IKO PERMAPHALT ROOFING SYSTEMS

PERMAPHALT WARM ROOF



SURFACE PROTECTION

- Solar Reflective Paint¹
- Promenade Tiles²

WATERPROOFING MEMBRANE



IKO PERMAPHALT 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO BLACK SHEATHING FELT³

INSULATION



- enertherm MG
- Foamglas T3+

ATTACHMENT OF INSULATION

Bonded using IKOpro PU Adhesive for insulation, Sprayfast IBA, or PUMA Zero Adhesive

AIR & VAPOUR CONTROL LAYER



- **IKO Ultra S-A Air and Vapour Control Layer**
- IKO Ultra T-O Air and Vapour Control Layer ⁴

ATTACHMENT OF THE VAPOUR CONTROL LAYER

Bonded with SA backing - (IKO Ultra S-A AVCI) Bonded by torching - (IKO Ultra T-O AVCL)

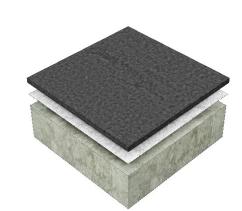
SUBSTRATE PREPARATION

- Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.
- IKOpro Bonding Agent (S-A membranes only)
- **IKOpro Sprayfast MPP**
- IKOpro Quick Dry Bitumen Primer (T-O membranes only)

NOTES

- ¹ Solar Reflective Paint to comply with the requirements of BS8218:1998 5.17. i.e. be free from materials deleterious to mastic asphalt, such as metallic pigments, noncompatible solvents or water-based emulsions.
- ² Promenade Tiles required on balconies and terraces bonded in suitable PU Adhesive in accordance with manufacturer's instructions.
- ³ 2 layers of Non-bituminous Building Paper are required beneath IKO Sheathing Felt where Foamglas insulation is used.
- ⁴ T-O Layers are not to be used on or near combustible substrates

PERMAPHALT UNINSULATED WALKWAY



SURFACE PROTECTION



N/A

WATERPROOFING MEMBRANE



IKO PERMAPHALT 25mm1 (second coat to be nominal 15mm thick incorporating 10-15% by weight of 3mm size coarse aggregate)

SEPARATING MEMBRANE

IKO GLASS FIBRE TISSUE

INSULATION



N/A

AIR & VAPOUR CONTROL





SUBSTRATE PREPARATION

Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

¹ This specification is not suitable if point loading is anticipated.

PERMAPHALT INVERTED ROOF



LOADING COAT



20-40MM STONE BALLAST ¹ **40MM PAVING SLABS ON PROPRIETORY SUPPORT**

GREEN ROOF BUILD UP 1

WATER FLOW REDUCING LAYER (WFRL)



- enertherm XPS WCL
- enertherm XPS Plus WCL enertherm EPS WCL

ATTACHMENT OF WFRL

Loose laid

INSULATION



- ²enertherm XPS
- ²enertherm XPS Plus
- ²enertherm EPS

ATTACHMENT OF INSULATION

WATERPROOFING MEMBRANE



IKO PERMAPHALT 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO BLACK SHEATHING FELT

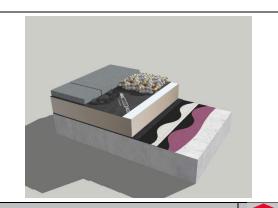
SUBSTRATE PREPARATION

Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

- ¹For buildings in sheltered regions or less than 10 storeys. A minimum load of 80Kg/m2 to resist wind uplift is required. This can be achieved with 50mm depth of washed rounded ballast, minimum 40mm thick concrete slabs or specified Green Roof Build-up. For other exposure conditions or tall buildings, specialist advice should be sought.
- ² Insulation boards should be laid so as to break the joints over non-woven geotextile layer with nominal 100mm laps.

IKO PERMATEC ROOFING SYSTEMS

PERMATEC ECOWRAP INVERTED **ROOF SYSTEM**



LOADING COAT

20-40MM STONE BALLAST ¹ **40MM PAVING SLABS ON PROPRIETORY SUPPORT**

WATER FLOW REDUCING LAYER (WFRL)

- enertherm XPS WCL
- enertherm XPS Plus WCL
- enertherm EPS WCL

ATTACHMENT OF WFRL

Loose laid

INSULATION

- ¹enertherm XPS
- ¹enertherm XPS Plus
- ¹enertherm EPS

ATTACHMENT OF INSULATION

WATERPROOFING MEMBRANE



IKO PERMATEC ECOWRAP ATTACHMENT OF WATERPROOFING MEMBRANE

N/A

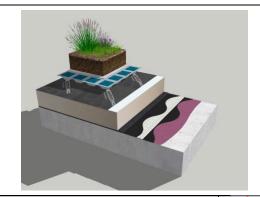
SUBSTRATE PREPARATION

Clean and dry. Primer to concrete substrates. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

