

ETHYLENE PROPYLENE DIENE MONOMER (E.P.D.M.) ROOFING

SECTION 7 - MEMBRANE FLASHING

7.1 GENERAL

- .1 To ensure protection against water entry into a newly installed roofing system, membrane flashing shall be installed at all primary membrane terminations (i.e. roof drains, curbs, roof/wall junctions, parapets etc.) as the application of the primary membrane progresses.
- .2 The use of cant strips at roof junctions is not required for E.P.D.M. membrane systems.
- .3 The membrane flashing shall be uniformly supported by and secured to an acceptable, solid substrate. Acceptable substrates consist of minimum 13mm (1/2") thick plywood, minimum 11mm (7/16") thick oriented strand board, smooth concrete, smooth surfaced concrete block or masonry and minimum 22 gauge flat sheet metal.
- .4 Gypsum board, stucco, cobblestone, textured masonry, corrugated metal panels are not acceptable substrate for the application of E.P.D.M. membrane flashing and must be covered by minimum 16mm (5/8") thick mechanically fastened exterior grade plywood.
- .5 The minimum membrane flashing height is 200mm (8") above the primary membrane surface in a conventional design and 75mm (3") above the insulation or concrete paver ballast for loose-laid ballasted design.
- .6 Exposed penetrations through the membrane flashing shall be placed no lower than 200 mm (8") above the finished roof surface.
- .7 The maximum membrane flashing height is 1100mm (42") above the primary membrane surface. A variance request must be submitted to the Technical Committee when membrane flashing height is to exceed 1100mm (42").
- .8 Where the upper termination of the membrane flashing on a vertical surface is exposed to water entry, the edge shall be protected with a continuous sheet metal flashing and termination bar.
- .9 The tops of parapet walls not covered by membrane flashing shall be covered with a water resistant sheet extending down from the top of the blocking a minimum distance of 50mm (2") on each side.
- .10 Sheet metal flashing shall be installed to cover and protect the top (horizontal) membrane-flashing surface.
- .11 Where required by the building code, metal flashings shall cover the vertical surface of the membrane flashing.
- .12 E.P.D.M. membrane flashing materials and accessories shall be from the same manufacturer as the primary membrane materials.
- .13 E.P.D.M. membrane flashing shall comply with the requirements of CGSB 37-GP-52M.
- .14 E.P.D.M. flashing materials, such as adhesives and primers, are temperature sensitive and should be stored and maintained at temperatures between 15 - 27° (60 - 80°F) at all times.

Revised Aug 18,
2009

.6 Added Nov 21,
2011

- .15 The manufacturer's cold weather requirements must be followed for E.P.D.M. applications below 5°C (40°F).
- .16 When preservative treated wood components are incorporated into a roof assembly, the potential for corrosion of some metal fasteners, sheet steel and roof decking exists when in direct contact with non-C.C.A. (Chromate Copper Arsenate) preservatives.

7.2 INSTALLATION PROCEDURE

7.2.1 Parapets and Vertical Junctions (See Figure 1, with cap flashing)

- .1 At the base of parapets and vertical junctions anchor a reinforced E.P.D.M. perimeter securement strip to the vertical or horizontal substrate in accordance with the membrane manufacturer's fastening requirements.
- .2 For self-adhering perimeter securement strips, the release paper shall be facing up with the tape portion farthest away from the wall or penetration.
- .3 At the base of the vertical junction the primary membrane sheet shall be folded back to expose the perimeter securement strip and the splicing surface on the back of the membrane sheet.
- .4 The membrane shall be allowed to relax a minimum of thirty (30) minutes prior to splicing.
- .5 The back of the primary membrane mating surface shall be primed with an approved primer and allowed to completely dry.
- .6 The E.P.D.M. surface of the securement strip shall be primed and allowed to dry completely.
- .7 The release paper covering the splicing tape portion shall be removed from the surface of the self-adhering securement strip.
- .8 The primed membrane mating surface shall be rolled onto the self-adhering securement strip tape surface, avoiding wrinkles, to form a continuous splice.
- .9 All mating surfaces must be rolled with a silicone roller to ensure proper adhesion.
- .10 The membrane flashing application shall be completed by coating the vertical substrate and back of membrane with bonding adhesive and allowed to completely dry.
- .11 An uncured E.P.D.M. flashing tape may be required to cover vertical corners as required by the membrane manufacturer.
- .12 The E.P.D.M. membrane shall be bonded to the vertical substrate avoiding ridges and wrinkles.
- .13 For parapets finished with cap flashing, the flashing membrane shall be bonded to the top of the parapet, be turned down and mechanically fastened to the exterior face of the wood blocking.
- .14 For parapets without cap flashing, the flashing membrane shall be bonded to the top of the parapet and maybe terminated to a minimum 26ga. continuous sheet metal edge flashing.

