

# **Technical Data Sheet**

December 2019

# IKO EASYSEAL SELF-ADHESIVE UNDERLAYS

### PRODUCT INFORMATION

There are two IKO Easyseal Self-Adhesive Underlays (partially and fully bonded) both of which comprise of a glass-fibre reinforced carrier coated on either side with self-adhesive bitumen SBS elastomeric coating. The upper surface is protected with a polythene film that facilitates rapid bonding of the subsequent selfadhesive waterproofing layers. The self-adhesive coating to the underside is protected by a release film.

### IKO Easyseal Self-Adhesive Partially Bonded **Underlay**

The underside has a self-adhesive bitumen coating that provides a 40% partial bond to primed substrates. The underside also has a 75mm selvedge that facilitates a full bond and rapid installation of the lap joints.

#### IKO **Easyseal** Self-Adhesive **Fully Bonded Underlay**

The underside has a self-adhesive bitumen coating that provides a full bond to primed substrates.

Product	Surface	Product Code
Fully Bonded	Film	73070008
Partially Bonded	Film	73170008





### **USE**

For use as reinforced bitumen underlays within built-up roofing systems, for new build and refurbishment, commercial and domestic projects.

Suitable for roof pitches up to 5° if reliant on adhesion alone. For roof pitches over 5° the underlays should also be mechanically fastened in accordance with BS8217 table 5.

These underlays must be used in conjunction with an IKO Easyseal Self-Adhesive Cap Sheet and be installed in accordance with IKO recommendations.

#### Partially Bonded

For use on only main flat roof areas, it allows for a partial bond to be achieved to the substrate therefore reducing the risk of blistering from any trapped vapour.

### **Fully Bonded**

For use with all associated detailing, abutments, internal gutters and penetrations as part of a two layer built up roofing application. It may also be considered for use on main flat areas in cold roof build ups.

# INDEPENDENT ACCREDITATION





# **FEATURES & BENEFITS**

Self-adhesive coating – no gas torches required Glass fibre base - robust carrier material SBS modification – low temperature flexibility

### COMPOSITION

**Bitumen Modification:** SBS

Carrier: Glass fibre

Form: Roll

Colour: Film Upper

Length: 8m Width: 1m

Mass/Weight: 2.25kg/m2 **Roll Weight:** 18kg

### **PERFORMANCE**

For key product performance characteristics, please refer to the IKO Declaration of Performance (DoP)

# **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:

BS 8747:2007 Reinforced bitumen membranes for roofing - Guide to selection and specification;

BS 8217:2005 Code of Practice for Reinforced Bitumen Membranes for roofing;

BS 6229:2018 Code of Practice for Flat Roofs with continuously supported roof coverings;

BS5250:2011+A1:2016 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, unless 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.

The National Federation of Roofing Contractors (NFRC) also provides a Responsible Specification Checklist that may be useful during this stage www.nfrc.co.uk

## DESIGN CONSIDERATIONS

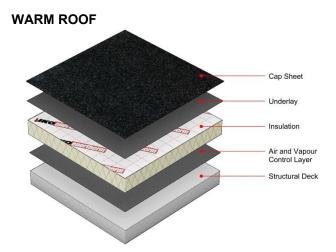
#### CONFIGURATION

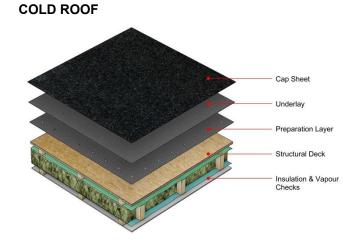
The construction of the roof deck and ceiling has an important effect on the behaviour of the waterproofing material on top.

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.





#### STRUCTURAL DECKS

It is essential that the deck is suitably fit for purpose and is structurally adequate in supporting the waterproofing system and any associated loadings. For deck selection and determining suitability, the guidance of the relevant Approved Codes of Practice should be sought.

#### **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 1:40 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. For further guidance please contact IKO Technical services department.

### 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.

If application proposals include the use of hot air guns, 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.

#### **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.

Deck surfaces receiving the self-adhesive membranes must be clean, dry and fit for purpose. It must be prepared with **IKOpro Easyseal Bonding Agent** at a coverage rate of 3-5m<sup>2</sup> per litre.

When undertaking warm roof installation, the vapour control layer must be fully bonded to the primed deck with the subsequent insulation layer laid and bonded in accordance with the manufacturers details.

#### **SETTING OUT**

When setting out the field area, the rolls of material should always be laid in the same direction, never cross bonded. Top layers should be arranged to achieve a staggered bond with the preceding underlayers with half width layers being used to maintain bond patterns where necessary.

The underlay sheets should be overlapped to form 75mm side laps and 75mm end laps. The cap sheet should be overlapped to form 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 or underlying sheets.

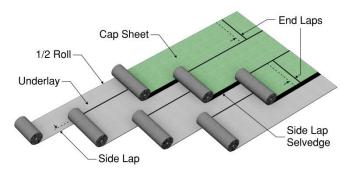


Figure 1 Setting Out to Staggered Laps

#### **BONDING**

The underlayer is fully bonded to the primed receiving substrate i.e. deck or insulation.

The capsheet bonds directly to the upper surface of the underlay requiring no further priming. Bond is achieved by a sequential removal of the release paper to expose the self adhesive bitumen, and applying pressure equally from centre to edge of the sheet, as the roll moves forward.



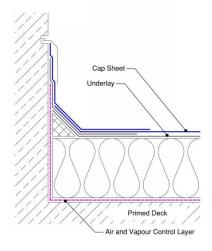
Figure 2 Application of self-adhesive system.

End laps and detailing between the self adhesive underside and mineral top surface must incorporate **IKOpro High Performance Roofing Felt Lap Adhesive** to achieve the required bond between the self adhesive underside and top surface of mineral. At laps, apply a generous snaking 5mm bead to the topside of the lower cap sheet surface across the full width of the overlap. Using a spreader, spread the adhesive over the surface and firm press the surfaces together.

#### **DETAILING**

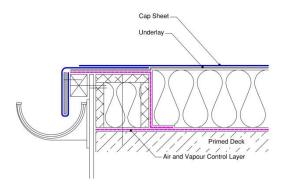
All waterproofing detailing must be undertaken as seperate flashings.

### <u>Upstands and skirtings – (Warm Roof)</u>



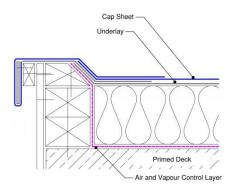
At all skirtings and upstands, the waterproofing should be at least 150mm <u>above</u> the level of the finished roof. Care must be undertaken not to bridge over any DPC or Cavity Tray positions.

#### Drip edge detail - (Warm Roof)



A welted drip edge should be formed wherever drainage to an external guttering is required. 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. In warm roof build ups a timber hard edge should be incorporated.

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 IKO Easyseal Self Adhesive Underlays will have a life expectancy of up to 20 years.

# **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.