

PRODUCT DESCRIPTION:

PQ 6170 is a blend of synthetic, polymers in a specially-selected compatible asphalt. This blend produces a product that displays excellent impact resistance, flexibility, toughness, extensibility and characteristics not found in conventional oxidized roofing asphalts. These properties result in a stronger, more flexible, roofing system capable of accommodating greater thermal movements.

USES:

PQ 6170 Modified Roofing Asphalt is used for roofing/waterproofing instead of an oxidized asphalt. It can be used as an adhesive in the application of SBS modified/asphalt cap sheets. The material can be mopped or squeegee applied using conventional roofing equipment and procedure.

Standards: A.S.T.M. C836-84 & CGSB 37.50-89M

PHYSICAL CHARACTERISTICS:

PROPERTY	TEST METHOD	TYPICAL RESULTS
Recommended application temp.		177-210°C
Softening point	ASTM D-2398	90°-95°C
Penetration @25°C	ASTM D-5	25-35 dmm
@50°C		75-85 dmm
Flexibility	CGSB 37-GP-50M	Passes -25°C
Tensile strength		>7 Mpa (from Elcometer readings)
Elongation @25°C		700 percent min.
Adhesive strength		>7 Mpa (from Elcometer readings)
Toughness		9.2 J (specification 5.5 minimum)
Crack Bridging @25°C		No sign of Cracking, Splitting or loss of Adhesion
Viscosity Brookfield @160°C		1100 cps. max.
Flash point COC	ASTM D-92	270°C min.
Flow @60°C	ASTM D-1191	1.0 mm max.

