



SIKABIT[®] PRO BITUMINOUS MEMBRANES

THE COMPLETE BITUMINOUS ROOFING SOLUTION
FOR HIGH PERFORMANCE, SAFE2TORCH-COMPLIANT
INSTALLATIONS

SikaBit[®]



SIKABIT® PRO BITUMINOUS MEMBRANES

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COMPLETE ROOFING SOLUTIONS FROM SIKA

Building on Sika's trusted expertise as a global leader in roofing solutions, SikaBit® complements the Liquid Applied Membranes and Single Ply Membranes in the Sika portfolio, with a suite of advanced Bituminous Membranes, offered with the same high standards of technical support and customer service.

INTRODUCING SIKABIT®

PRO BITUMINOUS MEMBRANES

THE NEXT GENERATION OF TRADITIONAL ROOFING SYSTEMS



SIKABIT® OFFERINGS / BENEFITS

SikaBit® Pro Bituminous Membranes offer the best of both worlds technologies, combining the flexibility and tensile strength of a Styrene-Butadiene-Styrene (SBS) modified bitumen membrane with the hardwearing properties and UV stability of Amorphous Poly-Alpha-Olefins (APAO). This ensures exceptional waterproofing protection, along with proven ease of application.

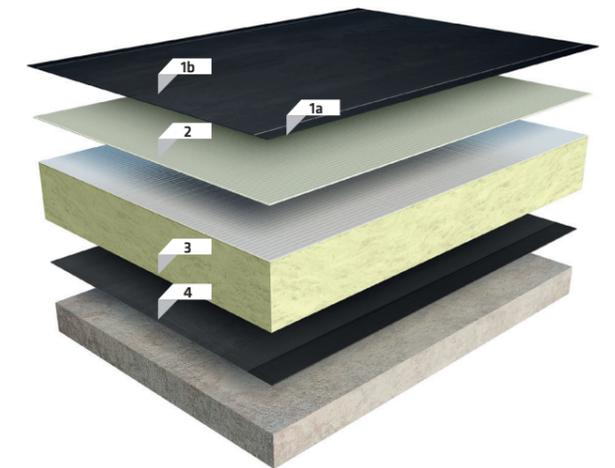
Developed to offer a safe and secure solution for any environment, the SikaBit® Pro Bituminous Membranes range includes detailing materials for completely flame-free Safe2Torch-compliant roof installations.

Our proven solution includes all three elements required for a high performance waterproof roof build-up: air and vapour control layer (AVCL), underlay, and cap sheet. Our range also includes insulation, and a root-resistant membrane for green roof applications.

SIKABIT® FEATURES:

- A complete range of torch-on and self-adhesive bituminous membranes
- High levels of safety for customers, occupiers, and contractors
- A best of both worlds technology cap sheet
- Excellent mechanical properties and durability
- A fully CE-marked system with a Declaration of Performance to EN13707 (Reinforced bitumen sheets for roof waterproofing)
- A fire-tested system in accordance with BS 476 - Building Material and Structures and External Fire Exposure to Roofs
- A BBA-certified system

SYSTEM BUILD UP



Key

- 1a. Cap sheet - SikaBit® Pro SA-940 G UK
- 1b. Cap sheet - SikaBit® Pro T-940 UK or SikaBit® Pro T-940 G UK
- 2. Underlay - SikaBit® Pro SA-730 UK
- 3. Thermal Insulation: PIR
- 4. Air and Vapour Control Layer: S-Vap® HD SA

SikaBit® has been developed to comply with the NFRC's Safe2Torch Guidance. The NFRC (National Federation of Roofing Contractors) published its Safe2Torch guidance in July 2017 to help specifiers put safety first at the design stage of roofing projects. The guidance was designed to aid compliance with the Construction (Design and Management) Regulations 2015, and ties in with the HSE's 'Helping Great Britain to Work Well' Strategy, which promotes safer working environments.

WHAT IS SAFE2TORCH?

Safe2Torch is an NFRC campaign to promote safety best practice when designing and installing roofs using reinforced bitumen membranes.

