IKO PERMAPARK

MASTIC ASPHALT SOLUTION FOR ELEVATED VEHICLE DECKS

MADE IN THE U.K. SINCE 1883

IKOGROUP.CO.UK

CONTENTS

WE ARE IKO

With more than 140 years' manufacturing experience, IKO is firmly established as the UK's market leader in roofing, waterproofing and insulation solutions, along with our fast-growing highways maintenance range. This hard-earned reputation has been built on a foundation of high quality products, exemplary customer service and an unwavering commitment to driving positive change and protecting what matters to our people and the planet.

With this comes a responsibility to continue investing in our product solutions, manufacturing facilities and extensive team of experts to deliver excellence at every level.

MANUFACTURED IN THE UK.
MADE FOR THE FUTURE.

Our strategically-located manufacturing plants around the country, supported by our nationwide network of building contractors and distributors, make IKO best placed to provide our UK-wide customers with a reliable, responsible and responsive service.

We're BES 6001-accredited, which means our products and raw materials are responsibly sourced. And all of our sites are ISO 9001 and ISO 14001-certified. This includes our Prospect Quarry plant in Grangemill, Derbyshire, which is where our hot melt and mastic asphalt solutions for roads, flat roofing, car parks and pedestrian walkways are manufactured.

All IKO projects are regularly monitored during installation by our dedicated Technical Services department, helping maintain full specification compliance and ensuring any site queries are handled quickly and effectively.

In addition to manufacturing these systems to the highest standard and minimising our environmental impact, we also provide dedicated project design support.

The IKO team is also on hand to provide specification advice, technical drawings, wind uplift and thermal calculations, site visits and post-project support, such as maintenance and comprehensive guarantees – a comprehensive service that is all free of charge.

INTRODUCING IKO PERMAPARK

IKO Permapark is a specially-formulated, mastic asphalt waterproofing and surfacing system for elevated vehicle decks. Incorporating advanced polymer technology, it provides the ideal combination of long-term durability, increased fatigue resistance and improved temperature stability.

Applied using traditional mastic asphalt techniques, IKO Permapark is the result of extensive research and development and the careful selection of polymers to provide improved performance in vehicle deck specifications.

THROUGHOUT THE YEARS

Past
IKO Permapark was developed as one of the first polymer-modified mastic asphalt waterproof paving systems in the UK. It was extensively tested by the Building Research Establishment, certified by the British Board of Agrément in 1992, and has been used on a wide variety of applications, including pedestrian walkways, car parks, HGV service decks and access ramps, ever since.

Present
The current IKO Permapark system and advanced polymer formulation offers enhanced low temperature flexibility (resistance to cracking) and high temperature stability (resistance to deformation).

Future
As part of IKO's development programme, we are striving to improve all of our products and systems, including IKO Permapark. At our central laboratory in Grangemill, we are exploring further product developments to achieve enhanced low temperature flexibility characteristics and high temperature stability.

THE IKO PERMAPARK DIFFERENCE

IKO Permapark is underpinned by a highly developed project design and specification service. Working with our experienced registered contractor partners, we deliver projects on time, on budget and get it right first time. High performance materials, together with high standards of workmanship and project supervision, provide guaranteed car park options across the widest specialist product range in the industry.

Our specialist knowledge, combined with our strength in structural waterproofing design provides a completely watertight building envelope.

Our unrivalled technical support covers:

- Assistance with new build design
- Refurbishment works survey and design service
- Comprehensive proposals, including full written reports and specifications (NBS format available)
- Technical advice
- Nationwide network of registered contractors
- Contract monitoring (for work in progress)
- Final inspection and guarantee sign-off
- Up to 25-year guarantees

Providing you with complete peace of mind

Guarantees
Comprehensive IKO guarantees, covering materials and workmanship, are available for up to 25 years.

Registered contractors
To maintain high industry standards, IKO Permapark systems are only installed by IKO-registered contractors.

DESIGN CONSIDERATIONS AND SITE WORK

STRUCTURAL BASES

Decks can be either in-situ or pre-cast concrete. Cement screed, lytag grade 20 concrete or concrete structural topping are commonly used to achieve the required surface finish and drainage falls.

In-situ concrete for roof decks should be specified and produced in accordance with BS EN 206:2015 and installed in accordance with BS 13670:2009 and the National Structural Concrete Specification.

Decks that receive IKO Permapark must be true, plane and even, free from ridges, hollows and indentations, and should provide a fall of 1 in 60 to ensure adequate drainage to outlets. The most suitable surface is provided by a skip float or power float finish.

To reduce the risk of coarse aggregate settlement, sufficient thermal mass should be positioned directly below IKO Permapark, which will enable rapid heat dissipation to take place during laying. 'Insulating' screeds should therefore be avoided.

Decks must be capable of supporting all static and imposed loads without undue deflection. The weights given in Table 1 can be used as a guide for assessing the load imposed by the specification.

Component	Thickness (mm)	Nom. Weight (kg/m²)
IKO Permapark Waterproofing	10	22
IKO Permapark Waterproofing	20	44
IKO Permapark Paving	25	60
IKO Permapark Paving	30	72
IKO Permapark Paving	40	96
IKO Permascreed H	30-60	72-144
Lytag Sand Concrete	75	133
Lytag Sand Concrete	100	177

SITE DELIVERIES

IKO Permapark Waterproofing and IKO Permapark Paving are supplied directly to site in purpose built hot charge transporters capable of holding up to 18 tonnes of material. IKO luggers are often used to transport the molten material to the point of installation

Alternatively, both products are available in nominal 20kg blocks for small areas and detail work. IKO Permapark paving blocks will require the site addition of 6mm or 10mm size coarse aggregate during remelt in accordance with the following table.

Paving thickness (mm)	Size of coarse aggregate (mm)	Aggregate content (%)
25	6	30
30	6 or 10	35
40	6 or 10	45

INSTALLATION

IKO Permapark must be installed by an IKO-registered contractor, who is experienced in the techniques of car park surfacing. They must also have sufficient resources to lay the relatively high volumes of material associated with this type of work. Work should be carried out in accordance with BS 8218:1998 and IKO recommendations.

For a list of contractors for specific projects or for further guidance, please contact IKO's Technical Services team on 01257 256888 or technical.ma@iko.com

BAY JOINTING

Splayed steel gauges must be used to achieve the correct thickness of IKO Permapark Paving, according to the selected specification, and to provide an increased bonding edge between adjacent bays of IKO Permapark Paving. The usual bay jointing techniques, warming and cleaning the edge of the previously laid area, must also be carried out to ensure fusion between the bays.