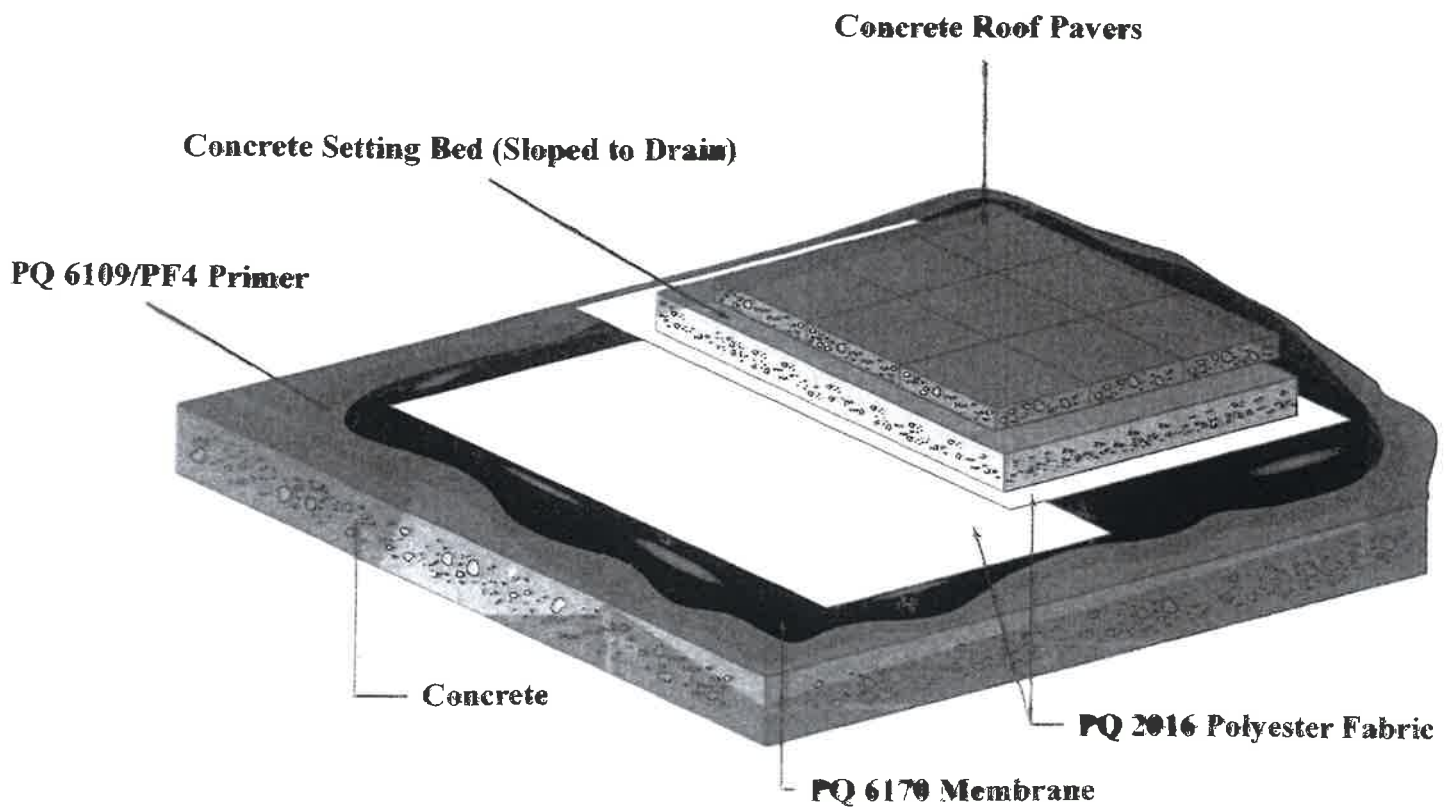
USE AREAS

Flat and Upper Roof, Podium and Terrace, Planter and Lawn, Light and Heavy Traffic Deck, [EVA], Canopy, Pool Deck and Foundation Wall ...etc.

PREPARATION

PQ 6170 is heated in a standard asphalt roofing kettle. The kettle must be equipped with a circulating pump or mechanical agitator.

PERMAQUIK 6170 PROTECTED MEMBRANE ROOFING SYSTEM



PERMAQUIK PQ 6170

MODIFIED ASPHALT ROOFING SYSTEM

NOTE:

The following is a general specification and does not limit the use of PQ 6170 as listed. A Permaquik representative shall be consulted for specific project requirements.

SYSTEM 1

- (a) One layer of PQ 6170 membrane applied to primed roof deck
- (b) One ply of separation sheet over PQ 6170 membrane
- (c) A membrane incorporating a fabric reinforcing sheet sandwiched between two layers of PQ-6170 membrane (optional)
- (d) Rigid insulation laid on separation sheet
- (e) Cast in place light weight insulating concrete
- (f) Light weight reinforced concrete sloped to drains

SYSTEM 2

- (a) Same as in System 1
- (b) Same as in System 1
- (c) Same as in System 1
- (d) Light weight reinforced concrete sloped to drains
- (e) Roofing tiles

SYSTEM 3

- (a) Same as in System 1
- (b) Same as in System 1
- (c) Same as in System 1
- (d) Rigid insulation
- (e) Cast in place light weight reinforced concrete sloped to drains
- (f) Roofing tiles

SYSTEM 4

- (a) Same as in System 1
- (b) A membrane incorporating a fabric reinforcing sheet sandwiched between two layers of PQ-6170 membrane (optional)
- (c) Polymer modified asphalt cap sheet or protection board or concrete or screeding protection (65-100mm thick)



INSTALLATION

Surface Preparation

All concrete surfaces shall be wood float finish or better. Concrete shall be cured a minimum of 14 days. Surfaces shall be dry, clean and free of all laitance, oil and dirt. Concrete curing compounds must be free of oils, waxes and greases. Deteriorated concrete must be removed and repaired to an acceptance working surface.

Priming

All concrete surfaces must be primed prior to application of 6170 membrane. Apply an asphalt cutback primer using a brush, roller or spray equipment. Application rate of primer shall be 2 to 8 sq M/litre, depending on porosity of surface.

Membrane Preparation

Asphalt roofing kettle must be equipped with a circulating pump or mechanical agitator.

- (a) Add 100 kg of PQ 6170 into kettle and slowly heat until material is liquid.
- (b) Start circulating pump and continue to circulate during day's operation.
- (c) Add PQ 6170 to the capacity of the kettle and maintain adequate supply of hot material.
- (d) Application temperature of 6170, 180 – 210°C.
- (e) Do not heat above 220°C.
- (f) Always keep material circulated to avoid localized overheating.
- (g) It is recommended that the kettle should be empty at the end of each day's work.

Membrane application

Apply PQ 6170 membrane using a roofing mop or squeegee to a thickness of 2.5 – 3mm to all areas. Reinforce all joints, cracks and change of plane with a fabric (cotton, polyester or glass fibre mat) embedded between 2 layers of PQ 6170 membrane.



At expansion joints reinforce using an elastomeric material installed as detailed.
Application rate of PQ 6170, $2.8 - 3.4 \text{ kg/m}^2$, 20 kg/box.

Separation Sheet

Apply a single layer of polyethylene sheeting (0.025 – 0.05 mm thick) to cover the membrane, while it is still warm and tacky. Lap the polyethylene a minimum of 50 mm. Locally accepted separation sheet will be considered.

Topping

Select one of the system as listed, to meet the requirement of the project, or one that is locally accepted by the building authorities.

