

February 26, 2024

# Technical Bulletin TB-2024-01

## I. Coverboard requirement over Expanded Polystyrene (EPS) Insulation.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. revised the ARCA Roofing Application Standards to provide additional clarity on the use of expanded polystyrene (EPS) insulation in modified bituminous conventionally insulated roof assemblies.

### Revised Standards:

#### MB 5.4.1.5

Combination base sheet membranes incorporating asphalt coreboard and asphalt coreboard are not accepted coverboards directly over polystyrene insulation.

The basis of this change was approved at the November 28, 2023 ARCA Warranty Ltd. Board of Directors meeting, and changes came in to effect for jobs bid after January 28, 2024.

Changes will be referenced in the ARCA Roofing Application Standards Manual.

## II. Revision to EPDM Application Standards.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. approved the following revisions to EPDM application standards.

### Revised Standards:

#### EPDM 7.2.3.1

Do not run membrane seams through roof drain. If drain or seam location causes a field seam to fall within 457mm (18") from the drain clamping ring or seam, a minimum 900mm x 900mm (36" x 36") **taped or spliced** target patch centred over the drain sump shall be required.

Changes will be referenced in the ARCA Roofing Application Standards Manual.

## III. Revised Section Name.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. approved the revised title of Section TP 6.3.3 to **'Thermoplastic Polyolefin'**.

Changes will be referenced in the ARCA Roofing Application Standards Manual.

#### IV. Revised Cold Weather application temperatures.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. approved a revision to refer to Manufacturer's Installation Guidelines for when cold weather application standards shall be followed.

##### Revised Standards:

###### EPDM 6.1.3

Applications of E.P.D.M. roofing systems must not be undertaken when the air temperature at roof level is colder than -18°C and a wind velocity more than 14.5 km/h, or an equivalent wind chill of -26°C. **For cold weather applications, follow the membrane manufacturer's cold weather membrane seaming and application requirements.**

###### EPDM 7.1.12

E.P.D.M. flashing materials, such as adhesives and primers, are temperature sensitive. **Follow the membrane manufacturer's cold weather membrane storage and application requirements.**

Changes will be referenced in the ARCA Roofing Application Standards Manual.

#### V. Revised Asphalt Felt Vapour Retarder Side Lap Dimension

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. approved a revision to the asphalt felt vapour retarder side lap requirement.

##### Revised Standards:

MB 4.4.2.3	EPDM 4.4.2.2	TP 4.4.2.3	BUR 4.4.1
MB 4.5.2.2	EPDM 4.5.2.2	TP 4.5.2.2	BUR 4.5.1
MB 4.6.2.2	EPDM 4.6.2.2	TP 4.6.2.2	BUR 4.6.3
			BUR 4.7.1

Separator sheet/vapour retarder side laps shall be minimum **50mm (2") wide** and end laps shall be a minimum 150 mm (6") wide.

Changes will be referenced in the ARCA Roofing Application Standards Manual.

## VI. Revised Requirements – ARCA 15-Year Warranty Certificate.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. revised the following requirements for a 15-year ARCA Warranty Certificate.

1. Specialized factory insulated accessories are an option to a curbed roof penetration.

### Revised Standards:

MB 2.3.1.3.1      EPDM 2.3.1.5.1      TP 2.3.1.5.1

All membrane penetrations shall be curbed except **specialized factory insulated accessories**, roof drains and fall protection anchors.

MB 2.3.5.8      EPDM 2.3.5.7      TP 2.3.5.7

To qualify for an ARCA 15 Year Warranty Certificate, **there shall be no gum boxes**.

2. Asphalt adhered systems are a permitted application technique.
3. Vapour retarder requirements have expanded to include asphalt and adhesive adhered materials.

### Revised Standard:

MB 4.1.6      EPDM 4.1.6      TP 4.1.6

To qualify for an ARCA 15 Year Warranty Certificate **a fully adhered**, self-adhered or thermally fused vapour retarder is required.

4. The requirement to mechanically fasten the initial layer of insulation over wood and steel decks has been removed.

### Revised Standard:

MB 5.3.7      EPDM 5.3.6      TP 5.3.6

To qualify for an ARCA 15 Year Warranty Certificate, each roof assembly shall consist of a minimum of two layers of insulation with a minimum thickness of 38mm (1 1/2") for each layer. Insulation can be either mechanically fastened, adhered using asphalt or adhered with an ARCA approved adhesive.

Changes will come into effect on projects bid after March 31, 2024.

Changes will be referenced in the ARCA Roofing Application Standards Manual.

## VII. Alternate Modified Bituminous Membrane Flashing Detail.

On January 30<sup>th</sup>, 2024 ARCA Warranty Ltd. approved an alternative membrane flashing standard for modified bituminous membranes.

### New Standard:

#### MB 7.3.5.4. Alternate Combination Membrane Base Sheet Membrane Flashing

##### MB 7.3.5.4.1.

The combination membrane base sheet may be comprised of supporting accepted mineral wool insulation, fire resistance fiberboard, asphalt core board or high-density polyisocyanurate insulation substrate with an attached factory laminated modified bituminous base sheet and an ARCA approved membrane cap sheet flashing.

##### MB 7.3.5.4.2.

Prior to installing the cover board, fire prevention tape shall be applied at bottom junction of the parapet or curb, the vertical spine at corners, and where abutted board joins require it to be a torched membrane cover strip.

##### MB 7.3.5.4.3.

To prepare panel board sections for application of a combination membrane base sheet, score the board to coincide with top transition of the parapet. Heat and fold the prepared cover board panel sections to completely cover the combustible substrate.

##### MB 7.3.5.4.4.

Extend the combination membrane base sheet to the exterior edge of parapet and down a minimum 50mm (2") or install flush to exterior edge of parapet and install self-adhering membrane overlapped onto the cover board membrane face a minimum of 75mm (3") and a minimum 50mm (2") down the exterior vertical face or to completely cover parapet wood blocking.

##### MB 7.3.5.4.5.

The prepared combination membrane base sheets shall be fastened to the nailable substrate with minimum 25mm (1") diameter round top roofing nails placed at a maximum 150mm (6") centres in the side laps and along the top and bottom of each panel or 200mm (8") spacing with screws and plates. Minimum 25mm (1") diameter round top roofing nails shall also be placed no lower than 50mm (2") above the membrane surface at a maximum 150mm (6") centres or 200mm (8") spacing with screws and plates. To secure the balance of the combination membrane base sheet, additional fasteners shall be spaced vertically at maximum 200mm (8") centres at mid-span of the cover board panel.

##### MB 7.3.5.4.6.

Complete the membrane flashing base sheet application by cutting minimum 200mm (8") wide strips of the polyester reinforced SBS modified bituminous membrane to act as the membrane flashing tie-in between the cover board membrane and the combination membrane base sheet. Thermally fuse (torch) the membrane flashing tie-in strip so it extends a minimum distance of 100mm (4") onto the surface of both the cover board and combination membrane base sheet.

##### MB 7.3.5.4.7.

An accepted thermally fused polyester reinforced SBS modified bituminous membrane cap sheet flashing shall be uniformly torch-applied to the cover board membrane, and lap onto the membrane cap sheet in accordance with ARCA Warranty Ltd. application standards.

Changes will be referenced in the ARCA Roofing Application Standards Manual.