MARGIN INFILL TO ABUTMENTS

IKO Permapark Paving should end approximately 100mm from abutments and the margin should be infilled with IKO Permapark Waterproofing. An angle fillet should then be formed at the base of the skirting roof to complete the detail.

SURFACE FINISHES

The IKO Permapark Paving layer should be well rubbed with clean, sharp sand during the final floating of the hot asphalt. In addition, a dimpled surface may be achieved by the use of a crimping roller.

Pre-coated chippings must be rolled into the surface, where the anticipated gross vehicle weight exceeds 7.5 tonnes, to improve resistance to indentation. In this case, IKO Permapark Paving should not be sand rubbed. However, an uneven scattering of chippings must be applied, which makes this finish less attractive than the alternatives.

For normal car park usage, IKO Permapark does not need to be protected against minor oil, petrol or grease contamination. However, prolonged contact may cause localised softening of the binder.

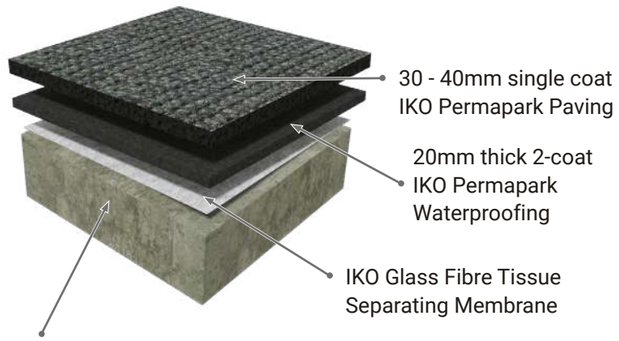
Proprietary coatings are available where a coloured finish is required.

DECK SPECIFICATION OPTIONS

CARS AND LIGHT COMMERCIAL VEHICLES

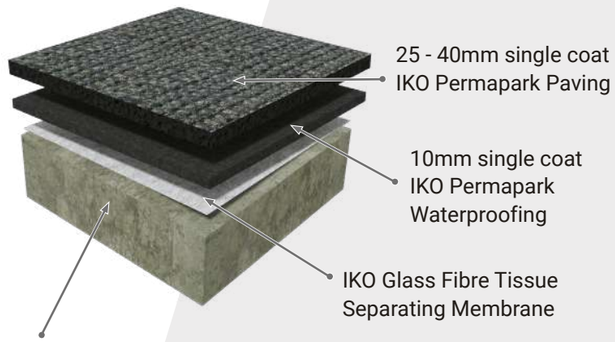
Premier specification PA1 (Maximum gross vehicle weight 3.5 tonnes)

IKO Permapark PA1, comprising nominal 30mm - 40mm thick, single coat IKO Permapark Paving on nominal 20mm thick two-coat IKO Permapark Waterproofing on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps.



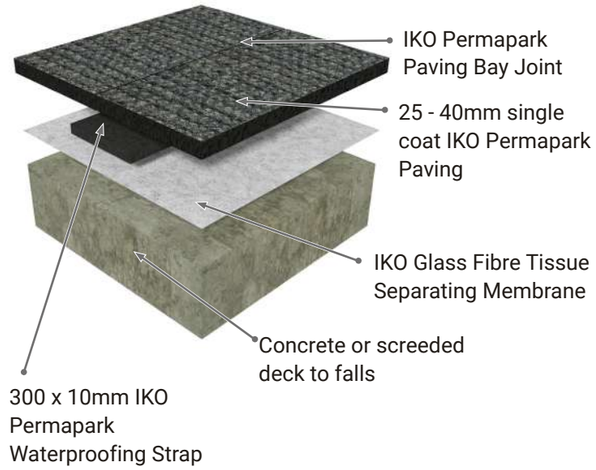
Standard specification PA2 (Maximum gross vehicle weight 3.5 tonnes)

IKO Permapark PA2, comprising nominal 25mm - 40mm thick, single coat IKO Permapark Paving on nominal 10mm single coat IKO Permapark Waterproofing on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps.



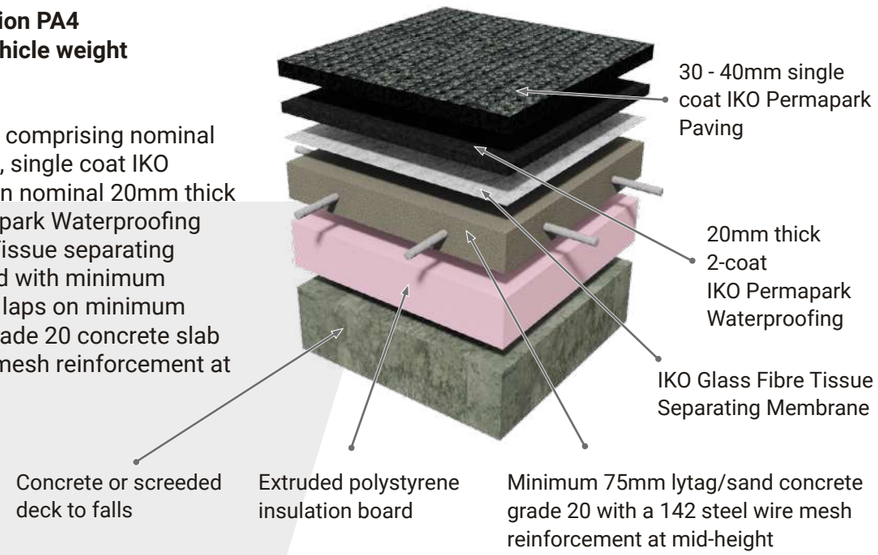
Economy specification PA3 (Internal levels only. Maximum gross vehicle weight 3.5 tonnes)

IKO Permapark PA3, comprising nominal 25mm - 40mm thick, single coat IKO Permapark Paving on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps. The IKO Permapark Paving bay joints must be positioned centrally over nominal 300mm wide x 10mm thick IKO Permapark Waterproofing straps.



Insulated specification PA4 (Maximum gross vehicle weight 3.5 tonnes)

IKO Permapark PA4, comprising nominal 30mm - 40mm thick, single coat IKO Permapark Paving on nominal 20mm thick two-coat IKO Permapark Waterproofing on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps on minimum 75mm thick lytag Grade 20 concrete slab with 142 steel wire mesh reinforcement at mid height.



