

**SCOPE OF WORK AND SPECIFICATIONS
SMHA ROOF REPLACEMENT and RELATED WORK**

A. Scope of Work

Work may include, but is not limited to, the removal of existing roofs; replacement of step flashing and counter flashing; replacement of sheathing, dimensional shingles, felt, drip edging, all chimney flashing, metal or masonry, including all roofing areas, door overhangs, breezeways, dormers, etc.; providing new roof vents; repair and replacement of sheathing; replacement of rolled roofing material; repair and replacement of chimney and pipe boots; installation of ice and water seal underlayment, insulation and rafter vents. If no roof vents exist, new roof vents shall be installed for proper ventilation per local code requirements.

B. Required Areas of Work (when specified)

- a. Remove all existing roofing, shingles, felt, flashing, edging, etc.
- b. Prepare roof surface to receive new roof.
- c. Nail all loose nails in roof sheathing.
- d. Remove and replace all drip edging strips.
- e. Install underlay of asphalt saturated felt.
- f. Remove and replace all existing flashing.
- g. Install new dimensional shingles as per manufacturer's recommendations.
- h. Remove and replace all damaged sheathing.
- i. Remove and replace all damaged substructures.
- j. Install new roof vents and/or shingle-over ridge ventilation as per local code and manufacturer's recommendations. Existing roof vents may be eliminated if installing ridge vent.
- k. Install Ice and Water Seal Underlayment as per local code and manufacturer's recommendations.
- l. Remove and replace pipe boots and chimney boots.

- m. Remove gutters and downspouts.
 - n. **When specified**, Install new aluminum 6" seamless white gutters and downspouts with hidden hangers.
- 1. Antennas (when applicable):
 - a. Special care shall be taken around all antennas. Remove any antenna with caution so no damage occurs to the antenna. After roofing is installed, permanently re-attach antenna to roof.
 - b. Any antennas that are damaged by the Contractor will be replaced with like kind at the cost and responsibility of the Contractor.
 - c. At the end of each day, all antennas are to be in working condition, mounted either temporarily or permanently.
 - 2. Satellite Dishes (when applicable):
 - a. Remove any satellite dishes on roof with caution so no damage occurs to satellite dishes.
 - b. Contractor is not to re-install satellite dishes under any circumstances. SMHA does not permit satellite dishes to be physically attached to SMHA buildings.
 - 3. Hidden Damages:
 - a. If inspection indicates deterioration exists in the sheathing, deteriorated material shall be repaired or replaced as necessary.
 - b. If inspection indicates deterioration or failing roof framing, whether under good sheathing or deteriorated sheathing, then existing sheathing shall be removed and framing replaced or added as necessary.
 - c. Should one or both of these conditions exist (a or b above), the Contractor shall:
 - 1) Immediately contact SMHA and advise of the extent of the damage;
 - 2) Give estimated quantities and costs for repair and/or replacement of same;
 - 3) Where repairs and/or replacement of damaged areas below the sheathing are required the Contractor shall submit a Change Proposal Form, with photographs of damaged areas requiring repair, in accordance with SMHA requirements.

- 4) Request authorization to proceed with necessary repairs and/or replacement.
- d. Any repairs or replacements made to damaged areas below without prior approval of SMHA shall not be considered for payment.
- e. Work in area of any damaged substructures shall become part of the required work when it is discovered, and the remainder of the work in that area will not continue until all hidden damages have been repaired.

C. Materials

1. Dimensional Shingles shall be fiberglass asphalt bearing UL Class "A" label in accordance to ASTM standard specifications (Latest Edition).

CertainTeed Landmark Series Pro Limited Lifetime (formerly 30-year), or equal.

Conform to ASTM D3018 Type I - Self sealing

Weight- 250 pounds per square

Wind- 110 miles per hour

Color- Selected by SMHA

2. Fasteners shall be roofing nails of one (1)-inch length, hot dipped zinc coated steel, aluminum, or chromated steel (3/8" head, 12 gauge) for the shingles. All other nails shall be of industry standard for the specific application (i.e., flashing, edging, asphalt felt).
3. All edge strips and flashing shall be 26 Gauge steel with galvanized coating (ASTM A 361/A361 M). Weather-lap joints minimum 2".
4. New slant-back roof vents shall be eight (8)-inch factory-painted aluminum. Color to be selected by SMHA.
5. New ridge vent shall be shingle-over ridge ventilation type, 11 1/4-inches, rigid roll, and low profile.
6. New felt shall be asphalt saturated and of the ASTMD 226 15 lb. type or better.
7. Asphalt Roofing Cement- ASTM D 4586, Type I or II
8. New sheathing shall be 1/2-inch exterior CDX grade plywood, specifically designed and manufactured for this application and installed with H-clips.

