### **SECTION 073113**

### ASPHALT ROOF SHINGLES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

A. Granular surfaced asphalt shingle roofing, underlayment, eave, valley, and ridge protection, with metal flashings.

### 1.2 SUBMITTALS

A. Product Data: Provide data indicating material characteristics, and limitations.

# 1.3 QUALITY ASSURANCE

A. Perform Work in accordance with NRCA Steep Roofing Manual.

## 1.4 ENVIRONMENTAL REQUIREMENTS

A. Do not install eave ice dam edge protection and shingles when ambient temperatures are below 50 degrees F.

### PART 2 PRODUCTS

### 2.1 ASPHALT SHINGLES

A. Manufacturers and series equal to: GAF Timberline 30 (30 Year). Tamko – Heritage 30 (30 Year). Certainteed Landmark 30 (30 Year)

B. Asphalt Shingles: ANSI/ASTM D3018, Class A with Type I - Self Sealing; UL Rating of A and Wind Resistance Label, glass fiber mat base, mineral granule surface type; 250 lb/square; standard self sealing type; square; color as selected.

### 2.2 SHEET MATERIALS

- A. Eave and Valley Ice Dam Protection: Sheet barrier of rubberized asphalt bonded to sheet polyethylene, 40 mil total thickness, with strippable treated release paper.
- B. Underlayment: 15 pound asphalt paper.

## 2.3 ACCESSORIES

- A. Nails: Standard round wire shingle hot dipped zinc coated steel type, of sufficient length to penetrate roof sheathing.
- B. Plastic Cement: Asphalt type with mineral fiber components.
- C. Lap Cement: Fibrated cutback asphalt type.

### 2.4 FLASHING MATERIALS

- A. Sheet Flashings: See Section 07620
- B. Drip Edge Flashing: .032 Break formed aluminum sheet. Standard enamel finish. Color to be selected by the Architect.
- C. Bituminous Paint: Acid and alkali resistant type; black color.
- D. Nails: Standard round wire roofing type, hot dipped zinc coated steel; of sufficient length to penetrate wood substrate.

### 2.5 FLASHING FABRICATION

- A. Form flashings to protect roofing materials from physical damage and shed water.
- B. Form sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
- C. Hem exposed edges of flashings minimum 1/4 inch on underside.
- D. Apply bituminous paint on concealed surfaces of flashings.

### PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Verify that plumbing stacks and roof penetrations are flashed to deck surface.
- B. Verify deck surfaces are dry, free of ridges, warps, or voids. Broom clean surfaces.
- C. Fill knot holes and surface cracks with latex filler at areas of bonded eave protection.

### 3.2 INSTALLATION - EAVE ICE DAM PROTECTION

- A. Place eave and gable edge metal flashings tight with fascia boards. Weather lap joints and seal with plastic cement. Secure flange with nails.
- B. Apply rubberized asphalt/polyethylene sheet eave protection in accordance with manufacturer's instructions.
- C. Extend eave ice dam protection membrane minimum 3 ft minimum upslope beyond interior face of exterior wall, (5'minimum total width).
- D. In areas where the roof pitch is  $3\frac{1}{2}:12$  or lower install additional Ice Dam protection as may be required by the shingle manufacturer.

### 3.3 INSTALLATION - PROTECTIVE UNDERLAYMENT

A. Place one ply of underlayment over area not protected by eave protection, with ends and edges weather lapped and nailed. Stagger end laps of each consecutive layer.

- B. Install perpendicular to slope of roof.
- C. Weather lap and seal watertight with plastic cement, items projecting through or mounted on roof.

# 3.4 INSTALLATION - METAL FLASHING

- A. Weather lap joints and seal weather tight with plastic cement. Secure in place with concealed fastenings.
- B. Flash and seal work projecting through or mounted on roofing with plastic cement, weather tight.

# 3.5 INSTALLATION - ASPHALT SHINGLES

- A. Install shingles in accordance with manufacturer's instructions.
- B. Provide triple course of shingles at eaves.
- C. Place shingles in straight coursing pattern with required weather exposure to produce triple thickness over full roof area.
- D. Project first course of shingles 3/4 inch beyond eave boards.
- E. Extend shingles 1/2 inch beyond face of gable edge fascia boards.
- F. Cap hips and ridges with individual shingles, maintaining weather exposure. Place to avoid exposed nails.
- G. After installation, place one daub of plastic cement, under each individual shingle exposed to weather, to prevent lifting.
- H. Complete installation to provide weather tight service.

**END OF SECTION**