1507.2.7 Attachment.** Asphalt shingles shall have the minimum number of fasteners required by the manufacturer, but not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 21 units vertical in 12 units horizontal (21:12), shingles shall be installed as required by the manufacturer.