- ¹For buildings in sheltered regions or less than 10 storeys. A minimum load of 80Kg/m2 to resist wind uplift is required. This can be achieved with 50mm depth of washed rounded ballast or minimum 40mm thick concrete slabs. For other exposure conditions or tall buildings, specialist advice should be

PERMATEC ANTI-ROOT INVERTED **GREEN ROOF SYSTEM**



LOADING COAT



GREEN ROOF BUILD UP 1

WATER FLOW REDUCING LAYER (WFRL)



- enertherm XPS WCL
- enertherm XPS Plus WCL
- enertherm EPS WCL

ATTACHMENT OF WFRL

Loose laid

INSULATION



- ¹enertherm XPS
- ¹enertherm XPS Plus
- ¹enertherm EPS

ATTACHMENT OF INSULATION

WATERPROOFING MEMBRANE



IKO PERMATEC ANTI-ROOT

ATTACHMENT OF WATERPROOFING MEMBRANE

N/A

SUBSTRATE PREPARATION

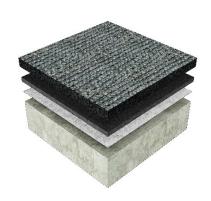
Clean and dry. Primer to concrete substrates. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

¹For buildings in sheltered regions or less than 10 storeys. A minimum load of 80Kg/m2 to resist wind uplift is required. This can be achieved with the specified Green Roof Build-up. For other exposure conditions or tall buildings, specialist advice should be sought.

IKO PERMAPARK CAR PARK WATERPROOFING & SURFACING SYSTEMS

UNINSULATED



WEARING COURSE



¹IKO PERMAPARK PAVING 25mm-40mm

WATERPROOFING MEMBRANE



²IKO PERMAPARK WATERPROOFING 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO GLASS FIBRE TISSUE

LYTAG CONCRETE SLAB



N/A

INSULATION



N/A

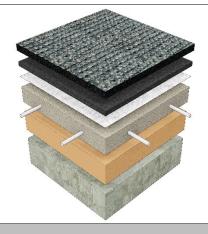
SUBSTRATE PREPARATION

 Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

- 13.5 tonnes maximum gross vehicle weight
- The Permapark Waterproofing can be reduced to 10mm single coat for noncritical areas e.g. above another parking level.

INSULATED



WEARING COURSE



¹IKO PERMAPARK PAVING 30mm-40mm

WATERPROOFING MEMBRANE



IKO PERMAPARK WATERPROOFING 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO GLASS FIBRE TISSUE

LYTAG CONCRETE SLAB



Minimum 75mm Lytag Grade 20 concrete slab with 142 steel mesh reinforcement at mid-height

INSULATION



²enertherm XPS 500

ATTACHMENT OF INSULATION

Loose laid

SUBSTRATE PREPARATION

 Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

- 13.5 tonnes maximum gross vehicle weight

IKO PERMAPARK HGV SERVICE DECK WATERPROOFING & SURFACING SYSTEMS

UNINSULATED



WEARING COURSE



¹IKO PERMAPARK PAVING 40mm

WATERPROOFING MEMBRANE



IKO PERMAPARK WATERPROOFING 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO GLASS FIBRE TISSUE

LYTAG CONCRETE SLAB



N/A

INSULATION



N/A

SUBSTRATE PREPARATION

 Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

 144.0 tonnes maximum gross vehicle weight and maximum individual axle loading 11.5 tonnes. 6mm, 14mm or 20mm pre-coated chippings must be rolled into the surface to improve indentation resistance

INSULATED



WEARING COURSE



¹IKO PERMAPARK PAVING 40mm

WATERPROOFING MEMBRANE



IKO PERMAPARK WATERPROOFING 20mm (2 x 10mm coats)

SEPARATING MEMBRANE

IKO GLASS FIBRE TISSUE

LYTAG CONCRETE SLAB



Minimum 100mm Lytag Grade 20 concrete slab with 142 steel mesh reinforcement at mid-height

INSULATION



²enertherm XPS 700

ATTACHMENT OF INSULATION

Loose laid

SUBSTRATE PREPARATION

Clean and dry. Uneven surfaces may require suitable preparation to the surface prior to the application of the waterproofing.

NOTES

 144.0 tonnes maximum gross vehicle weight and maximum individual axle loading 11.5 tonnes. 6mm, 14mm or 20mm pre-coated chippings must be rolled into the surface to improve indentation resistance