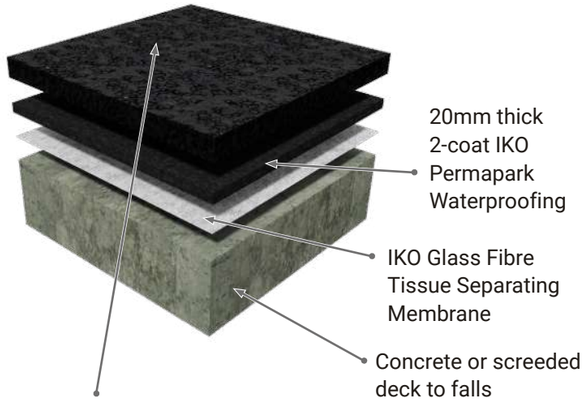
The thickness and grade of extruded polystyrene insulation must be specified in accordance with imposed loading and required U-value recommendations.

HEAVY GOODS VEHICLES

Uninsulated service desk specification PA5
(Maximum gross vehicle weight 44.0 tonnes and maximum individual axle loading 11.5 tonnes)

IKO Permapark PA5, comprising nominal 40mm thick, single coat IKO Permapark Paving on nominal 20mm thick two-coat IKO Permapark Waterproofing on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps.

*If the anticipated gross vehicle weights are likely to exceed 7.5 tonnes, 6mm, 14mm or 20mm, pre-coated chippings must be rolled into the surface to improve indentation resistance. However, it should be noted that the uneven scattering of chippings will reduce the aesthetic appearance of the paving. The paving surface should not be sand rubbed when pre-coated chippings are used.

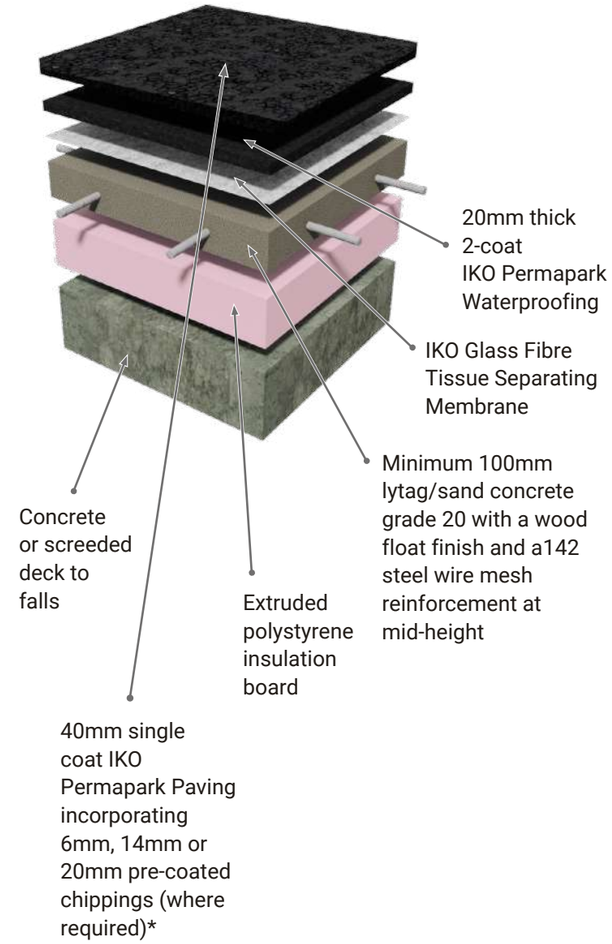


PRE-COATED CHIPPINGS SPREAD RATE	
Size (mm)	**Weight (kg/m²)**
6	6.5-7.5
14	7.5-10
20	10-13

Insulated service desk specification PA6 - with pre-coated chippings
(Maximum gross vehicle weight 44.0 tonnes and maximum individual axle loading 11.5 tonnes)

IKO Permapark PA6, comprising nominal 40mm thick, single coat IKO Permapark Paving on nominal 20mm thick two-coat IKO Permapark Waterproofing on IKO Glass Fibre Tissue separating membrane loose laid with minimum 50mm side and end laps on minimum 100mm thick lytag/sand concrete Grade 20 with a wood float finish and reinforced with 142 steel wire mesh at mid height.

*If the anticipated gross vehicle weights are likely to exceed 7.5 tonnes, 6mm, 14mm or 20mm, pre-coated chippings must be rolled into the surface to improve indentation resistance. However, it should be noted that the uneven scattering of chippings will reduce the aesthetic appearance of the paving. The paving surface should not be sand rubbed when pre-coated chippings are used.



RAMPS

CARS AND LIGHT COMMERCIAL VEHICLE RAMPS

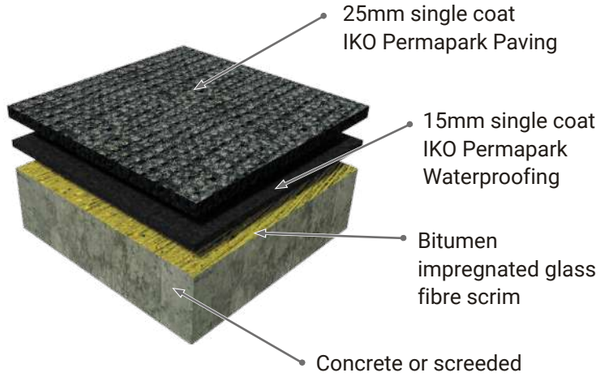
Ramps should be cross tamped and lightly primed with IKOpro High Bond Primer.

To prevent undue thinning of the IKO Permapark Waterproofing, tamps should not exceed 5mm in height.

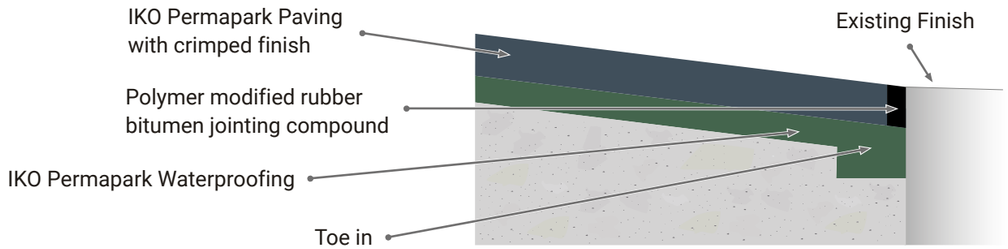
Nominal 25mm t hick, single coat IKO Permapark Paving with crimped finish on nominal 15mm thick, single coat IKO Permapark Waterproofing on loose laid bitumen impregnated glass fibre scrim.

Where ramps are subject to HGV traffic, the thickness of the IKO Permapark Paving should be increased to 40mm with a crimped finish.

If warming elements are required, they should be embedded within a sand/ cement screed underneath the IKO Permapark. IKO's Technical Services team should be contacted for design approval.



