

WALKER COUNTY BOARD OF EDUCATION  
FACILITITES & OPERATIONS

SPECIFICATIONS FOR SHINGLED ROOF

PART 1 – GENERAL

1.01 SCOPE:

- A. Provide all equipment, labor, material & services to remove existing shingle roof system & install new underlayment & shingles & roof related accessories.
- B. Replace damaged wood decking & insulation due to water damage or other related conditions to create a flat surface for installation of felt & shingles.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

- A. General Carpentry
- B. Metal Flashing
- C. Metal Valleys

1.03 QUALITY ASSURANCE:

- A. Acceptable Manufacturers:
  - 1. Certaineed Landmark 30
  - 2. Tamko Heritage 30
  - 3. Or equal to be approved by Owner's Rep prior to bid.
- B. Underwriter's Laboratories, Inc.: Class A fire rating label U.L. wind resistance rating.

1.04 SUBMITTALS:

- A. Samples: Two of style & color selected.
- B. Manufacturer's Literature: Material description & recommended installation procedures.

1.05 PRODUCT DELIVERY, STORAGE & HANDLING:

- A. Deliver materials with manufacturer's labels intact & legible.
- B. Deliver materials in sealed packages with Underwriter's Laboratories, Inc. labels.
- C. Store materials on raised platforms & protect with coverings outdoors.

- D. Do not stack bundles of shingles more than 3' high.
- E. Store rolled goods on end.

1.06 JOB CONDITIONS:

- A. Do not install underlayment or shingles on wet surfaces.
- B. Do not apply shingles when air temperature is below 31 degrees F.
- C. All debris to be removed from the jobsite.
- D. Any exposed deck or felted areas are to be covered with tarps to prevent damage from weather. Keep sufficient tarpaulin on roof for emergency & overnight protection.
- E. Work must be performed as to not disrupt the normal activities of the school day. Materials that must be stored on site will need to be stored in areas not to impede foot or vehicular traffic. This is to include vehicle parking and /or travel by contractor.
- F. Roofing contractor to furnish portable toilets of adequate number for personnel on jobsite. Contractor personnel are NOT allowed inside school buildings.

1.07 GUARANTEE:

- A. Materials must be fungus resistant, 30-year limited warranty against defects.
- B. Workmanship must be guaranteed against defects for two (2) years.

PART 2 - PRODUCTS

2.01 FIBERGLASS SHINGLES:

- A. Certainteed Landmark 30, color by Owner's Representative
- B. Tamko Heritage 30, Owner's Representative – Weathered Wood
- C. Or equal to be approved by Owner's Representative prior to bid.

2.02 ASPHALT SATURATED ROOFING FELT - ASTM D 226, 15 lbs, organic, unperforated 36" wide

2.03 RIDGE SHINGLES - Performed, manufacturer's standard.

2.04 NAILS - Standard round wire-type roofing nails, corrosion resistant, sufficient length to penetrate through decking.

2.05 VENTS:

- A. No ridge vent required.
- B. Re-install existing.

2.06 SHEET METAL:

- A. Edge Metal – re-use existing if usable or install new
- B. Valley Metal & roof related sheet metal flashings.
  - 1. 24-gauge zinc coated (galvanized) ASTM A 653, G90.
  - 2. Prefinished Kynar 500 or equal. Color to accent shingle color.

2.07 ICE & WATER - Tamco Moisture Guard, 55 mil or equal.

PART 3 – EXECUTION

3.01 INSPECTION:

- A. Assure that surfaces to which shingles are to be applied are uniform, smooth, clean, dry and free of irregularities.
- B. Verify that work of other trades, which penetrates roof deck has been completed.
- C. Do not start until unsatisfactory conditions are correct.

3.02 APPLICATION:

- A. Metal Flashing:
  - 1. Install metal drip strip on all sides of eave, secured to wood roof deck. (No metal required at gutter edge.)
  - 2. Install Valley metal in two (2) long valleys. 36" wide 50' up from gutter & 24" wide remaining length to top of valley.
  - 3. Small curb flashing: install step flashing & metal curb flashing.
  - 4. EFIS metal at rear of main entry: If new step flashing is installed, saw cut 30 degrees reglet into EFIS & bend counter flashing 30 degrees & insert into reglet. Caulk with urethane sealant.
- B. Felt Underlayment:
  - 1. Install new felt with new roof system.
  - 2. Do not allow organic felts to get wet with dew or rain.
- C. Ice & Water:
  - 1. Install 36" full width in all valleys directly to deck.
  - 2. Install under all penetrations flanges. Bottom edge to lap over shingles short of shingle seal strip.

- D. Fiberglass Shingles:
1. First course shall be 3-tab or starter shingle.
  2. Start first & odd numbered courses with full shingle.
  3. Start second & even numbered courses with full shingle minus 6".
  4. Align lower edge of tabs with top of preceding course cutouts.
  5. Nailing:
    - a. Four nails per shingle.
    - b. Nail shingles within nail line at 1" back from each end.
    - c. Nails must penetrate roof deck at least 3/8".
  6. Total installations shall be per manufacturer's recommendations to obtain specified warranty.
  7. Install roof cement at roof edges & valleys per manufacturer requirements.

### 3.03 PENETRATIONS:

- A. Install step flashing and counter flashing on all curbs over 12" & as needed.
- B. Install new lead pipe flashing. Turn lead down inside vent pipe.
- C. Remove & replace PVC vent extensions after proper installation of lead pipe boots.
- D. At skylights: install new 60 mil EPDM adhered to acceptable substrate.
- E. Use 60 mil uncured EPDM flashing for details. Install per manufacturer's recommendations.

### PART 4 – ADDITIONAL NOTES

- A. Re-use existing expansion joint covers & re-paint. If expansion joint cover is damaged, replace with new and paint.
- B. Repair any uneven decking to insure proper slope.
- C. Conditions & dimensions to be verified by bidders.