07 30 00 – Steep Slope Roofing

1. General
   
   A. The NRCA roofing manual and standards set by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA), the National Slate Association and the American Society for Testing and Materials (ASTM) shall constitute the minimum basic roofing criteria for the following roofing systems and materials:

   B. Roof types:
      
      1. Asphalt shingles
      2. Fiberglass shingles
      3. Slate
      4. Tile
      5. Metal
      6. Architectural metal roofing
      7. Asphalt built-up roofing

   C. Physical characteristics of materials:
      
      1. Fiberglass mat: ASTM D3462
      2. Class A: ASTM D3018 Type I (self-sealing)
      3. Wind resistance: ASTM D3161 (self-sealing)
      4. Minimum thirty year warranty
      5. Minimum slope of 1/4 inch per foot

   D. Copper or lead-coated copper shall be installed in all valleys, base flashings and counter flashings to provide a maintenance free roofing system. Woven or laced valleys are prohibited.

   E. Use lead boots on all penetrations through the shingles.

   F. Install a continuous ridge vent.

   G. Slate and tile must have an expected life of seventy-five years. The roofing system shall provide a minimum slope of 6 inches per foot. The Contractor shall supply a minimum of one square of material for future maintenance repairs.
1. Underlaymen shall be a minimum of a 43-pound coated base sheet.

2. Design the steepest roof practical to limit or prevent roof traffic.

3. Use copper or stainless steel nails.

H. Architectural metal and structural standing-seam roofing shall have a minimum slope of 4 inches per foot. Copper, lead-coated copper and terne-coated stainless steel are preferred. The use of exposed fasteners shall be limited through the panels to end and side panels. Systems that do not penetrate the panels shall be specified. Continuous, no-seam panels shall be used. Skylight panels shall be avoided due to problems with leaks, condensation and safety concerns.

1. Penetrations that interrupt seams shall be avoided.

2. Metals that cannot be soldered shall not be used.

I. See Appendix A073000 for additional information.