

3 EPDM - SECTION 3 – SEPARATOR SHEETS & AUXILIARY LEVELING SURFACES

3.1 Separator Sheets

3.1.1 **General**

- 3.1.1.1 Separator sheets are materials used to separate roofing system components, to prevent material incompatibility or to prevent adhesion.
- 3.1.1.2 Separator sheets are not required for uninsulated fully adhered E.P.D.M. membrane systems.
- 3.1.1.3 Separator sheets are not accepted for uninsulated ballasted or mechanically fastened E.P.D.M. membrane systems, refer to auxiliary leveling surface requirements.
- 3.1.1.4 For conventional insulated E.P.D.M. design, the vapour retarder membrane will serve as the separator sheet.
- 3.1.1.5 All bitumen based materials must be removed or covered with an acceptable separator sheet as E.P.D.M. membrane is not compatible with bitumen products

3.2 Auxiliary Leveling Surfaces

3.2.1 **General**

- 3.2.1.1 An auxiliary leveling surface is a material used to provide a smooth substrate to which roofing system components can be adhered.
- 3.2.1.2 ARCA accepted auxiliary leveling surfaces may be comprised of a minimum 9.5mm (3/8") thick Fibre Reinforced Gypsum Panel (ASTM C1278-17), 12.7mm (1/2") thick Glass Mat Gypsum Substrate (ASTM 1177), 12.7mm (1/2") thick Gypsum Board (ASTM C1396), 12.7mm (1/2") Fiber-Mat Reinforced Cementitious Board (ASTM 1325), 12.7mm (1/2") thick plywood, or 12.7mm (1/2") thick O.S.B. when not used as a thermal barrier.³
- 3.2.1.3 For loose-laid and ballasted designs the auxiliary leveling surface may be loose-laid.
- 3.2.1.4 The existing substrate type and condition will determine the auxiliary leveling surface type and attachment method.
- 3.2.1.5 Where required by the current National Building Code – Alberta Edition, a thermal barrier may be used as an auxiliary leveling surface.
- 3.2.1.6 Deck fills are not permitted with fully adhered E.P.D.M. membrane systems.
- 3.2.1.7 When torching over heat sensitive substrates or insulation, all joints must be covered with 150mm (6") 1.5mm (60mil) self-adhesive fire tape.

3.2.2 **Wood Decks**

- 3.2.2.1 For dimensional lumber decks an accepted auxiliary leveling surface shall be mechanically fastened to completely cover the lumber decking.
- 3.2.2.2 An auxiliary leveling surface is not required for smooth surfaced plywood decks.
- 3.2.2.3 Some E.P.D.M. membrane manufacturers may not accept oriented strand board (O.S.B.) as the substrate for fully adhered membrane systems.

³ EPDM 3.2.1.2 Revised June 16 2022 (TB-2022-04)

3.2.3 **Steel Decks**

- 3.2.3.1 For uninsulated designs an accepted auxiliary leveling surface (excluding perlite and wood fiber boards) shall completely cover the steel decking prior to membrane application.
- 3.2.3.2 The auxiliary leveling surface may be attached to the steel decking using one of the following attachment methods.
 - 3.2.3.2.1 Continuous beads or a full roller coating of an adhesive applied to the top flanges of the steel deck in accordance with the adhesive manufacturer's application rates.
 - 3.2.3.2.2 Minimum twenty (20) self tapping drywall screws per 1200mm x 2400mm (4' x 8') sheet fastened through the top flange of the steel decking. Where drywall screws break the gypsum board paper covering, install a replacement screw in approximately the same location. Additional fasteners may be required to meet wind uplift standards.
 - 3.2.3.2.3 When using screws and plates for attachment, use a minimum of eight (8) per 1200mmx2400mm (4' x 8') sheet fastened through the top flange of the steel decking. Additional fasteners may be required to meet wind uplift standards.

**CAUTION: Attachment methods for steel deck are experienced based.
ARCA has not conducted formal wind studies.**

- 3.2.3.3 Hot bitumen shall not be used to adhere roofing materials directly to steel decks.
- 3.2.3.4 To qualify for an ARCA 15 Year Warranty Certificate, a minimum 12.7mm (1/2") glass faced gypsum auxiliary leveling surface shall be either mechanically fastened or adhered with an ARCA accepted adhesive to the structural deck.⁴

3.2.4

3.2.5 **Concrete Decks**

- 3.2.5.1 An auxiliary leveling surface is not required over concrete decks.
- 3.2.5.2 Damaged and deteriorated concrete decks shall be repaired to provide a smooth substrate for roofing system application.

⁴ EPDM 3.2.3.4 Revised February 27, 2025 (TB-2025-01)