The guidelines clearly explain roof areas where it is not safe to torch. These include:

- Timber roof decks and roof areas with timber upstands or timber fillets
- Hanging tiles
- Thatched roofs
- Rooflight kerbs and upstands
- Cladded areas
- Lantern rooflights
- Window sills
- Any confined space

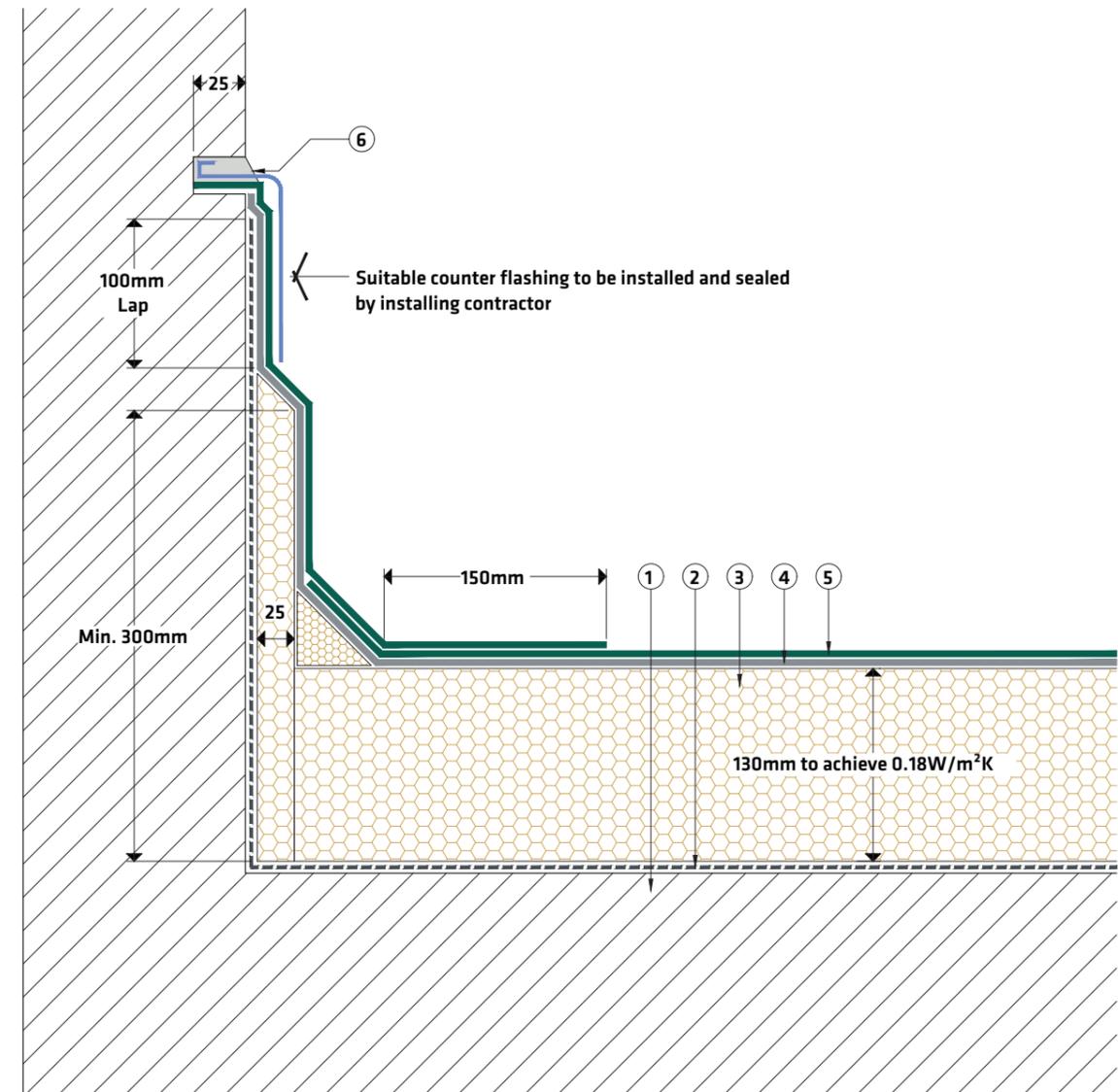
The guidelines also caution against the use of torch-on systems where there is any possibility that the flame could ignite concealed flammable materials in inaccessible areas, such as:

