

### MINERAL DESIGN.1 NON-NAILABLE DECK

Apply this system using the appropriate Bitec-approved base flashing, metal flashing or wall covering as specified in the most current edition of the Bitec "Roofing Material Specifications and Details" publication.

#### SEC. 1.00 INSULATION

The following insulations are acceptable for use with Mineral Design:

- Perlite
- Polyisocyanurate
- Wood Fiber
- Cellular Glass

#### SEC. 2.00 CANTS

Flashing details, where the transition is from the horizontal to a vertical surface, a noncombustible cant strip must be used.

#### SEC. 3.00 BASE SHEET

A minimum of one ply of fiberglass TYPE G2 base sheet must be installed over the insulation or deck before the membrane is heat welded.

#### SEC. 4.00 FASTENERS

Consult Factory Mutual Research Publications governing your region, or FM J.I.OQ3A3.AM governing Bitec products and systems.

#### SEC. 5.00 OUTLETS

##### APP Membranes

Drainage outlets shall be installed below the roof deck surface to permit positive drainage of the roof deck and to prevent water ponding at the drain rim. Base ply should be evenly trimmed with the drain flange, followed with a 40" x 40" heat welded collar of Bitec APS-4T. This collar must extend into and be fully adhered to the interior of the drain flange and interior surface. The Mineral Design membrane shall be fully adhered to the base ply, APS-4T flashing collar and extend into the drain. Clamp ring should be installed and tightened while the membrane is hot. A 4 lb. lead or

16 oz. copper flashing is optional between the collar and the Mineral Design field membrane. APS-4T collar should extend 4" beyond the lead or copper flashing.

#### SEC. 6.00 PIPE FLASHING

##### APP Membranes

Where penetrations occur in the roof surface, a collar of APS-4T should be installed over the base ply, extending a minimum of 4" beyond the flanges. A metal flashing shall be installed having a continuous flange 4" minimum, on top of the APS-4T collar. (On nailable decks, the metal flange must be nailed 3" o.c., 3/4" from the perimeter.)

**NOTE:** All metal flashings must be primed with an asphalt primer and allowed to dry before membrane and flashings are installed.

The Mineral Design field membrane must be fully adhered to the APS-4T collar and metal flange. All seams must be troweled and filled with molten modified bitumen.

#### SEC. 7.00 OUTLETS

##### SBS Membranes

Drainage outlets shall be installed below the roof deck surface to permit positive drainage of the roof deck and to prevent water ponding at the drain rim. Base ply should be evenly trimmed with the drain flange, followed with a 40" x 40" hot-applied collar of Bitec SPS-3H. This collar must extend into and be fully adhered to the interior of the drain flange and interior surface. The Bitec Mineral Design membrane shall be fully adhered to the base ply, SPS-3H flashing collar and extend into the drain. Clamp ring should be installed and tightened while the membrane is hot. A 4 lb. lead or 16 oz. copper flashing is optional between the collar and the Mineral Design field membrane. The SPS-3H collar should extend 4" beyond the lead or copper flashing. The roof deck must be smooth, dry, clean and free of sharp projections and depressions, and properly graded to the outlets.

#### SEC. 8.00 PIPE FLASHING

##### SBS Membranes

Where penetrations occur in the roof surface, a collar of SPS-3H should be installed over the base ply extending a minimum of 4" beyond the flanges. A metal flashing shall be

installed having a continuous flange 4" minimum, on top of the SPS-3H collar. (On nailable decks, the metal flange must be nailed 3" o.c., 3/4" from the perimeter.)

All metal flashings must be primed with an asphalt primer and allowed to dry before membrane and flashings are installed.

The Mineral Design field membrane must be fully adhered to the SPS-3H collar and metal flange. All seams must be troweled and filled with molten modified bitumen or hot asphalt.

### **SEC. 9.00 ROOF DECK**

The roof deck must be smooth, dry, clean and free of sharp projections and depressions, and properly graded to outlets.

The roofing contractor, architect, and engineer must allow for positive drainage when designing the roof deck or roof system. Bitec defines positive drainage as: roof deck becomes devoid of water within 72 hours after liquid precipitation has occurred. Bitec will not be responsible for membrane damage as a result of inadequate roof deck drainage.

### **WARRANTIES**

- (1) 10-YR. MATERIAL ONLY
- (2) 10-YR. LIMITED "INSURED" ROOFING WARRANTY\*

In order to obtain warranty (2), which covers labor and materials, an authorized Bitec applicator must install the roofing system. Final inspection by a Bitec field representative is necessary before issuance of warranty. Information regarding Bitec warranties may be obtained by calling 800-535-8597.

*\*Extended warranty periods are available, 12, 15 and 20 years.*