

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- .1 Drawings and general provisions of Contract, including General Conditions and Division 1 Specification sections apply to work specified in this section.

1.2 DESCRIPTION OF WORK

- .1 Extent of shingles is shown on drawings and is hereby defined to include units employed as weather protection for walls as well as for roofs.
- .2 Types of shingle application specified in this section include the following:
  - .1 Asphalt shingle roofing.

1.3 QUALITY ASSURANCE

- .1 Provide labeled materials which have been tested and listed by UL for class and rating indicated for each shingle type required.

1.4 SUBMITTALS

- .1 Submit technical product data, installation instructions, and recommendations from shingle manufacturer, including data that materials comply with requirements.
- .2 Submit full range of samples for color and texture selection. After selection, submit 2 full-size shingles for verification of each color/style/texture selected.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver materials in manufacturer's unopened labeled containers.
- .2 Store materials to avoid water damage and store rolled goods on end. Comply with manufacturer's recommendations for job-site storage and protection.

1.6 JOB CONDITIONS

- .1 Proceed with shingle work only after substrate construction and penetrating work have been completed.

- .2 Proceed with shingle work only when weather conditions are in compliance with manufacturer's recommendations and when substrate is completely dry.
- .3 Roof reconstruction will occur only during summer recess when the building will be unoccupied for an extended period of time under normal operating conditions except as otherwise approved by the Project Architect.

#### 1.7 WEATHERTIGHTNESS/ABATEMENT INTERFACE

- .1 During abatement, only "certified" workers are allowed into the abatement work area to do removals, clean-up, and install temporary roof. During abatement and until satisfactory air clearance, no "uncertified" roofers may be in the roof abatement area.
- .2 Temporary Roof – Provide and maintain a two ply mop-down membrane as temporary roof and system vapor barrier to keep building watertight while abatement work proceeds. This shall be installed daily as removals progress. It shall be installed by roofing mechanics with "certification" for asbestos projects. Such installation and methods, etc. shall fully comply with all asbestos project requirements.
- .3 Temporary roof shall be utilized only as long as capable of weathertightness but not longer than one week. Provide daily inspection and monitor integrity of temporary roof membrane. The temporary roof shall be installed upon coordination with the abatement work following all requirements of Code Rule 56, including waiting periods prior to clearance testing, any variance or other project requirements.

#### 1.8 SPECIFIED PRODUCT WARRANTY

- .1 Provide shingle manufacturer's warranty on installed work, agreeing to pay for repair or replacement of defective shingles as necessary to eliminate leaks. Period of warranty is 20 years from date of final payment.

### PART 2 - PRODUCTS

#### 2.1 ASPHALT SHINGLE MATERIALS

- .1 Square tab strip shingles, fiberglass mat, self-sealing, 3 tab

asphalt shingles bearing UL Class "A" external fire exposure label and UL "Wind Resistant" label. Color as selected by Architect.

- .2 Submit to compliance with requirements, provide one of the following:
  - .1 Bird Inc. Fireline
  - .2 Certainteed Corp. Glass guard
  - .3 GAF Corp. Sentinel
  - .4 Georgia Pacific – Tough Glass
- .3 Asphalt-Saturated Roofing Felt: No. 30, unperforated organic felt, complying with ASTM D 226, 36" wide.
- .4 Asphalt Plastic Cement: Fibrated asphalt cement complying with ASTM D 2822, designed for trowel application.
- .5 Ridge Shingles: Manufacturer's standard factory pre-cut units to match shingles.
- .6 Nails: Aluminum or hot-dip galvanized 11 or 12 gauge sharp pointed conventional roofing nails with barbed shanks, minimum 3/8" diameter head and of sufficient length to penetrate minimum 3/4" into solid decking or to penetrate through plywood sheathing.
- .7 Nailboard: Provide nailboard insulation as manufactured by NRG. Nailboard to have an R-value of 19.3.
- .8 Metal Drip Edge: Minimum .024" mil finish sheet aluminum. Job-cut sizes and configurations required.

### PART 3 - EXECUTION

#### 3.1 INSPECTION

- .1 Installer of shingles must examine substrate and conditions under which shingling work is to be performed and must notify Project Architect in writing of unsatisfactory conditions. Do not proceed with shingling work until unsatisfactory conditions have been corrected in a manner acceptable to installer.

#### 3.2 PREPARATION OF SUBSTRATE

- .1 Clean substrate of any projections and substances detrimental to shingling work. Cover knotholes or other minor voids in substrate with sheet metal flashing secured with roofing nails.

- .2 Coordinate installation of shingles with flashing and other adjoining work to ensure proper sequencing. Do not install shingle roofing until all vent stacks and other penetrations through roofing have been installed and are securely fastened against movement.

### 3.3 INSTALLATION

- .1 Comply with instructions and recommendations of shingle manufacturer, except to extent more stringent requirements are indicated.
- .2 Asphalt Shingles
  - .1 Underlayment: Apply one layer felt horizontally over entire surface lapping succeeding courses 2" minimum and fastening with sufficient nails to hold in place until shingle application.
  - .2 Ice Protection Underlayment: In addition to felt underlayment along eaves to a point 12" minimum beyond wall line, minimum 36" width. Set in continuous bed of asphalt plastic cement and secure with roofing nails at 6" centers along all edges. Provide 2" laps where required, set in roofing cement. If head laps are required, install so head lap occurs 12" before wall line.
  - .3 Shingles: Install starter strip of roll roofing or inverted shingles with tabs removed; fasten shingles in manufacturer's recommended pattern, weather exposure and number of fasteners to ensure straight coursing.
  - .4 Comply with installation details and recommendations of shingle manufacturer and NRCA Steep Roofing Manual.
  - .5 Flashing and Edge Protection: Install metal flashing, vent flashing and edge protection as shown and in compliance with details and recommendations of the NRCA Steep Roofing Manual.

END OF SECTION