- Louvered vents, air ducts, intakes and outtakes
- Timber, DPC, or sarking membranes beneath fixed metal capping systems
- Existing kitchen extraction plant that is coated in oils or fats
- Flammable wrapping to trunking or ducting
- Existing metal or plastic copings or cappings
- Existing vulnerable plastic curbs, domes or pipes

To comply with Safe2Torch best practice, a self-adhesive membrane must be used on any areas within 900mm of these high-risk locations, and an accurate installation technique must be used in order to guarantee the safety and security of installation teams, occupants, and the building fabric.



INSULATED UPSTAND



Key

- 1 Existing substrates or decks prepared and primed in strict accordance with SikaBit® project specification
- 2  S-Vap® HD Self Adhesive air and vapour control layer applied in strict accordance with SikaBit® project specification
- 3  SikaTherm® PIR Insulation bonded with specified Sika adhesive in strict accordance with SikaBit® project specification
- 4  SikaBit® Pro SA-730 self adhesive underlay applied in strict accordance with SikaBit® project specification
- 5  SikaBit® Pro [T/SA]-940 G UK torch-on/self adhesive mineral cap sheet **AS APPROPRIATE** for the designated location; all applied in strict accordance with SikaBit® project specification, and where appropriate, the approved **Safe2Torch** guidelines
- 6  Specified Sika sealant applied in strict accordance with SikaBit® project specification and Product Data Sheets

SIKABIT® PRO 940

THE MULTI-LAYER BITUMINOUS MEMBRANE CAP SHEET

SikaBit Pro 940® is a 4mm multi-layer bituminous sheet, which combines the advantages of APAO and SBS modified bitumen. The use of APAO membranes enable us to provide very high performance systems, that last longer than traditional membranes.

This multi-layer system allows two different compounds to work together, to provide a technically advanced, high-performance membrane.

The upper layer is made from APAO modified bitumen, which gives excellent heat resistance and durability. The under layer is SBS-modified bitumen, which provides increased elongation, improved flexibility in cold conditions, and excellent resistance to thermo-oxidative aging.

By combining the properties of these two materials, we've ensured that SikaBit® Pro 940 membrane is highly UV-resilient and performs better than either of the compounds in insolation.

SikaBit® Pro 940 has been tested to measure thermo-oxidising aging, in accordance with UEAtc Directives for waterproofing membranes (1984).

The tests revealed that it is resistant to UV aging for 2,000 hours (Xenotest), and to the combined action of sunlight and rainwater for 800 hours (UNI 8629 QUV test).



- Key**
1. Upper Layer (granules or fleece)
 2. APAO Compound
 3. Three layer Reinforcement
 4. SBS Compound
 5. Under Layer (removable film)

During Thermal Hydra Shock tests, when SikaBit® Pro 940 was subjected to 1,500 cycles of thermal shock, it showed no visible signs of deterioration, and the joints remained robust, with both new and artificially-aged joints meeting UEAtc Directive standards.

SikaBit® Pro 940's reinforcement has also been developed following thorough research into the strengthening of waterproofing membranes. Fibreglass matting has been compressed between two layers of non-woven polyester fabric, to give excellent mechanical properties, even at low temperatures.

This composite material is also more resistant to nail tearing than standard reinforcement, enabling mechanical fixing of SikaBit® Pro 940.



CE marking to EN 13707 - Reinforced bitumen sheets for roof waterproofing

External fire performance tested (as a system) according to ENV 1187 and classified according to EN 13501-5: BROOF (t4).