Typical Ramp Termination

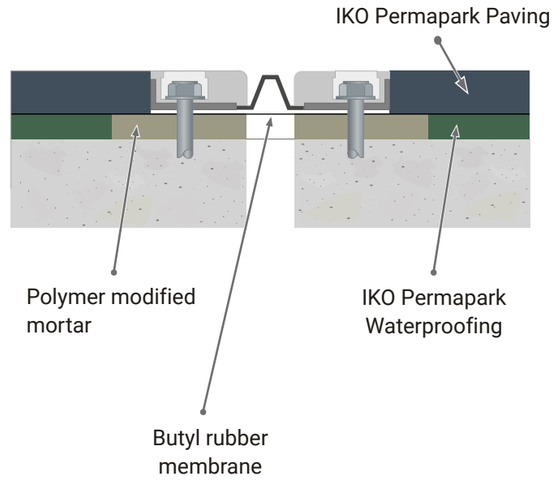


EXPANSION JOINTS

Where the design called for a controlled gap in the structural slab, a suitable proprietary expansion system must be included through the finishes. This work requires specialist design and installation.

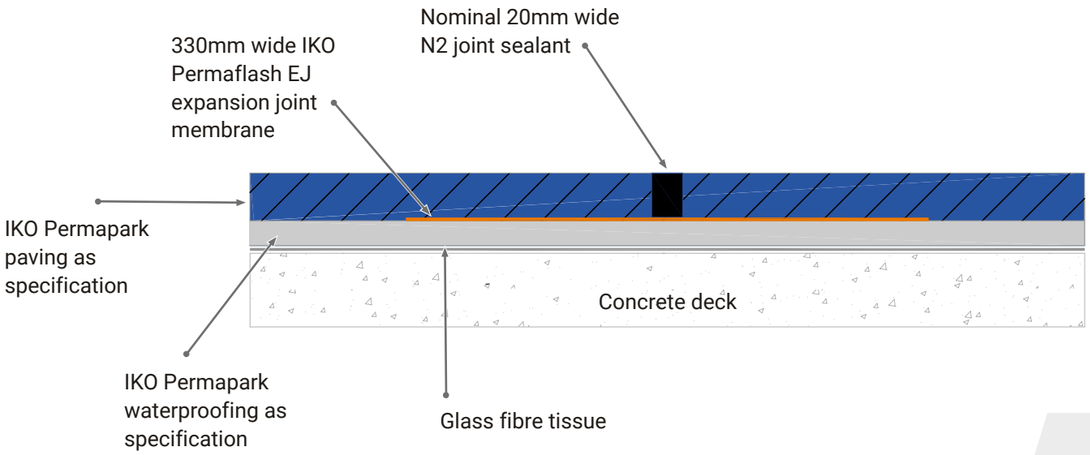
The proprietary expansion jointing system must be designed for use with a mastic asphalt waterproofing and surfacing system. It must be able to accommodate the anticipated type and level of traffic and be fitted strictly in accordance with the manufacturers instructions. The performance of the installed proprietary expansion joint system is not covered by the IKO waterproofing guarantee offered for this project.

Proprietary Expansion Joint System



THERMAL MOVEMENT JOINTS

The introduction of thermal movement joints within the IKO Permapark paving layer may be required on certain projects. The need for these joints will depend on the type, size and shape of the structure. Advice should be sought from IKO technical services at design stage.



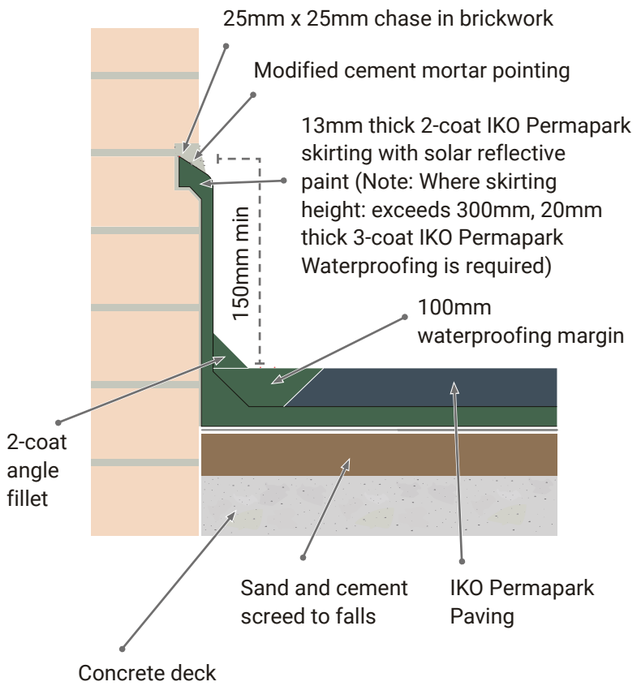
DETAILING

For concrete, brickwork and similar substrates, a two-coat IKO Permapark Waterproofing skirting is applied to all upstands to a nominal thickness of 13mm and a minimum height of 150mm. A two-coat angle fillet should be formed at the junction of the vertical and horizontal waterproofing.

The top of the skirting is splayed and turned into a chase 25mm x 25mm, unless the waterproofing continues horizontally.

In certain circumstances, differential movement between the parapet and structural deck must be catered for by the provision of a freestanding upstand and cover flashing.

Edge Detail to Brick Upstand

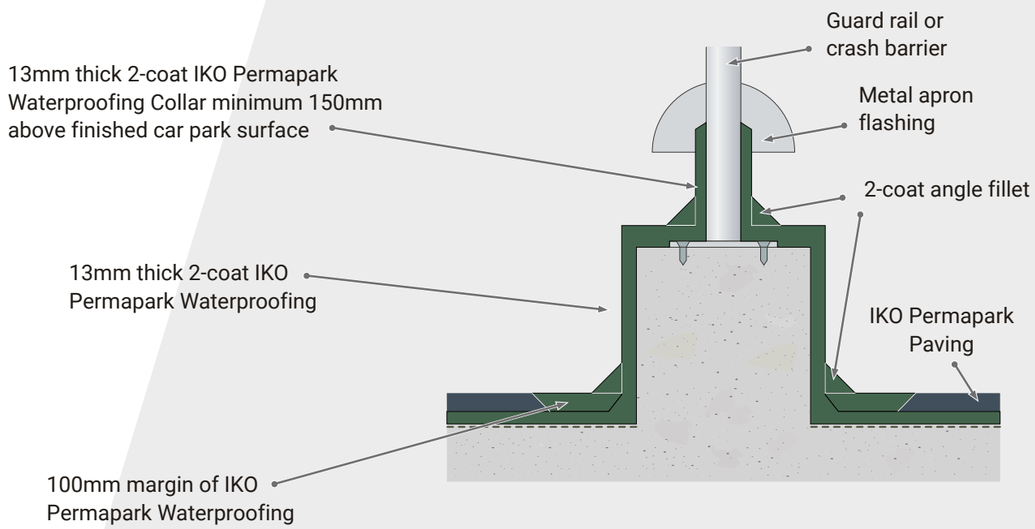


PROTRUSIONS

Concrete plinths should be cast off the structural slab to accommodate crash barriers and handrail stanchions, etc.

