# **POLYMAX 180** Three Ply B.U.R. Membrane Specification

# **General Information**

**POLYMAX 180 Ply Sheet** is made from spunbonded, heat stabilized polyester fabric which has been pre-dipped into hot roofing grade asphaltic bitumen to form a high strength ply sheet for built-up roofing (B.U.R.).

**Base Sheet** may be a non-organic asphalt coated base sheet such as 40lb. coated base sheet, 28lb. coated base sheet (G2), or POLYMAX Base Sheet.

Install POLYMAX with hot asphalt using traditional B.U.R. methods and equipment. Mopping asphalt may be conventional Type II, Type III or kettle modified elastomeric. Hal Industries Inc. produces an elastomeric S.E.B.S. modified mopping asphalt, which can be used in a standard roofing kettle.

# Deck Preparation

Deck is to be prepared according to good roofing practice. Install cant strips, wood blocking and curbs as specified or detailed.

Wood deck is to be nailed tightly.

**Insulated deck** should have a surface that can withstand hot mopping temperatures. Insulation joints should be taped to prevent asphalt drippage when a full mopping is required.

Concrete deck should be dry, free of dust, and primed with an asphalt primer.

## Base Sheet

**Wood decks** require a nailed or partially adhered base sheet. Do not mop ply sheet directly to a wood surface. Nail or fastener spacing should be according to good roofing practice for the local area and no less then two rows per sheet at 250 mm (10 inch) spacing.

**Insulated decks** do not require a base sheet provided that the surface of the insulation can withstand hot mopping temperatures. Generally an organic fibreboard should be used over synthetic insulation. For a partially adhered system, the base sheet may be skip mopped to the insulation surface with hot asphalt at an application rate of 7.5 kg/10 sq.m. (15 lbs/100 sq.ft).

**Concrete decks** do not require a base sheet when a fully adhered system is desired. For a partially adhered system, the base sheet may be skip mopped to the concrete deck with hot asphalt at an application rate of 7.5 kg/10 sq.m. (15 lbs/100 sq.ft).

# **MEMBRANE**

Three plies of POLYMAX 180 ply sheet.



# POLYMAX 180 Three Ply B.U.R. Membrane Specification Cont'd

## Asphalt Bitumen

Use an industry acceptable mopping grade of Type II, Type III or kettle modified elastomeric asphalt.

**NOTE:** Asphalt temperature should be between 400 degrees F and 460 degrees F when applied. Do not apply asphalt when it is over 475 degrees F in temperature or distortion of the membrane may occur.

## Application Procedures

## 1. Application of Membrane

1.1. **Three Plies Fully Mopped:** Starting at the low point of the roof, mop three plies of POLYMAX 180 ply sheet in hot asphalt at the rate of 15 to 20 kg/10 sq.m. (30-40 lbs/100 sq.ft) per ply. Laps are to be 2/3 width of sheet plus 25 mm (1") on sides and 150 mm (6") on ends (Follow lap lines provided).

Good roofing practice should be followed when installing the POLYMAX system. When mopping ensure that a puddle of hot asphalt always precedes the advancing roll. It is important to force the ply sheet into the hot asphalt to ensure good saturation and a void-free roof membrane.

1.2. Where slopes exceed 10 percent, backnail each mopped sheet at 600 mm (24") o/c. along top edge using broad headed roofing nails.

## 2. Stripping Cants and Curbs

- 2.1. Apply a double strip of POLYMAX 180 ply sheet at each curb and cant. Set the POLYMAX strips into hot asphalt and immediately apply a hot-mop to the surface. Force the sheet down with the hot mop and "mold" it into the valleys and corners. Once pressed into position, POLYMAX will hold its shape and position, even on a vertical surface.
- 2.2. An additional strip of mineral surfaced cap sheet should be set into hot asphalt to cover the exposed portion of the cants and curbs. This cap sheet may be fibreglass or polyester reinforced.

## 3. Application of Asphalt Flood Coat and Gravel

Apply a hot asphalt flood coat after the POLYMAX ply sheets have been installed and all cants and curbs have had stripping applied.

Where a single pour coat is specified, follow 3.1.

Where a double pour coat is specified, follow 3.2.

Asphalt pouring temperature should be no lower than 425 degrees F to ensure total saturation of the POLYMAX membrane.

## POLYMAX 180 Three Ply B.U.R. Membrane Specification Cont'd

- 3.1. **Single Pour:** Application rate for asphalt should be 25 kg/10 sq.m. (50 lbs/100 sq.ft). Embed clean washed pea gravel in the flood coat at the rate of 200 kg/10 sq.m. (400 lbs/100 sq.ft).
- **3.2. Double Pour:** Apply a light asphalt flood coat of 12.5 kg/10 sq.m. (25 lbs/100 sq.ft) and apply washed pea gravel at the rate of 100 kg/10 sq.m. (200 lbs/100 sq.ft). Apply a second asphalt flood coat and gravel as described in 3.1. above.

# 4. Application of 72 lb. Glass Cap Sheet

If a mineral surfaced cap sheet is desired instead of gravel surfacing, then eliminate section 3.

4.1. Fully mop a 72 lb. Glass cap sheet to the surface of the installed Polymax. Application rate for the asphalt should be a minimum 15.0 kg/10 sq. m. (30 lb. / 100 sq. ft.).

## 5. Overnight Protection

It is the roofer's responsibility to ensure that any unfinished roof portion is protected from overnight rain damage. POLYMAX ply sheet is not watertight until it is totally saturated and sealed with hot asphalt. Therefore, it is recommended that the roofer protect all exposed unfinished membrane being left overnight with a light seal-glaze of hot asphalt. Never mop POLYMAX to a surface which contains moisture as this will result in future blistering.

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