QUV TEST

Test of resistance to the combined action of water and UV rays

One Cycle:

4 hours UV rays at 60°C
4 hours condensed water at 40°C



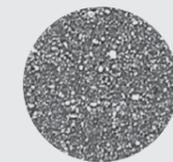
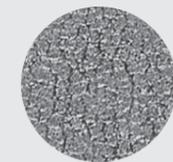
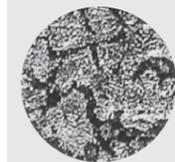
SBS-bitumen membrane after 800 cycles



APP-bitumen membrane after 800 cycles



SikaBit® PRO 940 composite membrane after 800 cycles



THERMAL SHOCK

Test of resistance to rapid temperature changes

One Cycle:

55 minutes IR rays at 80°C
5 minutes water at 15°C



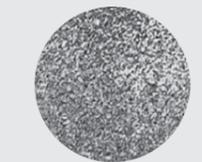
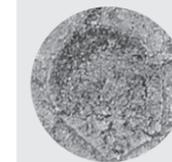
SBS-bitumen membrane after 500 cycles



APP-bitumen membrane after 1,500 cycles



SikaBit® PRO 940 composite membrane after 1,500 cycles



SIKABIT® PRO 940

THE MULTI-LAYER BITUMINOUS MEMBRANE CAP SHEET

The SikaBit® solution for a Safe2Torch system comprises:

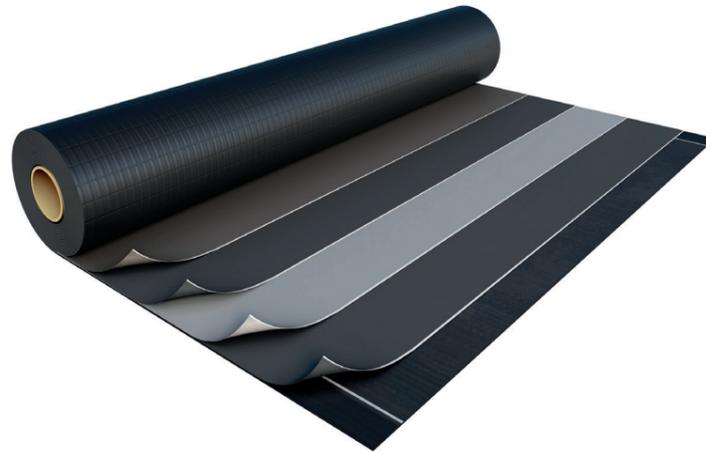
- SikaBit® Pro T-940 G UK: a torch-applied system, coated with mineral granules, which are hot-bonded to the external layer of APAO-modified bitumen, ensuring strong and lasting adhesion.

Designed to provide an attractive finish, and protect the membrane from puncturing, Sika® Pro T-940 G UK can be used as the final layer on exposed roofs.

The sheets are produced with c.8cm side strips, with no slate granules on the upper face, to allow effective sealing of the laps.

- SikaBit® Pro T-940 UK: a torch-applied system, coated with a new multi-functional fleece called Texflamina. This smooth finishing is the perfect solution for non-exposed roofs that will be covered.

- SikaBit® Pro SA-940 G UK: a self-adhesive system, designed for use in torch-free zones. This membrane offers the same properties and performance as the rest of the range, but includes a thin layer of adhesive compound, to provide a fully-bonded, torch-free solution.



FEATURES

BENEFITS

Upper layer: APAO-modified bitumen

- Excellent heat resistance (melting point >150°C)
- Excellent durability and higher life expectancy

Under layer: SBS-modified bitumen

- Increased elongation (50%)
- Low temperature workability (-25°C)

Three-layer reinforcement

- High tensile strength (750/650 N/50mm)
- High shear resistance (650/550 N/50mm)
- High impact resistance (1,250mm)

SBS compound and fibreglass mat

- High dimensional stability even at high and low temperatures (-0.20/+0.10%)
- Excellent fatigue strength

SIKABIT® PRO SA-730

A SELF-ADHESIVE UNDERLAY SHEET FOR SAFE2TORCH EXCLUSION AREAS

SikaBit® Pro SA-730 UK is a 3mm self-adhesive membrane, suitable for use in torch-free zones. It has been reinforced with a non-woven polyester fabric composite, and stabilised with fibreglass.

The special compound of radial and linear elastomeric thermoplastic polymers and tackifying resins, used in SikaBit® Pro SA-730 UK, ensures that it offers excellent adhesion, even at low temperatures.

