IKO EASYSEAL UNIVERSAL UNDERLAY

PRODUCT INFORMATION

IKO Easyseal Universal Underlay is an elastomeric self-adhesive underlay incorporating a robust polyester reinforcement for greater durability, coated with SBS modified bitumen. The product has a release film backing and a fine mineral surface that forms an ideal surface for the bonding of subsequent torch-on cap sheets.

Surface	Product Code
Fine Mineral	73000016

USE

To act as an underlay or vapour check within a torch applied built-up flat roof system.

INDEPENDENT ACCREDITATION

CE

0086-CPD-537586

FEATURES & BENEFITS

Self-adhesive coating – no gas torches required
Fine mineral surface – Ideal for use as an underlay to torch on cap sheets
Polyester base – robust carrier material
SBS modification – low temperature flexibility

PERFORMANCE & COMPOSITION

Composition:	SBS modified bitumen
Form:	Roll
Colour:	Fine Mineral
General Dimension Data	
Length:	16m
Width:	1m
Mass/Weight:	2.25kg/m²
Roll Weight:	36kg
Carrier:	Polyester

SPECIFICATION

All construction detailing and specification should conform to UK Building Regulations.

Relevant Codes of Practice and British Standards, should also be used for guidance, in particular it is recommended that reference is made to the relevant parts of:

roofing – Guide to selection and specification;
BS 8217:2005 Code of Practice for Reinforced Bitumen Membranes for roofing;
BS 6229:2003 Code of Practice for Flat Roofs with continuously supported roof coverings;
BS5250:2011 Code of Practice Control of Condensation within Buildings.

Refurbishment work undertaken on existing flat roofs is likely to be reportable to Local Authority Building Control (LABC) and it is advisable that any proposed works are discussed with the LABC prior to commencement, or the installing contractor is a member of the Competent Roofer Scheme. www.competentroofer.co.uk

Where required by building warranty providers i.e. NHBC, LABC, etc. installers and those undertaking specifications should seek guidance from Technical Standards as issued by the provider in addition to the above.

Specifiers should also seek the guidance of the National Federation of Roofing Contractors (NFRC), with particular reference to their '**Safe2Torch**' campaign.

DESIGN CONSIDERATIONS

CONFIGURATION

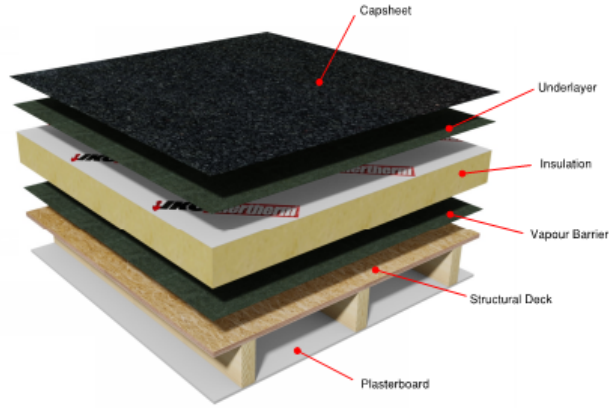
The construction of the roof deck and ceiling has an important effect on the behaviour of the waterproofing material on top.

The building industry uses the terms WARM ROOF and COLD ROOF to describe the two different types.

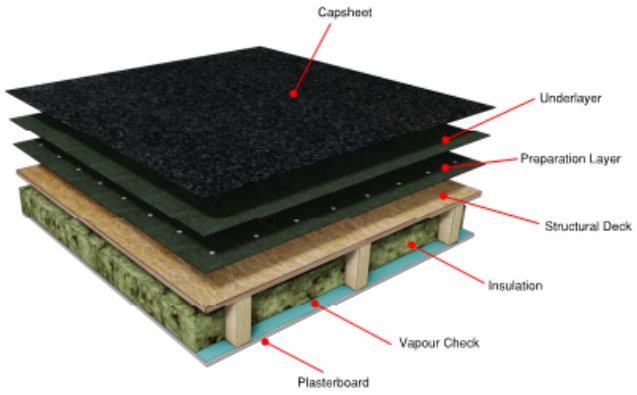
Most roofs require insulation and current practice is for insulation to be placed above the roof deck, often referred to as a 'warm roof'. No void ventilation is required with this design.

Alternative practice is to install the insulation within the voids below the roof deck. Often referred to as a 'cold roof', this type of arrangement must include ventilation to the void areas to remove the risk of condensation.
It is advisable that cold roof design is ventilated at the rates prescribed within the aforementioned British Standards and Approved Codes of Practice.

WARM ROOF



COLD ROOF



FALLS AND DRAINAGE

To reduce the effect of water ponding on the roof finish, a minimum finished fall of **1:80** should be achieved; however designs should be to 1:60 to take into account any inaccuracies within the deck construction.

VAPOUR CONTROL

It is essential that roofing solutions include layers to control and inhibit the movement of vapour into the building fabric.

IKO Easyseal Universal Underlay can be utilised when bonded to the top of the structural deck, prior to the bonding of the insulation layer in warm flat roof construction.

