



IKO PermaTEC Hot Melt Monolithic Waterproofing

Product Information

PermaTEC Hot Melt Monolithic Waterproofing Systems comprise of PermaTEC EcoWRAP or PermaTEC Anti-Root hot melt waterproofing compounds, which are specially formulated combinations of refined bitumen, synthetic rubbers, fillers and other additives, which are hot-applied in conjunction with carefully selected reinforcement/detailing fabrics and protection layers to give the ultimate waterproofing performance.

NB: PermaTEC Anti-Root is specifically designed for use in Extensive & Intensive Green Roof and Biodiverse Roof systems.

Installed by a nationwide network of Registered Installers, PermaTEC provides a fully bonded, tough, flexible, waterproof membrane for use on inverted, green, flat including completely flat protected roofs. PermaTEC is also suitable for use as a damp-proof membrane in solid concrete floors or as the waterproofing layer in a typical sandwich membrane used for above or below ground waterproofing in concrete, brick or blockwork structures.

Features and Benefits

- Hot applied system
- Suitable for zero fall roof decks
- BBA Certified No. 03/4009 (including PermaTEC Anti-Root)
- Outstanding durability – lasts the design life of the building
- Nominal membrane thickness of 6mm
- Tough and resistant to impact damage
- Excellent low temperature flexibility
- High bond strength to substrate - High tensile strength
- Homogenous and seamless
- Seamless application and rapid setting – resistant to rain, snow and frost immediately after application.
- Integral root protection. No need for separate anti root barriers. (PermaTEC Anti Root)
- Virtually no packaging to be disposed of (zero wrapper waste).

System Components

IKO PermaTEC Ecowrap Hot Melt Compound

A hot applied specially formulated combination of refined bitumen, synthetic rubbers, fillers and other additives.

Product Code	Block Weight	Blocks Per Pallet	Pallet Weight
24110080	12kg	80	960kg

IKO PermaTEC Anti-Root Hot Melt Compound

A hot applied specially formulated combination of refined bitumen, synthetic rubbers, fillers, other additives and anti-root chemicals. Used for green roof installations.

Product Code	Block Weight	Blocks Per Pallet	Pallet Weight
24116080	12kg	80	960kg

IKO PermaTEC Polymer Primer

IKO Permatec Polymer Primer is synthetic rubber based primer for use on concrete and other similar substrates prior to the installation of IKO Permatec Hot Melt Waterproofing System

Product Code	Drum Size	Coverage
24602500	25 Litres	4 m ² /Litre

IKO PermaTEC High Penetration Primer

A brush or roller applied bituminous priming solution for the preparation of cementitious surfaces to receive PermaTEC monolithic membrane.

Product Code	Drum Size	Coverage
24600025	25 Litres	6-8 m ² /Litre

IKO PermaFLASH-D150

A nominal 1.25mm thick flexible bitumen EPDM polymer detailing sheet which is installed as a reinforcement layer over cracks, construction joints, changes in materials and where minor movement may occur.

Product Code	Roll Weight	Roll Width	Roll Length
24150000	4.8kg	150mm	20m

IKO PermaFLASH-D500

A flexible bitumen EPDM polymer detailing sheet, which is installed as a reinforcement layer around rainwater outlets.

Product Code	Roll Weight	Roll Width	Roll Length
24500000	16kg	500mm	20m

IKO PermaFLASH-UN

A very flexible un-cured neoprene rubber reinforcement sheet for use as part of the IKO Permasec hot melt waterproofing system over construction joints and structural movement joints with a maximum width of 25mm and maximum 50% total movement. .

Product Code	Roll Weight	Roll Width	Roll Length
24600000	21kg	300mm	30m

IKO PermaFLASH-R

A 55g/ m² polyester reinforcement layer, installed between the two applications of PermaTEC EcoWrap or PermaTEC Anti- Root

Product Code	Roll Weight	Roll Width	Roll Length
24991000	11kg	1m	200m

IKO PermaGUARD-F

A sand surfaced 180g/m² polyester based bitumen membrane, installed as a protection layer in standard PermaTEC and PermaTEC Anti Root systems.

Product Code	Roll Weight	Roll Width	Roll Length
24010000	42kg	1m	20m

IKO PermaGUARD-M Torch On (T-O)

A high performance torch applied SBS modified bitumen membrane with a 270g/m² polyester fibre carrier. It has a black mineral finish on the upper surface and thermos-fusible film on the underside. It is installed as a protection layer to PermaTEC on exposed upstand details.