The membrane can be applied onto any of the most commonly used building materials, including metal decks, plywood, OSB, polystyrene, extruded foam, polyurethane foam coated with polyethylene, and fibreglass felt.

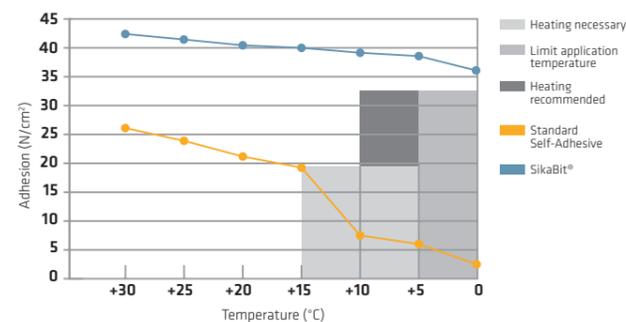
The adhesive face has no granules, to ensure an excellent bond, and it is protected by a white-coloured film, which is easily removed during installation.

The membrane's upper face is coated with polyethylene film, allowing other membranes to adhere securely onto the SikaBit® Pro SA-730 UK layer.

A longitudinal self-adhesive strip ensures fully-bonded overlapping of the membrane. This too, is protected by a removeable film.



TACK ADHESION TEST ON STEEL



FEATURES

BENEFITS

SBS-modified bitumen and tackifying resins

- High elasticity (40%)
- Low temperature workability (-25°C)
- Excellent adhesion even at low temperatures

Reinforcement stabilised with fibreglass

- High tensile strength (450/400 N/50mm)
- High shear resistance (350/300 N/50mm)
- High impact resistance (1,000mm)

Polyethylene foil on the upper face

- Excellent adhesion to the cap sheet

Self-adhesive

- Safe and quick to install
- No special equipment required

S-VAP® HD SA

THE AIR AND VAPOUR CONTROL LAYER FOR SIKABIT® BITUMINOUS MEMBRANES

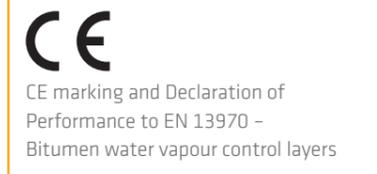
S-Vap® HD SA is a 3.0kg/m self-adhesive air and vapour control layer (AVCL), for torch-free installation. Fabricated from SBS-modified bitumen, it requires no hot works.

S-Vap® HD SA consists of a polymer-distilled bitumen, modified with styrene-butadiene-styrene (SBS) polymers. The underside has been hot-spread with a specially formulated elastomeric mixture, which remains flexible, even at low temperatures, or during long periods of storage.

An aluminum sheet, combined with polyester non-woven material that has been stabilised with fibreglass reinforcement, provides excellent resistance to vapour migration. This allows S-Vap® HD SA to be applied on roofs with high humidity, up to 80% at 20°C.

The upper surface is coated with a polyethylene film, for ease of application and bonding of the thermal insulation.

An overlap strip, protected by a silicon film, provides secure sealing of sections of membrane.



FEATURES

BENEFITS

SBS-modified bitumen

- High elasticity (15/20%)
- Low temperature workability (-25°C)
- Excellent adhesion even at low temperatures

Reinforcement stabilised with fibreglass and aluminium

- Excellent vapour barrier even after aging

Polyethylene foil on the upper face

- Excellent adhesion to thermal insulation

Self-adhesive

- Safe and quick to install
- No special equipment required



SIKABIT® PRO T-240 RT

A ROOT-RESISTANT BITUMINOUS MEMBRANE FOR GREEN ROOFS

SikaBit® Pro T-240 RT is a 3mm torch-applied waterproofing membrane, with a root-resistant additive. It has been designed especially to protect roof gardens, sunken works, and gravel-covered roofs.