Alternatively **IKO Easyseal SA Vapour Control Layer** where a higher degree of vapour resistance is required.

CONSTRUCTION

MATERIAL HANDLING

Checking: Material should be checked to ensure that they conform to the project specification.
Handling: Material should be unloaded and handled with care to avoid damage.
Site Storage: Material should be stored on end on a firm, clean base protected from direct sunlight.

PRIOR TO COMMENCEMENT

Application must always follow good, safe working practice. Prior to commencing works, it is advisable to consult Health and Safety Executive Guidance documents such as HSG33 'Health and Safety in Roof Work', irrespective of levels of competence, to ensure all works are being planned and undertaken in a safe, pragmatic manner.

Additionally it is important to be aware of all the information given by your employers Risk Assessments and understand all Method Statements produced for undertaking the work.

Application will require the use of hot air guns on laps, and users should be competent, conversant and capable of using such items. Care must be taken when hot air guns in close proximity to combustible materials, decorative coatings and heat sensitive materials.

When using this product with torch applied materials it should be done only by those competent, conversant and capable of undertaking roofing works safely and that are experienced in the use of roofing torches and procedures. Torch applied membranes should not be used in close proximity to combustible materials, decorative coatings and heat sensitive materials.

Roofing contractors should be fully conversant with the guidance of the National Federation of Roofing Contractors (NFRC) '**Safe2Torch**' campaign.

PREPARATION

Before commencement of the roofing works, the roofing contractor should ensure that the surfaces to receive the new waterproofing system are sound and capable of accepting the imposed loading of the new waterproofing system and its installation.

Existing deck substrates should be assessed by a competent roofer or suitably qualified professional to ascertain their suitability in relation to structural strength, falls and drainage provision.

Surfaces receiving the **IKO Easyseal Universal Underlay** must be clean, dry and fit for purpose.

SETTING OUT

When setting out the field area, the rolls of material should always be laid in the same direction, never cross bonded.

Underlay should be arranged to achieve a staggered bond with the preceding underlayers with half width layers being used to maintain bond patterns where necessary (Figure 1).

Sheets should be overlapped to form the required 75mm side laps and 100mm end laps. Ends laps must be staggered so that they do not occur in the same position in adjacent sheets.

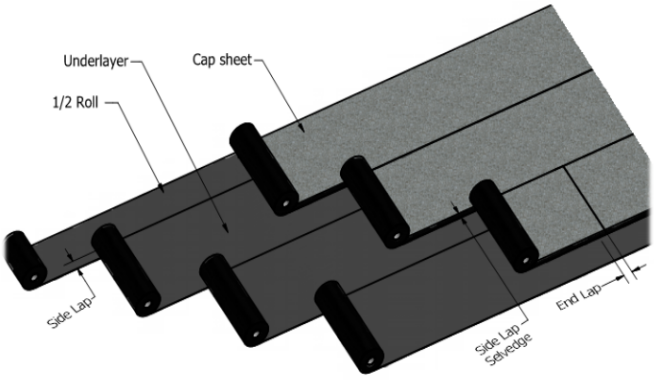


Figure 1 Setting Out to Staggered Laps

BONDING - COLD ROOF

When using **IKO Easyseal Universal Underlay** as part of a cold roof arrangement, the underlay should be installed onto a deck primed with **IKOpro SA Bitumen Primer** in a manner appropriate to the deck substrate.

Allow the primer to completely dry, and position the membrane. Once positioned, roll back to a central point using a cylindrical former i.e. plastic soil pipe and carefully slit the release film.

As one operative progressively removes the release film, another operative rolls the former forwards applying equal pressure to the membrane. Once complete, a soft brush may be employed to ensure a full bond is achieved with the primed surfaces (Figure 2).

All side (75mm) and end laps (100mm) must be fully bonded by hot air to exude a bead of bitumen from the joint.

When approaching an angle where the sheet will change from a horizontal to a vertical configuration, use a seam or penny roller to press the membrane firmly into position. Provide heat activation to all changes of direction of the membrane to ensure a full bond is achieved throughout the detail.

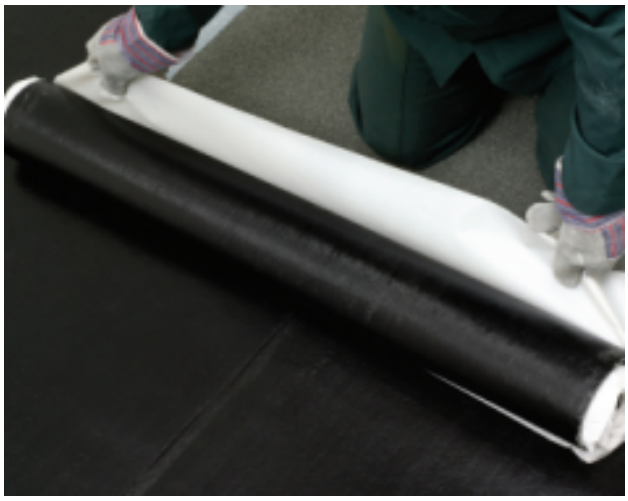


Figure 2 Application of self-adhesive membranes.