The detail should be at least 150mm high, weathered with IKO Permapark Waterproofing and protected with a metal apron flashing.

Concrete Plinth

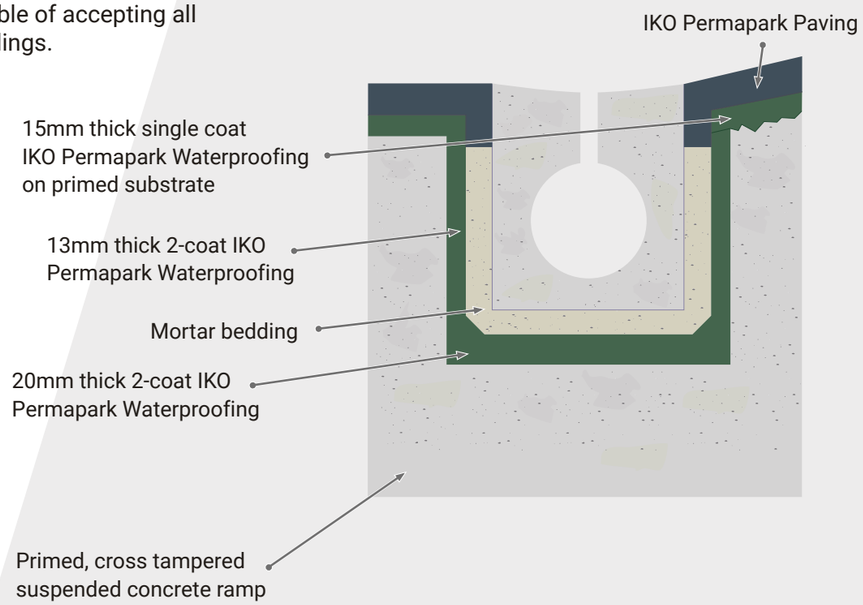


DRAINAGE

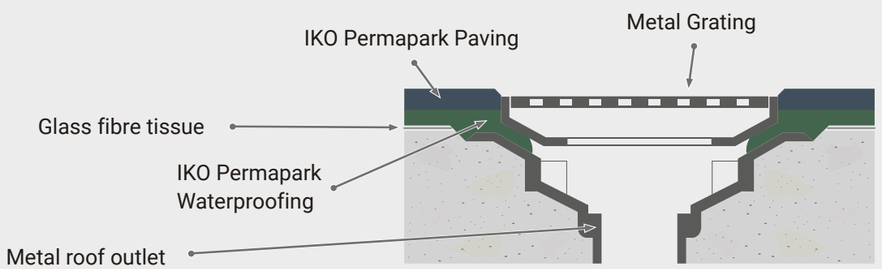
RAINWATER OUTLETS AND DRAINAGE CHANNELS

All rainwater outlets and drainage channels must be specifically designed to be used with a mastic asphalt car park system and capable of accepting all anticipated wheel loadings.

Heavy Duty Drainage Channel to Suspended Ramp



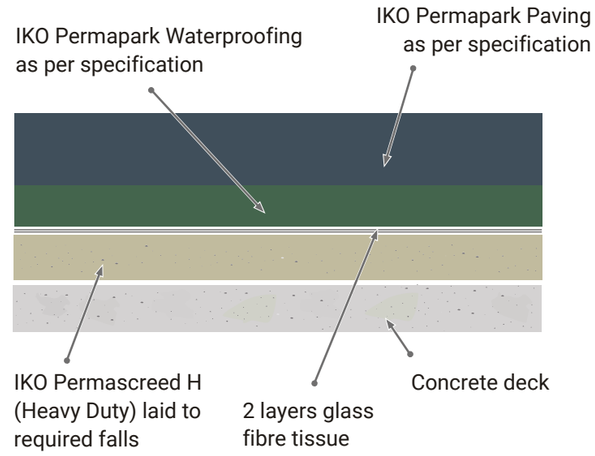
Proprietary Rainwater Outlet



IKO PERMASCREED H

IKO Permascreed H is a screeding solution for car parks and HGV decks and is an efficient way of creating drainage falls and provides a stable base for mastic asphalt vehicle decks. Unlike wet screeds, which require curing time, the waterproofing can be installed as soon as the IKO Permascreed has cooled to ambient temperature.

Made from bitumens, limestone filler and aggregates, IKO Permascreed H is supplied directly to site in purpose-build, hot-charge transporters and can be applied in a wide range of thicknesses and falls. It is suitable for refurbishment and new build projects.



IKO Permascreed H key features and benefits – at a glance:

- Fast application
- Avoids the extended curing time associated with wet cement screeds
- Can be covered or trafficked as soon as it has cooled to ambient temperature
- Impervious to water - can help provide a temporary waterproofing solution
- Long-term durability
- Traditional, simple application
- Manufactured in the UK under the BS EN ISO 9001 Quality Assurance Scheme
- Unaffected by low ambient temperatures
- Moisture-free

MAINTENANCE AND REPAIR

A routine care and maintenance program is fundamental to the long term performance of the waterproofing system. You as the building owner are responsible for ensuring that regular maintenance of the waterproofing is undertaken in line with this document.

As with all Flat roofing and waterproofing systems it is essential proper and adequate maintenance is undertaken at routine intervals to ensure long term performance and life expectancy. This is an integral part of the terms and conditions of any guarantee. Any defects found to the waterproofing must be highlighted and notified to IKO Customer Support department at customersupport@iko.com in accordance with the terms and conditions of the IKO guarantee.

The building owner or client is responsible for providing safe access to and from the vehicle deck. All persons given access must be instructed to use dedicated access and walkways and fully advised on health and safety procedures required.

MAINTENANCE, INSPECTION, TESTING AND REPAIR

A Permapark vehicle deck, which has been designed and installed in accordance with the recommendations of British Standard BS6229 and relevant flat roofing trade associations guidance, should be expected to provide a trouble-free service for many years, provided it is properly maintained. Maintenance inspections should be carried out Bi-annually by a competent person.

IKO Technical Services recommend that Permapark vehicle deck waterproofing / surfacing systems are inspected and maintained in accordance with the guidelines given in BS6229.

