

PART 1 - GENERAL

- 1.01 Membrane manufacturer: 30-year total system warranty, longer if offered.
- 1.02 New roofs - structural deck: positive slope of ¼ inch per foot, directed toward interior drainage. Slope may be structural or with tapered insulation.
- 1.03 Existing roofs - finished roof surface: maintain positive slope of ¼ inch per foot, directed toward interior drainage.
- 1.04 Provide parapets on all new low slope roofs, standing 42-inch above finished roof. An engineered fall protection system may be used in lieu of the 42-inch tall parapet when the tall parapet is not feasible.
- 1.05 Provide handrails on existing low slope roofs not meeting the 42-inch parapet rule.
- 1.06 Roofs not having serviceable equipment mounted on them need not comply with 1.04 or 1.05 (i.e. penthouse roof with no mounted equipment). An engineered fall protection system shall be provided for roofs not meeting 1.04 or 1.05, compliant with OSHA Fall Protection regulations.
- 1.07 Position roof-mounted equipment in a manner to allow for roof maintenance. Mount equipment on pipe stanchions, with a vertical clearance per the current NRCA manual requirements. Mount horizontal piping a nominal 18 inches above the roof surface.
- 1.08 Provide walking mats or surface around, to, and from access to equipment requiring maintenance when the membrane is exposed.
- 1.09 Coordinate and provide for additional future roof mounted equipment, penetrations, and pedestals.
- 1.10 Use the current edition of the NRCA Roofing and Waterproofing Manual as a basis of design.
- 1.11 The preferred roofing system for all replacement and new low sloped roofs shall be a 5-ply built-up-roof system. At a minimum, the basis of design shall consist of (from roof deck upward):
 - A. Thermal barrier (GWB, Dens-Deck or similar product selected by the consultant)
 - B. Vapor Retarder/barrier (hot mopped 2-ply asphalt sheets, bituminous membrane, Ice and Water Shield) fully adhered to wall vapor retarder.
 - C. Rigid insulation board: Per ASHRAE 90.1 standards, not less than R-40 at the rain bowl, not less than R-60 average

- D. Recover/securement board
 - E. Roofing membrane: 3-ply SBS asphalt sheets or Kemper System.
- 1.12 Single Ply Membrane, consisting of .075 reinforced EPDM rubber may be utilized in lieu of the 5-ply built up roof in special circumstances and only upon approval of UAF FS. If EPDM is used, all seams are to be stripped-in, per manufacturer's recommendations.

PART 2 - PRODUCTS (NOT USED)

- 2.01 Utilize "No-Smell" low odor roofing asphalt

PART 3 - EXECUTION

- 3.01 Penetrations: minimum outside-to-outside clearance of 24 inches from other penetrations, parapets, or other structures. For large curbed units, specify 48 inch minimum clearance between the exterior of a unit and perimeters of walls, etc.
- 3.02 Ensure compatibility of protection board with structural roof elements
- 3.03 Connection of vapor retarder to rain leaders, VTR's and other roof penetrations must be continuous between the two and flexible to allow for movement of the roof.
- 3.04 Require contractor to place asphalt kettle in a location that will limit the entrainment of the roofing odors into the occupied facilities. Require that all asphalt kettles used on the UAF campus, be configured with an after burner (ie: a closed- manufactured fume control system).

END OF SECTION