9. Ice protection underlayment shall be rubberized asphalt sheet membrane, self-adhering, cold applied minimum 40-mil thick, 36-inch wide rolls, UL Class "A" fire rated, minimum tensile strength 250 psi, in accordance with ASTM D 146 and ASTM D 1970.
10. Gutters- K-Style shape .032" aluminum with butt-type expansion joints with hidden hangers.
11. Downspouts-4"x3" rectangular downspouts, .024" aluminum, with bottom 8' of downspout to be Schedule 40 PVC with rubber boot transition
12. Substructures shall be replaced as needed with new materials to match existing.
13. All materials to be installed shall be installed according to the industry standard and to all local and city code requirements.
14. Install rafter vents - ProVent (or equal) plastic ventilation channels installed per manufacturer's specifications
15. Any aforementioned brand name material item can be substituted with an "equal to" brand of same material as long as the specs are not less than the requested brand name item and specs. Also if an "equal to" item is substituted, the contractor must inform SMHA of such substitution.

D. Installation and Workmanship

1. Dimensional Shingles: Shingles must be applied properly. Install starter course with the factory applied sealant adjacent to the eaves overhanging the rake edge and eaves by 1/4-inch to 3/8-inch. Continue remaining courses of dimensional shingle installation per manufacturers' specifications.
2. Fasteners (nails): Use galvanized (zinc coated) roofing nails, 12 gauge with at least 3/8-inch diameter heads, long enough to penetrate through plywood or 3/4-inch boards. Use four (4) nails per shingle placed in the nail line 7 3/8-inches below the top edge, approximately 1-inch and 13-inches in from each end. Drive nails straight so that nail head is flush with, but not cutting into shingle surface. When nails fail to penetrate solid decking, use additional nails in adjacent unexposed area. Stapling is NOT permitted.
3. Ridges shall be capped with factory hip and ridge shingles; color to match dimensional shingles and be installed per manufacturers' specifications. Three tab cut shingles for ridge application is NOT acceptable.

4. Ridge vents or slant back vents shall be installed to give proper ventilation according to local code requirements.
5. All flashing shall be installed in strict accordance with the manufacturers' recommendations.
6. Valley shingling: use closed method. Install using ice and water shield on length of valley.
7. Flashing around chimneys, soil stacks, vents, etc., shall lay under new shingles on upper side and over the lap of new shingles on lower side.
8. Ice protection and underlayment: Install self-adhering ice protection underlayment along full length of eaves two (2) 36-inch wide rolls lapped per manufacturers' recommendation from the eave edge to a point 36-inches minimum beyond building wall line in accordance with underlayment manufacturers' installation instructions.
9. Install rafter vent channels per manufacturers' specifications.
10. All precautions shall be taken to protect the existing structure and surrounding areas (i.e. shrubs, plants, trees, windows, etc.) Any damage to existing items shall be repaired or replaced with new and like kind.
11. All work shall be done in accordance with any and all applicable codes that have jurisdiction over same. Contractor is responsible for any permits that may be required.
12. Contractor is responsible for providing SMHA with pictures of any discovered additional work or charge order items that present themselves during the course of the project.
13. SMHA requires at least one complete roofing project fully completed per week, unless circumstances beyond the contractors control prevent such a timeframe, such as inclement weather and or industry material shortages. In the event either case presents itself, the contractor is responsible for document such circumstances and immediately contacting SMHA with the reason, and an anticipated revised timeline of the project completion.

E. Job Conditions and Clean Up

1. Do not install shingles, felt, or sheathing when it is raining or over wet surfaces.
2. Do not apply shingles when air temperature is below 32 degrees Fahrenheit.

3. All scraps and debris shall be removed from the job site at the end of each work day. Entire job and work areas shall be kept neat and orderly as reasonably possible at all times while work is underway. Clean up includes the use of a roller magnet to assure all nails are removed from walks, drives, parking lots, and lawns.
4. Any gutters or downspouts damaged by the Contractor during any portion of this work shall be replaced with new at the Contractor's expense. All gutters are to be cleaned out during the clean-up process.
5. The Contractor shall provide safe means of egress to all units from start date thru completion of the work.
6. The Contractor shall take all precautions necessary to protect the structure from wind, snow or rain damage (i.e., tarps, etc.)