BS6229 gives guidance on the content of maintenance manuals and the scope and frequency of routine maintenance inspections applicable to all flat roofing and waterproofing finishes. A Permapark vehicle deck should be inspected at least twice yearly; in autumn to ensure it is clear of leaves, dirt and debris, outlets are not blocked and the roof is free draining; in spring to discover and rectify any damage due to weather. Vehicle decks exposed to high levels of pollution or in close proximity to trees might require more frequent inspections.

Any inspections of a Permapark vehicle deck should include the interior of the building or underside of the deck for signs of water penetration or condensation and for alterations, which might have affected the vehicle deck. Externally, abutting construction, which can affect the performance of the vehicle deck, should also be inspected.

An inspection should also be carried out if one or more of the following situations have occurred.

- Recent construction on or adjacent to the roof
- New roof mounted equipment installed on the vehicle deck
- Unusual weather conditions, such as very high winds or unusually heavy snow.
- Following a fire, vandalism or other known damage to an adjacent structure.

MAINTENANCE CHECKLIST

During regular maintenance inspections the whole of the roof and waterproofing should be systematically checked and a note made of any items requiring attention, supported with photographic or video evidence. For example:

a) General area - Examine the whole of the general vehicle deck area and note any areas of stress, any signs of blistering, ruckling. Record the extent and type of any defects and notify IKO Technical services of such findings. Check for any areas of repair.

   NB: Some de-bonding of the Permapark Paving Wearing Course bay joints may occur. The open bay joints will not normally affect the integrity of the underlying Permapark Waterproofing and therefore do not constitute a risk to water ingress in the short term. However, it is recommended that any open joints are effectively repaired as part of the vehicle deck maintenance program.

   NB: Being a thermoplastic material, the Permapark Paving Wearing Course may be liable to surface marking under vehicle loading during periods of high ambient temperatures, especially in the early stages of it's serviceable life. This should not be regarded as a defect and will not affect the long term waterproofing and wearing properties of the system.

   NB: Mastic asphalt is a thermoplastic material and expands and contracts slightly with changes in ambient temperature. This thermal movement is not usually noticeable but can often be observed in large vehicle deck applications where the Permapark Paving Wearing Course is terminated in the horizontal plane against rigid items such as linear drainage channels and expansion joints. Contraction of the wearing course at these locations should not be regarded as a defect or a risk to water ingress as the integrity of the underlying waterproofing detail will not be affected.

b) Drainage - Inspect all gutters and rainwater outlets and discharge points. Ensure they are clean and that water discharge from the vehicle deck is uninterrupted. Carefully examine the junction between the Permapark Waterproofing and rainwater outlets. Note any apparent defects or signs of silting or ponding. Check internal rainwater goods for blockages or build up of debris. Check leaf guards are secure and in place.

c) Internal - Check inside the building or underside of the deck for any staining or indication of damp penetration or condensation, which could be related to the vehicle deck.

d) Surface protection - Check that any surface protection is in place and complete. Check for any wind damage to the waterproofing or components upon the vehicle deck.

e) Upstands - Check that upstands are intact, fully adhered and adequately protected. Note any areas of distortion or stress and any blistering.

f) Flashings - Check that flashings are intact and fully secured with sealant/mastic pointing complete.

g) Penetrations - Inspect the waterproofing around each penetration; ensure that flashings and upstands are intact. Check if further penetrations have been undertaken since the waterproofing had been completed.

h) Edge trims - Check for signs of movement, displacement, or stress, particularly at the joint between the waterproofing and trims.

i) Capping's - Check for signs of movement, displacement, or stress.

j) Damage - check for damage to the waterproofing by other trades, such as cable penetrations, satellite dishes or PV solar panels, or vandalism, ducting installed or roof mounted equipment after the waterproofing has been completed.

OTHER ITEMS

Any solar reflective coatings used are deemed as a maintenance requirement and additional coats should be undertaken every 5-7 years in accordance with the manufacturer's recommendations. Any coating used should be referred to IKO Technical department prior to its use. Solar reflective coating must be free from materials deleterious to bitumen ie metallic pigments, non-compatible solvent and water based emulsions.

Mastics, sealants and gaskets are deemed as maintenance items and not covered by the IKO guarantee, consideration to any necessary repair or replacement should be undertaken every 5 years.

Alterations to the vehicle deck that affect the waterproofing, including addition of solar panels, services and cabling, penetrations such as crash barriers, vents etc, should be referred to IKO Technical department for approval prior to undertaking any works, and works being undertaken by the original installing roofing contractor.

During any maintenance to any roof mounted equipment or components of the building fabric, the waterproofing must be protected against damage caused by spillages of solvents, oils, fuels etc. or sharp objects such as nails, fixings, glazing etc

The vehicle deck must not be used as a storage area.

Accidental damage to the Permapark vehicle deck system must be notified to IKO customersupport@iko.com immediately to allow a practical method of repair to undertaken.

REPAIRS

Where an IKO Guarantee has been issued, no repairs of the vehicle deck should be carried out without first referring to IKO Customer Support department as described in the guarantee text. All repairs or modifications must be agreed in writing by IKO Technical Services and undertaken by the original installing contractor.

Repair procedure
Repairs should only be carried out after the type and extent of any defects have been noted and their underlying cause identified. The intention of repair work should be to restore the vehicle deck to its original condition and ensure continuing performance. All repairs should therefore be carried out by the original installing contractor in materials, and with accessories and standards of workmanship, compatible with the original installation.

All repairs to be undertaken in accordance with the recommendations contained in BS8218 (Code of practice for Mastic Asphalt Roofing) Clause 11.3.

All repair work should be performed by a qualified mastic asphalt operative. If it is necessary to remove an area of mastic asphalt, the line of the cuts should be covered with molten mastic asphalt until the underlying material has softened. When the area is sufficiently soft, it should be removed carefully. The mastic asphalt should not be removed until this has taken place. Due to the hardness of mastic asphalt paving, electrical or mechanical disc cutters or planer may be used in the removal of defective areas. In no circumstances should a hammer and chisel be used to cut cold mastic asphalt.

When jointing new mastic asphalt to existing mastic asphalt, the principle of the lapped joint should be observed in each individual layer to ensure a distance of at least 75mm from the junction in the preceding coat. . The perimeter of existing mastic asphalt should be softened to permit removal of material for a width of not less than 75 mm to form a stepped joint in each coat. The use of a forced flow hot air torch, or the controlled use of a gas gun may be acceptable for specific requirements; in the case of the latter extreme care should be taken to avoid continuous contact between the naked flame and the mastic asphalt.

Any repair works must allow for the temporary removal of any roof mounted equipment, roof finishes including green roof, ballast or paving etc and their temporary storage on the roof and their subsequent reinstatement or replacement.

Loose flashings should be adequately secured and any defective pointing made good.

