

GROWTH AND RESOURCE MANAGEMENT

Building and Zoning 123 West Indiana Avenue Deland, FL 32720 (386) 736-5929 Fax (386) 943-7096

SLOPED ROOF APPLICATION INFORMATION
FS 553.844 EXEMPT ROOFS OR REROOF OVER EXISTING SINGLE LAYER

| SLOPE: | " IN 12" | EXAMPLE: 5" IN 12" (INCHES OF RISE IN 12" OF RUN) |
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| AVERAGE ROOF HEIGHT: | FEET | EXAMPLE: 15 FEET (SINGLE STORY BUILDING) |
| DECK TYPE: | | EXAMPLE (S): ½" PLYWOOD, 5/8" OSB |
| UNDERLAYMENT: | TYPE: LAYERS: ASTM D 226, TYPE I or II ASTM D 4869, TYPE I or II | EXAMPLE: 15#FELT, 2 LAYERS [x] ASTM D 226, TYPE I |
| ROOF COVERING: | MANUFACTURER | EXAMPLE: ABC ROOFING PRODUCTS, INC. PINEVALLEY 30 AR |
| APPROVAL METHOD: | FLORIDA APPROVAL #: | EXAMPLE: 1675.4 (FL#) - OR - NOA No 03-0528.06 (MIAMI/DADE) |
| FASTENERS: | | EXAMPLE: 11/2" GALVANIZED ROOFING NAIL |

1507.2.5 - Asphalt shingles shall have self-seal strips or be interlocking, and comply with ASTM D 225 or ASTM D 3462.

1507.2.6 - 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 0.375 inch-diameter (9.5 mm) head, of a length to penetrate through the roofing materials and a minimum of 0.75 inch (19.1 mm) into the roof sheathing. Where the roof sheathing is less than 0.75 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.

1507.2.8 Underlayment application. - 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), underlayment shall be two layers applied in the following manner. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm) and fastened sufficiently to hold in place. For roof slopes of four units vertical in 12 units horizontal (33-percent slope) or greater, underlayment shall be one layer applied in the following manner. Underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches (51 mm), fastened only as necessary to hold in place.

1507.2.9.1 Base and counter flashing. - Base and counter flashing shall be installed as follows:

1. In accordance with manufacturer's installation instructions, or

2. A continuous metal "L" flashing shall be set in approved flashing cement and set flush to base of wall and over the underlayment. Both horizontal and vertical metal flanges shall be fastened 6 inches (152 mm) on center with approved fasteners. All laps shall be a minimum of 4 inches (102 mm) fully sealed in approved flashing cement. Flashing shall start at the lower portion of roof to insure water-shedding capabilities of all metal laps. The entire edge of the horizontal flange shall be sealed covering all nail penetrations with approved flashing cement and membrane. Shingles will overlap the horizontal flange and shall be set in approved flashing cement.

Base flashing shall be of either corrosion resistant metal with a minimum thickness provided in Table 1503.2 or mineral surface roll roofing weighing a minimum of 77 pounds per 100 square feet (3.76 kg/m2). Counter flashing shall be corrosion resistant metal with a minimum thickness provided in Table 1503.2.

- 1507.2.9.2 Valleys. Valley linings shall be installed in accordance with the manufacturer's instructions before applying shingles. Valley linings of the following types shall be permitted:
- 1. For open valleys lined with metal, the valley lining shall be at least 16 inches (406 mm) wide and of any of the corrosion-resistant metals in Table 1503.2.
- 2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing complying with ASTM D 6380 Class M or ASTM D 3909 shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
- 3. For closed valleys, valley lining of one ply of smooth roll roofing complying with ASTM D 6380 Class S and at least 36 inches (914 mm) wide or types as described in Items 1 or 2 above shall be permitted. Specialty underlayment complying with ASTM D 1970 may be used in lieu of the lining material.
- 1507.2.9.3 Drip edge. Provide drip edge at eaves and gables of shingle roofs. Overlap to be a minimum of 2 inches (51 mm). Eave drip edges shall extend ½ inch (13 mm) below sheathing and extend back on the roof a minimum of 2 inches (51 mm). Drip edge at eaves shall be permitted to be installed either over or under the underlayment. If installed over the underlayment, there shall be a minimum 4 inch (102 mm) width of roof cement installed over the drip edge flange. Drip edges shall be mechanically fastened a maximum of 4 inches (102 mm) on center.
- 1507.2.10 Wind resistance of asphalt shingles. Asphalt Shingles shall be classified in accordance with ASTM D3161 Class F or ASTM D 7158 Class G or TAS 107 to resist the basic wind speed per Figure 1609.