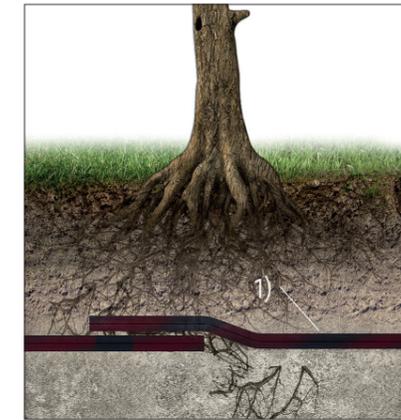
SikaBit® Pro T-240 RT is fabricated using distilled bitumen, which has been modified using elastoplastomeric polymers, to increase durability, and enhance resistance to high and low temperatures. It has root-resistant properties, thanks to a unique additive.

The reinforcement consists of a heavy non-woven polyester fabric, which ensures excellent mechanical resistance, exceptional elongation, and superior resistance to puncturing and laceration.

Both faces are coated with polyethylene film, facilitating ease of installation.

SikaBit® Pro T-240 RT resists the chemical effects of humic acids and fertilisers, allowing the membrane to be in direct contact with soil, and preventing penetration by roots.

Certification FORSCHUNGSANSTALT GEISENHEIM to guarantee resistance to roots conforms to the European test method EN-13948.



Traditional membrane with inhibitor, reinforced with film or seamless foil



SikaBit® PRO T-240 RT

FEATURES

Elastoplastomeric-modified bitumen

Reinforcement stabilised with fibreglass

BENEFITS

- High elasticity (40/40%)
- Low temperature workability (-15°C)
- Excellent heat resistance (flow resistance >120°C)

- High tensile strength (700/500 N/50mm)
- High shear resistance (600/400 N/50mm)
- High impact resistance (1,250mm)
- Excellent dimensional stability (-0.30/+0.10%)

WHY CHOOSE SIKABIT®?

QUALITY ASSURED PRODUCTS



The best of both worlds technologies used to develop the SikaBit® range ensure that the system offers superior strength and flexibility for a hard-wearing, long-lasting installation



SikaBit® products are BBA-approved

EXCEPTIONAL SERVICE



A consultation and roof condition survey carried out by our experienced technical team



Design and specification support from our experts



A hand-picked national network of experienced contractors, trained and quality assured by us



Site support with every application



A range of guarantee options

GUARANTEES YOU CAN TRUST



SikaBit® Product Guarantees of between 10 and 25 years are available, all supported by workmanship assurances from our SikaBit® Certified Contractors



Sika can also offer our SikaBit® Extended Product Guarantee & Installation Certificate, which covers the entire roofing system - underwritten by Sika, this includes additional cover for workmanship should the contractor cease trading during the guaranteed service life of the roof, giving you complete peace of mind

To arrange a site visit, please call 01772 255001 or visit: www.sikabit.co.uk

TRAINING



- Sika provides training in Safe2Torch-compliant installation of the SikaBit® range, to experienced and competent roofing professionals, at our dedicated, purpose-built Training Academy in Preston
- Our training course combines theory, demonstrations, and a practical application workshop, to give installers hands-on experience of the SikaBit® range
- Designed exclusively for our Certified Contractors, the training course focuses on ensuring that installers have an in-depth knowledge of our SikaBit® systems, and experience of the techniques required to install them correctly

Sika Roofing - Applications Support in 2018

4 Roofing Brands



23 Team Members



7,000 Field Technician Visits



1,350 Contractors Attended On-Site Training Support Vehicle Workshops



650 Contractors Trained at the Sika Training Academy



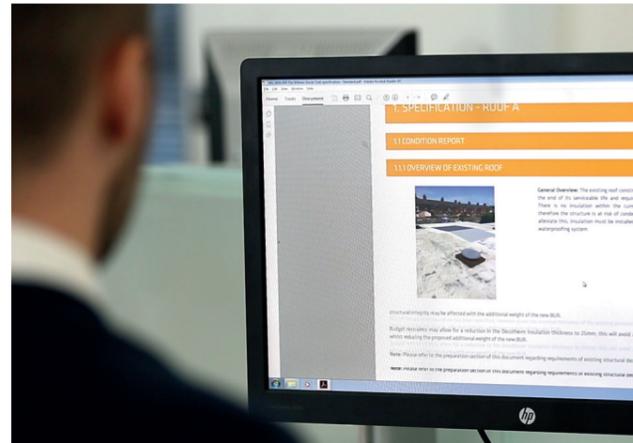
325 Contractors Trained under the Basic Competency Programme (BCP)