Areas of upstand which are detached should be repaired, re-adhered as appropriate and, if necessary, protected by the provision of an additional waterproofing finish.

Any defects at penetrations should be carefully cut out, the area thoroughly cleaned and primed and new seal formed between the vehicle deck waterproofing and the penetration.

Where a movement of edge trims has caused stress failure of the Permapark Waterproofing, the covering should be removed. The ends of the edge trim should be checked to ensure they are adequately secured to the substrate in accordance with the manufacturer's instructions, and the Permapark Waterproofing should then be replaced.

Blisters which are causing distress to the Permapark system should be cut out and the area reinstated by the original installing contractor. Excessive blistering may be indicative of more serious underlying problems and the substrate examined to establish the cause.

All silting, debris and plant life should be removed and the whole of the vehicle deck left clean. In areas of algal or moss growth, it might be advantageous to apply a compatible fungicidal wash.

On completion of all necessary repair work the roof should be re-inspected and the nature and extent of all repair works recorded.

IKO MAINTENANCE SCHEDULE

A record and schedule, or log of annual maintenance and any observations made, must be kept by the Building Owner or their representatives to ensure the long term performance of the roof and waterproofing as defined above, and as a requirement of the terms and conditions of the guarantee.

An IKO maintenance check list is issued with the guarantee upon completion of the works, and should be completed and maintained by the building owner or their representative. It is the responsibility of the building owner or their representatives to notify the IKO Customer Support department as soon as any potential defect arises.

CLEANING

The vehicle deck system must be maintained free of debris that may result in damage. When necessary, low pressure tap water dispensed from a hose and/or brooms may be used to remove dirt and debris from the surface.

Where permissible mild detergents may be used to clean surfaces, then use clean water to remove the detergent. Care should be taken not to allow dirt or debris or other inappropriate materials from entering the drainage system that may cause blockages.

De-icing and snow clearance
The use of rock salt (sodium Chloride) to de-ice vehicular decks will not be detrimental to IKO Permapark system. The suitability of any other proprietary de-icing product should be confirmed by IKO Before use. Any installed Permapark vehicle deck system will be at risk of mechanical damage from snow clearing procedures which involve the use of ploughs; diggers etc. and these should be prohibited from the vehicular deck.

MAINTENANCE MANUAL

A maintenance manual should be prepared, preferably at the time of initial construction, which includes the following basic information and guidance on the maintenance items and scheduling.

- A set of 'as built' drawings including subsequent changes
- A specification, calculations and dates of controlling documents used, including information on the proposed use of the building and any special features such as psychometric conditions, any areas subject to high loads and fragile roof materials
- Record of any surveys or tests carried out on the roofing system whether before handover or after occupation
- A list of designers, contractors, subcontractors and suppliers involved.
- Copies of warranties, guarantees etc including any schedule of requirements and conditions.
- Maintenance check lists, tasks and frequency and type of survey, and photographic records.

IKO IN ACTION
CASE STUDIES

Project: Sainsbury's West Wickham Car Park, Greater London
Area: 2,400m²

The upper deck of the Sainsbury's West Wickham car park had reached the end of its service life. Widespread cracking and water ingress were causing problems for the structure below and affecting daily operations.

Sainsbury's required a long-term solution that could be installed without disrupting public access. Having experienced performance issues with liquid-applied systems in the past, they had moved away from that approach. Instead, they chose mastic asphalt based on its strength, low maintenance requirements, and long-term performance history. The IKO Permapark system offered a proven track record on service decks and was the right fit for a live retail site.

Challenge

The store remained open throughout the works. For the facilities team, keeping the car park operational was essential. Access routes for customers and deliveries had to stay open and clear.

Work on the ramps was restricted to night hours, but nearby residential properties meant noise had to be kept to a minimum, placing additional pressure on the team while maintaining safety and efficiency during deliveries.

From an installation perspective, the condition of the surface added complexity. The existing layer was severely degraded. It contained multiple splits and water pathways, all of which needed to be addressed through full removal and preparation. This required careful sequencing and close attention to detail throughout the project.

Solution

IKO worked with Black Rock Asphalt and KSD Group to install a two-layer IKO Permapark system. This included a 10 millimetre waterproofing layer and a 30 millimetre paving layer. The system was chosen for its performance under frequent vehicle traffic, its reliability over time, and its straightforward application. This was particularly important for a site with limited access and tight working hours.

Hot-charge tankers were stationed at street level to supply the material. The asphalt was discharged into mobile luggers, which were then driven up the ramps to the deck. This method kept the site clear, avoided disruption to store operations, and reduced handling risks.

IKO supplied the full specification and provided regular site support. Field engineers carried out inspections and issued progress reports to ensure the installation met the expected standard. This gave the main contractor and Sainsbury's facilities team clear visibility throughout the works.

Despite the challenges, the project was delivered on time and with no health and safety incidents. The finished surface is robust, fully trafficable, and backed by a 20-year IKO guarantee. The car park remained open to the public throughout the programme, with no disruption to trading and no compromise on safety.

This outcome gave the property team a long-term waterproofing solution with lower future maintenance needs. For the contractor, it demonstrated what can be achieved with accurate planning, specialist expertise, and close support on site.

IKO IN ACTION
CASE STUDIES

Project: Skypark, Glasgow
Area: 2,200m²

A hive of commercial activity, Skypark is based in Glasgow's iconic West End. It is home to 3,000 occupants and almost 50 businesses, including telecoms, solicitors, nurseries and cafes.

In order to uphold its grand reputation, the site underwent a refurbishment that included waterproofing path and road surfaces in and around a car park that was located on the building's fourth storey and within a garden area.

