# **SECTION 6.6**





# **Technical Data Sheet**

December 2018

# **IKO EASYSEAL PRO CAP SHEET**

## PRODUCT INFORMATION

IKO Easyseal Pro Cap sheet is a high performance self-adhesive cap sheet consisting of a polyester base, coated with SBS modified self-adhesive bitumen.

	Product Code
Black	73000008



## USE

To act as a cap sheet within the IKO Easyseal built-up flat roof system.

## INDEPENDENT ACCREDITATION





The product carries a Declaration of Performance Certificate.

## **FEATURES & BENEFITS**

Fire safe – no naked flames used during installation **High strength** – tough polyester based cap sheet High flexibility - elastomeric bitumen coating Performance - product carries a 20 year material quarantee

## PERFORMANCE & COMPOSITION

Composition: SBS Modified

Form: Roll

Colour: **Black Slate** 

**General Dimension Data** 

Length: 8m Width: 1m

Mass/Weight: 3.82kg/m<sup>2</sup> **Roll Weight:** 30.6kg Carrier: Polyester

**Performance Data** 

**External Fire Performance** 

(EN 13501-1): B<sub>ROOF</sub>(t4)

Water tightness (kPa)

(EN1928):

**Maximum Tensile Force** 

(EN 12311-1): Longitudinal ≥400

Transverse ≥400

**Pass** 

**Elongation (EN 12311-1):** Longitudinal ≥18%

Transverse ≥18%

Resistance to Static Loading

(EN 12730 (A): 20kg

**Resistance to Tearing** 

(EN 12310-1): Longitudinal ≥160N

Transverse ≥160N

Flexibility at low temperature

(°C) (EN 1296): Upper ≤-10 Lower ≤-10

## **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 6229:2003 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. <a href="https://www.competentroofer.co.uk">www.competentroofer.co.uk</a>

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

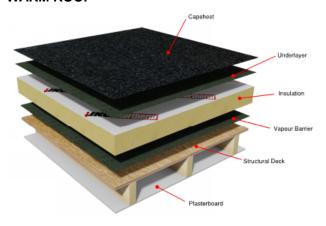
The construction of the roof deck and ceiling has an important effect on the behaviour of the waterproofing material on top.

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

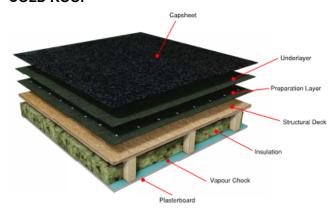
Most roofs require insulation and current practice is for insulation to be placed above the roof deck, often referred to as a 'warm roof'. No void ventilation is required with this design.

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.

### **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 Vapour Control Layer** should be used as a vapour control layer, bonded to the top of the structural deck, prior to the bonding of the insulation layer in warm flat roof construction.

# **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 of materials using hot air welders should only be undertaken by those competent, conversant and capable of undertaking roofing works safely, and that are experienced in the use of hot air welding equipment and procedures. Care should be taken 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.

**IKO** Easyseal Pro Cap Sheet must be used in conjunction with the **IKO** Easyseal Underlay, which must be clean, dry and free from any contaminants.

## **SETTING OUT**

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

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

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

## **BONDING**

Install IKO Easyseal Pro Cap Sheet directly to the surface of the IKO Easyseal Underlay as soon as practicable.

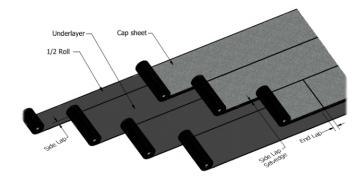


Figure 1 Setting Out to Staggered Laps

**IKO Easyseal Pro Cap Sheet** has a 100mm wide selvedge to facilitate the heat bonding of the side lap.

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 (Figure 2).

All 100mm side and end laps must be fully bonded by using hot air welders 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.

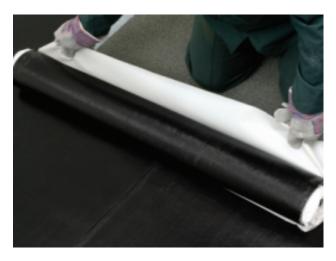
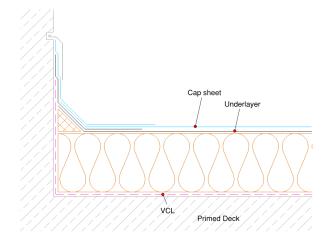


Figure 2 Application of Self-Adhesive Membranes.

## **DETAILING**

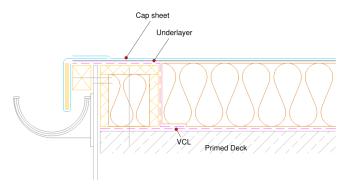
All waterproofing detailing must be undertaken as seperate flashings.

## Upstands and skirtings – (Warm Roof)



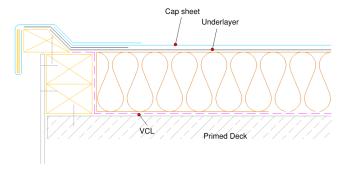
The vapour control layer (VCL) should be set out to facilitate a minimum 50mm link with the waterproofing layers, with completed detailing encapsulating the insulation. At all skirtings and upstands, waterproofing should be at least 150mm above the level of the finished roof level. Care must be undertaken 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 as part of a built up roof system and conditions are maintained as per IKO literature, relevant Codes of Practice and UK Building Regulations, the product has a 20 year material guarantee.

## 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.