BONDING - WARM ROOF

When using **IKO enertherm ALU** flat roofing insulation, the surface must be clean, dry, grease free and fit for purpose.

It must be prepared with **IKOpro SA (self-adhesive) Bitumen Primer** at the rates prescribed by the respective Technical Data Sheet.

Install **IKO Easyseal Universal Underlay** to the primed surface as soon as possible after the primer is completely dry.

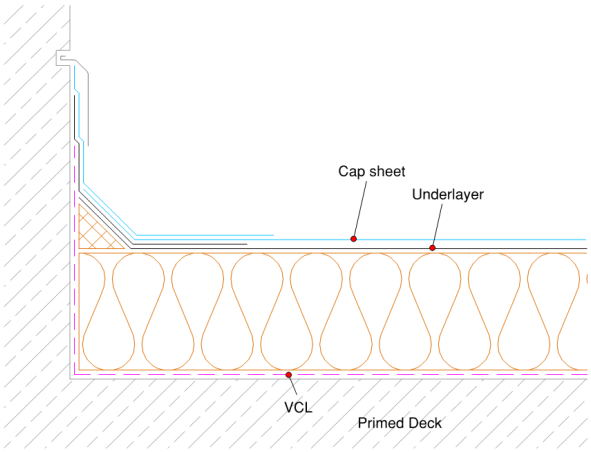
All side (75mm) and end laps (100mm) must be fully bonded by hot air to exude a bead of bitumen from the joint.

When approaching an angle where the sheet will change from a horizontal to a vertical configuration, use a seam or penny roller to press the membrane firmly into position. Provide heat activation to all changes of direction of the membrane to ensure a full bond is achieved throughout the detail.

DETAILING

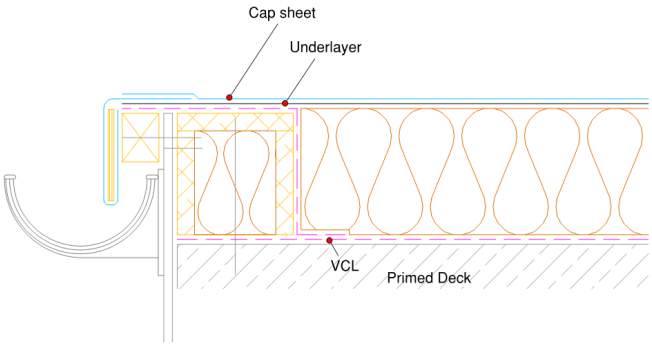
All waterproofing detailing must be undertaken as seperate flashings, and must be fully bonded.

Upstands and skirtings – (Warm Roof)



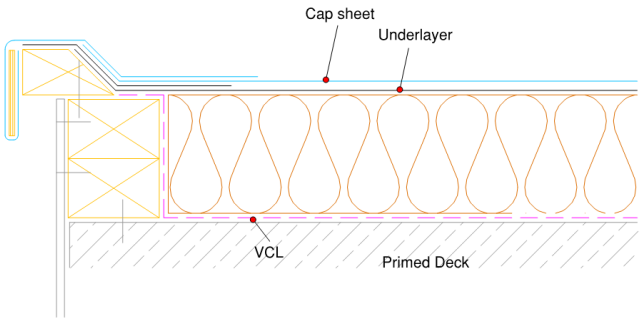
The vapour control layer (VCL) should be set out to facilitate a minimum 50mm link with the waterproofing layers, with completed detailing encapsulating the insulation. At all skirtings and upstands, the waterproofing should be at least 150mm above the level of the finished roof level. Care must be undertaken not to bridge over any DPC or Cavity Tray positions.

Drip edge detail – (Warm Roof)



A welted drip edge should be formed wherever drainage to an external guttering is required. The vapour control layer (VCL) should be set out to facilitate a minimum 50mm link with the waterproofing layers, with completed detailing encapsulating the insulation. A plywood former should be introduced to form the drip. In warm roof build ups an insulated hard edge, 10mm thinner than the insulation thickness, should be incorporated.

Check kerb – (Warm Roof)



Check kerbs should be constructed to form a 50mm water check to prevent water from running over the edge incorporating a welted drip detail. The vapour control layer (VCL) should be set out to facilitate a minimum 50mm link with the waterproofing layers, with completed detailing encapsulating the insulation.

Other typical details are available via the IKO website, or alternatively via NFRC information sheets – www.nfrc.co.uk

POST COMPLETION

To obtain the best possible life expectancy, all flat roofs should be inspected in accordance with the requirements of BS 6229 Code of Practice for Flat Roofs with continuously supported roof coverings.

DURABILITY

When installed and conditions are maintained as per IKO literature, relevant Codes of Practice and UK Building Regulations, the product will contribute to the durability stated by the respective torch applied cap sheet.

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.

IKO reserve the right to amend and/or withdraw this document without notice.

Intending purchasers of our materials should therefore verify with the company whether any changes in our specification, application details, withdrawals or otherwise have taken place since this literature was issued.