Added Aug 18,
2009

The sheet metal edge flashing shall be placed at the exterior face of the parapet, incorporate a drip and be fully supported by and mechanically attached to the wood blocking. The membrane flashing termination shall be in accordance with the manufacturer's approved detail.

- .15 For walls, a continuous termination bar or metal flashing shall finish the upper termination of the flashing membrane.

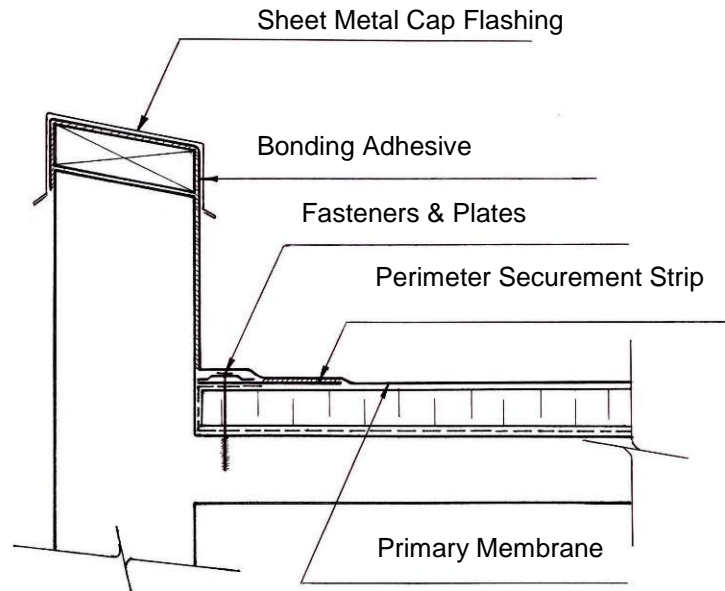


Figure 1

7.2.2 Sheet Metal Flanges

- .1 Exposed sheet metal surfaces shall be cleaned, primed and allowed to dry completely.
- .2 A self-adhering flashing tape shall be located to completely cover the 75mm (3") wide metal flange and to extend a minimum distance of 50mm (2") under the primary membrane.
- .3 The primary membrane shall be folded back, the membrane mating surfaces primed and allowed to dry.
- .4 The release paper shall be removed from the surface of the self-adhering flashing tape and the prepared membrane surface rolled onto the flashing tape.
- .5 The primary membrane and flashing tape mating surfaces must be rolled with a silicone roller to ensure proper adhesion.
- .6 The exposed primary membrane edges must be sealed with lap sealant tooled to a feathered edge.

7.2.3. Cast Roof Drains (See Figure 2)

- .1 The roof drain hopper must be located so that its flange is a minimum distance of 150mm (6") away from the nearest primary membrane field splice.

- .2 Both the hopper flange and drain clamping ring mating surfaces shall be clean.
- .3 A drainage opening shall be cut in the primary membrane above the drain hopper so the membrane extends approximately 12.7mm (1/2") beyond the interior edge of the clamping ring. The size of the membrane drainage opening must exceed the size of the drain outlet opening. Revised June 30, 2005
- .4 The membrane termination at the drain must be sealed by placing a continuous bead of water cut-off mastic around the drain hopper beneath the primary membrane.
- .5 The clamping ring shall be placed over the primary membrane and fastened to the drain hopper, to secure the E.P.D.M. membrane in place around the drain.

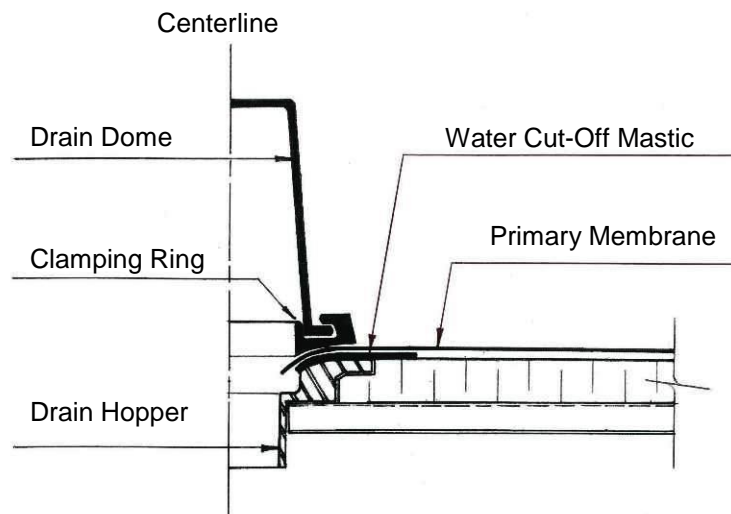


Figure 2

7.2.4 Scupper Drains

- .1 At scupper drains, the membrane flashing shall cover the sheet metal scupper flanges and shall extend past the scupper drain opening to terminate inside a minimum distance of 75mm (3") measured from the interior face of the parapet or wall.

Added June 30,
2005