458 Attendees at Introduction to Roofing Courses



DESIGN CONSIDERATIONS AND GUARANTEES



DESIGN CONSIDERATIONS

Following a detailed inspection of the existing roof, the following design factors should be established:

- The required thermal performance / u-value of the roof
- Any additional loading to the existing roof structure due to the new roof build-up
- The required compressive strength of the insulation where permanent plant or equipment is / will be located on the roof
- The required fire performance
- Any acoustic requirements
- Wind uplift calculations
- Drainage requirements, including falls to the roof surface
- Lightning protection requirements
- Safety provision (collective measure, fall restraint or fall arrest)
- Rooflight requirements

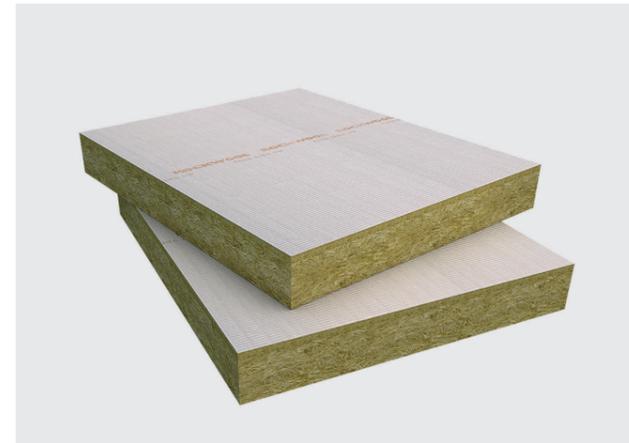
Our technical team will consider all these factors during a comprehensive SikaBit® roof survey, and include appropriate solutions in their recommendations.

GUARANTEE OPTIONS

We offer a flexible approach to guarantees, so that you can select a guarantee that meets your requirements:

- Our SikaBit® Product Guarantees certify product performance, with workmanship assurances provided by the SikaBit® Certified Contractor that carried out the work
- Our SikaBit® Extended Guarantee & Installation Certificate covers the complete system, including any Sika-branded components, along with additional workmanship assurances, in the event that the contractor should cease trading during the guaranteed service life of the installation
- These guarantees are subject to various criteria, including a condition survey and technical specification, carried out by the Sika team; they are only valid when the SikaBit® system is installed by one of our carefully selected Certified Contractors
- Our guarantees are supported by Public and Products Liability Insurance, as well as Professional Indemnity covering design

ADDITIONAL PRODUCTS



SikaTherm® Insulation



Sika® Rooflite Rooflights and Access Hatches



SikaBit® Constant Force Post and SikaBit® Versirail Edge Protection



Lightning Conductor Clips



Trims



Water Management System

SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:



LIQUID APPLIED ROOFING



SINGLE PLY ROOFING



CONCRETE



CONCRETE REPAIR



STRUCTURAL STRENGTHENING



WATERPROOFING



JOINT SEALING



FAÇADE STRUCTURAL ADHESIVES



FLOORING



INDUSTRY



DISTRIBUTION



BUILDING TRUST



WHO WE ARE

Sika Limited and Sika Ireland Limited are part of the global Sika Group, specialising in the manufacture and supply of chemical based products. Sika have a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and the motor vehicle industry. Sika has subsidiaries in 101 countries around the world and manufactures in over 200 factories. With more than 20,000 employees Sika generates annual sales of CHF 7.09 billion (£5.45bn). We are also committed to providing quality, service, safety and environmental care.

In the UK and Ireland, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds and Dublin with more than 870 employees and a turnover of more than £260 million.

The information, and, in particular, the recommendations relating to the application and end use of Sika® products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. Please refer to our homepage www.sika.co.uk for our current standard terms & conditions applicable to all orders. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.



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