The solution

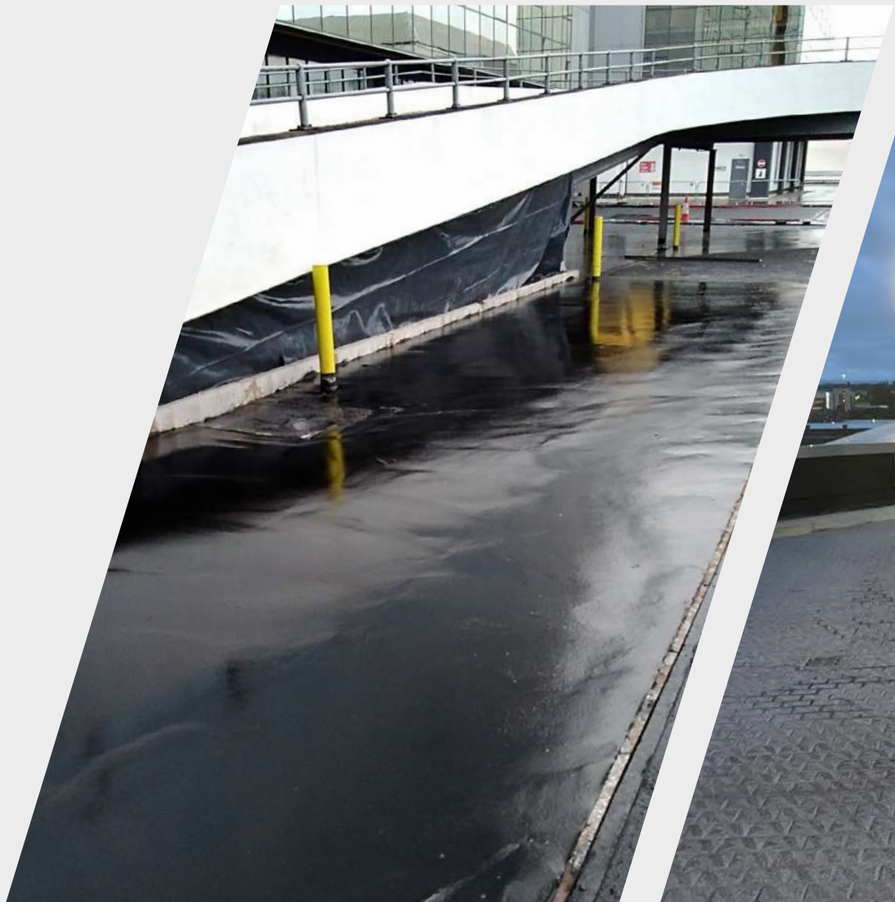
With the work being carried out during the winter, time was particularly of the essence when it came to preparing the surfaces to receive the paving and paviour and ensure a safe, watertight finish leading up to the building's main entrance. During the project, the waterproofing work had to be intermittently interrupted to reduce noise levels and avoid disturbing the nursery on the ground floor.

A total of 2,200m² of IKO Permascreed was installed to create falls at different heights – the first time IKO Permascreed had been used for such a large-scale waterproofing project in Scotland. This was both technically and physically challenging for the spreaders to achieve, especially in relation to making sure their gauges were set correctly. By specifying IKO Permascreed the risk of standing water was eliminated, which enabled the decks to be trafficked a lot sooner than if traditional screeds had been used. It also meant refurbishment work in the office building below could be carried out sooner and helped to improve driver and pedestrian safety throughout the car park site.

IKO Permapark, a polymer-modified mastic asphalt paving system, provided the deck's final, watertight layer complete with a crimped finish.

Result

With help from the IKO team, BriggsAmasco overcame a number of stern challenges to supply the car park with a durable, watertight surface in line with the client's strict budget and deadline requirements.



THE IKO SERVICE

From pre-project design advice through to completion, guarantees and aftercare, IKO's experienced and friendly team will guide you through each stage of any project with an all-round support service.

Consultation
We start by listening to you, your requirements and your brief for the project

Survey
Carried out by our IKO skilled and experienced business managers

Design
Bespoke to your project requirements and the results of the survey

Solution
The result of stages 1-3 culminating in the right IKO specification for your project

Installation
Reassurance that your project will be installed by vetted, registered IKO Contractors

Inspection
Visits to site before and during the project to achieve a quality, reliable installation

Guarantee
A long-term commitment from you deserves an equally long-term commitment from us

Aftercare
The final step, making sure your investment delivers yearsof faultless service.

For further information, contact IKO's Technical Services team on 01257 255771 or gm.technical@iko.com

PROTECTING WHAT MATTERS

As a responsible UK manufacturer of innovative roofing, waterproofing and insulation solutions, we aim to limit the environmental impact of our operations and lifecycle of our products, from maximising energy efficiency and minimising waste to locally sourcing raw materials and reducing carbon emissions from transportation. All IKO manufacturing sites in the UK now also run on renewable energy.

IKO continues to make significant strides forward

We have committed to a programme of continuous improvements that apply to our ways of working, manufacturing and initiatives to reduce, reuse and recycle materials. This includes investing in more sustainable packaging and recycling on-site asphalt and hot charge waste at our Grangemill plant, which enabled us to achieve 100% zero waste-to-landfill in 2021/2022.

Helping our customers meet their sustainability targets

Our R&D and product development teams continue to evolve and grow our portfolio of responsibly sourced products. Within the hot melt sector alone, IKO has been responsible for pioneering the market in terms of environmental responsibility, starting with the first UK manufactured hot melt waterproofing system in 2002. This was followed by other leading innovations, such as zero waste packaging, ant-root and specially-formulated compounds, allowing for lower application temperatures on-site.

Meeting our wider ESG goals

We have introduced a number of initiatives that range from installing bug hotels and nurturing the talent of the future, to offering mental health support to all IKO people. However, we haven't stopped there, our efforts extend beyond our employees.

Whether it's the people who live in the communities around our manufacturing sites, or those who work, live or learn under our roofing and waterproofing solutions, we aim to protect what matters to them most and create a positive legacy.

Building a lasting legacy

As a leader in our industry, we acknowledge our responsibility to not only mitigate our environmental footprint but to be a force for positive change in the face of the ensuing climate crisis.

We are steadfast in our efforts to decrease carbon emissions and improve efficiency throughout our operations to better manage climate-related risks. In line with the Paris Agreement, we have established ambitious science-based targets (SBTs) to achieve net zero with a 90% reduction in Scope 1, 2 and 3 carbon emissions by 2050. We have also pledged to achieve a 42% reduction in Scope 1 and 2 by 2030 from our 2022 baseline.

As we continue our transition to a low-carbon economy, we intend to invest further funds and resources into research and partnerships that enhance our adaptive capacity and resilience against climate impacts, ensuring long-term sustainability for our company, our customers and our communities.

WE'VE HAD OUR
SCIENCE-BASED TARGET APPROVED

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Learn more about our ESG journey

IKO PLC
Prospect Quarry,
Grangemill,
Matlock
DE4 4BW

01257 255771
getintouch.uk@iko.com
Member of the IKO Group

IKO Ireland
Unit 502
Northwest Business Park
Dublin
Ireland
D15 CP3V

+353 1 88 55 090
waterproofing@iko.ie
www.iko.ie

IKO Northern Ireland
2 Longlands Road
Newtownabbey
Co. Antrim
BT36 7LU
Northern Ireland

+44 2890 867079
waterproofing@iko-ni.com
www.iko-ni.com

IKOGROUP.CO.UK

Whilst every care is taken to see 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. Intending purchasers of our materials should therefore verify with the company whether any changes in our specification or application details or otherwise have taken place since this literature was issued.

August 2025