

SECTION 07311 – ROOF SHINGLES

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data and Samples.
- B. Identify each bundle of shingles with appropriate markings of UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - 1. Exterior Fire-Test Exposure: ASTM E 108 or UL 790, Class A.
 - 2. Wind-Resistance-Test Characteristics: ASTM D 3161 or UL 997, passed.
- C. Warranties: Provide standard manufacturer's written warranty, signed by manufacturer agreeing to promptly repair or replace asphalt shingles that fail in materials within 50 years from date of Substantial Completion, prorated, with first 7 years nonprorated.

PART 2 - PRODUCTS

2.1 ROOF SHINGLES

- A. Products:
 - 1. Basis-of-Design: to match existing for color, texture, and length of warranty.

2.2 ACCESSORIES

- A. Self-Adhering Sheet Underlayment: ASTM D 1970, SBS-modified asphalt; mineral-granule surfaced; with release paper backing; cold applied.
- B. Roofing Nails: Aluminum, stainless-steel, or hot-dip galvanized-steel shingle nails, minimum 0.120-inch (3-mm) diameter, of sufficient length to penetrate 3/4 inch (19 mm) into solid wood decking or extend at least 1/8 inch (3 mm) through OSB or plywood sheathing.
- C. Sheet Metal Flashing and Trim: Comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim," and drawings.
 - 1. Sheet Metal: Copper.
 - 2. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual."
 - 3. Drip Edge: Formed sheet metal with at least a 2-inch (50-mm) roof deck flange and a 1-1/2-inch (38-mm) fascia flange with a 3/8-inch (9.6-mm) drip at lower edge.
 - 4. Open-Valley Flashing: Fabricate with 1-inch- (25-mm-) high inverted-V profile at center of valley and equal flange widths of 12 inches (300 mm).

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with recommendations in ARMA's "Residential Asphalt Roofing Manual" and with asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Apply self-adhering sheet underlayment over entire roof.
- C. Install valleys complying with ARMA and NRCA instructions. Construct sheet metal open valleys.
- D. Install metal flashings and other sheet metal to comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim," recommendations in ARMA's "Residential Asphalt Roofing Manual," and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- E. Install first and remaining courses of roof shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure. Match pattern of existing building.
- F. Install shingle in temperatures above 45 degrees F. Store shingles at a temperature over 45 degrees F.
- G. During installation, Applicator to check periodically from the ground to ensure no color pattern is evident.

END OF SECTION 07311