Product Code	Roll Weight	Roll Width	Roll Length
24030008	36kg	1m	8m

IKO Permaguard-HDPB (Heavy Duty)

A 3mm thick high density polymeric protection board, which is extremely tough and with high impact resistance for use in heavy duty situations. Permaguard-HDPB is installed into the second coat of Permasec Compound whilst it is still hot. Boards must be tightly butted and joints sealed with hot Permasec compound applied with a wide blade scraper.

Product Code	Board Weight	Board Width	Board Length
62530000	10.5kg	1m	2m

IKO Permaguard-PB

A 3.2mm thick protection board, fabricated with a bituminous core and glass fibre reinforcement. It exhibits high strength, excellent puncture resistance and non-compressive nature. Permaguard-PB is installed into the second coat of Permasec Compound whilst it is still hot. Boards must be tightly butted and joints sealed with hot Permasec compound applied with a wide blade scraper.

Product Code	Board Weight	Board Width	Board Length
00910004	7.3kg	1.22m	1.22m

IKO Roofgarden 4 APP AD/F

A high performance cap sheet consisting of a polyester base, coated with APP polymer modified bitumen. The bitumen coating contains a specially formulated anti-root treatment, which prevents the penetration of roots from a range of plants and shrubs. Use as the final layer in a roof garden waterproofing specification where PermaTEC Anti-root Hot Melt Compound is not adopted. It has a slate finish on the upper surface, and a thermofusible film on the underside.

Product Code	Roll Weight	Roll Width	Roll Length
01520321	43kg	1m	7.5m

Application

The PermaTEC Hot-Applied Monolithic Membrane Roofing System must be installed in accordance with the IKO System Installation Guidelines and IKO instructions on a dry and frost-free substrate. After rain or snow, the substrate must be allowed to dry before installation can commence. The installer can aid drying by any suitable means approved by the Certificate holder. Once applied, the membrane is not affected by rain, snow or frost.

To assess the suitability of an in-situ concrete substrate, bond tests must be carried out to ensure that adequate adhesion can be achieved. If bonding problems occur, advice must be sought from the IKO.

Prior to the application of the Permatec membrane, any defects in the substrate must be identified and repaired in accordance with IKO's instructions.

Cementitious substrates must be conditioned with IKO PermaTEC High Penetration Primer or IKO PermaTEC Polymer Primer and allowed to dry before application of the membrane.

The installed Permatec membrane must be covered by a protective layer immediately after installation,

Detailing must be formed in accordance with the IKO instructions.

Installation Procedure

Blocks of the Permatec compound are heated in a purpose made mechanically-agitated melter, which must be fitted with thermostats to regulate the compound temperature. .

The nominal temperature range for the molten membrane is 160°C to 180°C. The temperature of the Permatec compound should not exceed 190°C.

The molten membrane is discharged from the melter into a suitable container and applied to the roof, using a long-handled squeegee for horizontal surfaces and a suitable spreader for vertical surfaces.

At structural movement joints up to 25mm (maximum 50% total movement), PermaFLASH-UN reinforcement must be installed fully bonded in hot Permatec compound centrally over the movement joint.

At structural movement joints between 12 and 50 mm (maximum 50% total movement), a proprietary joint system must be installed. IKO should be consulted for suitable products.

At all non-monolithic changes in substrate materials, at structural/shrinkage cracks between 3 and 6 mm wide, at structural joints between 6 and 12 mm wide and where minor movement may occur, a reinforcement layer of PermaFLASH-D150 should be applied prior to applying the PermaTEC membrane.

At all board joints in plywood, calcium silicate and composite metal decks, a reinforcement layer of PermaFLASH-D150 or a minimum 150 mm wide strip of PermaFLASH-R must be applied prior to applying the PermaTEC membrane.

The first layer of the molten PermaTEC membrane should have a nominal thickness of 3 mm.

PermaFLASH-R polyester reinforcing scrim is embedded by lightly brushing it into the first layer of the membrane whilst it is still hot and tacky. The reinforcement overlaps must be at least 75 mm and fully sealed by the PermaTEC membrane.

The second layer of PermaTEC membrane, applied over the top of the reinforcement, should have a nominal thickness of 3 mm.

The membrane must be protected immediately with the specified PermaGUARD protection layer. This is carried out prior to applying the insulation, water control layer and the protective layer or other specified surface finish

Material Handling

Please refer to the IKO Safety Data Sheets available from www.ikogroup.co.uk.

Disclaimer

Whilst every precaution is taken to ensure that the information given in this literature is correct and up to date it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded.

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