

## IKO HYLOAD TANKING MEMBRANE GASTITE SA

### PRODUCT INFORMATION

IKO Hyload Tanking Membrane Gastite SA is constructed from an aluminium / polyethylene laminate coated on one surface with a layer of self-adhesive polymer modified bitumen.

| Product                                | Product Code |
|--|--------------|
| IKO Hyload Gastite SA Tanking Membrane | 30820000     |



### USE

IKO Hyload Tanking Membrane Gastite SA can be used as a fully bonded damp proofing membrane, and as a post applied Type A Barrier protection membrane where there is an additional requirement to provide ground gas protection measures.

The product can be used within ground gas systems that are designed to the NHBC Traffic Light System, and CIRIA C665. The product currently does not conform to the requirements of ground gas protection measures designed to BS8485:2015.

### FEATURES & BENEFITS

**Ease of Use** – the product is cold applied and does not use specialist tanking equipment, making it a cost effective, low labour application.

**Gas resistance** – the product has aluminium facing, which offers an enhanced resistance to methane and radon gases.

### PERFORMANCE & COMPOSITION

|                                  |   |
|----------------------------------|---|
| <b>Composition:</b>              | Alu/HDPE/Bitumen                          |
| <b>Form:</b>                     | Roll                                      |
| <b>Colour:</b>                   | White foil upper/Black                    |
| <b>General Dimension Data</b>    |   |
| <b>Thickness:</b>                | 1mm                                       |
| <b>Roll Length:</b>              | 20m                                       |
| <b>Roll Width:</b>               | 1m  |
| <b>Weight:</b>                   | 1.2kg/m <sup>2</sup>                      |
| <b>Performance Data</b>          |   |
| <b>Strength (ASTM D1000):</b>    | 3.0N/mm                                   |
| <b>Elongation (ASTM D1000):</b>  | 40%                                       |
| <b>Adhesion (ASTM D1000):</b>    | 2.0N/mm                                   |
| <b>Puncture Resistance</b>       |   |
| <b>(ASTM E154):</b>              | 250N                                      |
| <b>Water Vapour Transmission</b> |   |
| <b>(ASTM E96):</b>               | <0.1g/m <sup>2</sup> /24h                 |
| <b>Methane Gas Permeability:</b> | <0.03ml/m <sup>2</sup> /24 hrs            |
| <b>Radon Diffusion:</b>          | 5.0 X 10 <sup>-14</sup> m <sup>2</sup> /s |

### INDEPENDENT ACCREDITATION



0836-CPD-13/F032

The product carries a Declaration of Performance Certificate.

## **SPECIFICATION**

All construction detailing and specification should conform to UK Building Regulations, relevant Codes of Practice and British Standards. In particular it is recommended that reference is made to the relevant parts of:

The Building Regulations 2010, Approved Document C - Sections 4 and 5;  
BS 8102:2009 Code of Practice for the protection of below-ground structures against water from the ground;  
BS 8000-4:1989 Code of Practice for waterproofing  
BRE Report 212 Construction of new buildings on gas-contaminated land  
BRE Report 414 Protective measures for housing on gas-contaminated land

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.

If required, please consult with IKO Technical Services.

## **SYSTEM COMPONENTS**

IKO have a range of essential system components, specifically tailored to facilitate the multiple uses of the versatile IKO Hyload Tanking Membrane Gastite SA system.

The following represents the system components available as part of that range:

**IKOpro SA Bitumen Primer** – a fast drying, rubber modified bituminous priming solution for the preparation of surfaces receiving IKO Hyload Self-Adhesive Tanking Membranes.

**Hyload 3mm Protection Board** – 3mm thick, flexible, load bearing and rot proof polymeric board. Used for the protection of membranes against damage from backfill operations, foot traffic or the process of positioning spacers and reinforcement prior to laying a reinforced concrete slab.

**IKO Plasdrain** – is available in various thicknesses, and acts as a combined protection and drainage sheet for IKO Hyload Tanking Membrane systems.

**IKO Hyload DPC Fixing Strip** – a 29mm wide x 2mm thick x 2m long corrosion resistant semi-rigid plastic strip, used specifically to provide surface fixing solutions. Pre-drilled at set 150mm centres, the component is complemented by fixings pins for masonry.

**Hyload DPC Fixing Pins For Masonry & Concrete** – used with IKO Hyload DPC Fixing Strip, IKO Hyload DPC Fixing Pins are corrosion resistant and can be used for surface fixing the head of tanking membrane systems to any solid internal substrate such as brick, stone and concrete. IKO Hyload DPC Fixing Pin bodies are made from moulded nylon and the drive pins are made from polycarbonate. When the drive pin is located, the barbed portion of the fixing pin body expands giving a secure grip and high pull out resistance.

**IKOpro Stickall** – a dense elastomer modified bituminous sealing mastic that remains plastic under normal temperatures and adheres well to most building surfaces. It can be used to complete termination detailing into chased positions.

**IKO Hyload Pre-formed Cloak Units** – for the detailing of internal and external corners, pre-formed cloak units reduce on site detailing work to a rapid position and fix operation, whilst providing consistent quality of work throughout.

Ultrasonic welding technology allows the semi-rigid polymeric cloak material to be formed into a vast number of profiles and shapes:

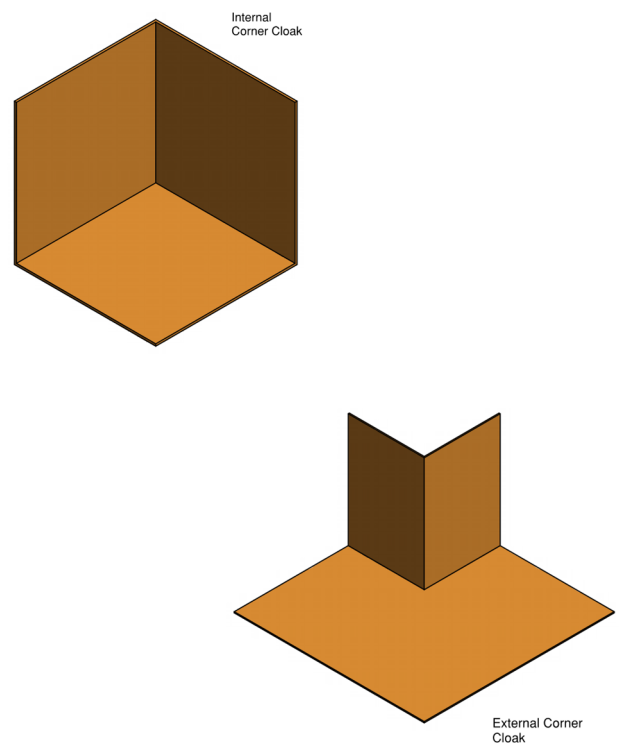


Figure 1 – Hyload Pre-formed Cloak Units

# SITE STORAGE

## GENERAL

Tanking membrane materials and any products ancillary to the system should be stored in the dry, under cover, and protected against damage.

Tanking membrane rolls should be stored on their ends on a flat and stable surface, kept away from direct sources of heat.

Check all labels on adhesives for any particular storage recommendations, and for any hazards relating to that specific product.

## 24 HOURS PRIOR TO WORK

Store a sufficient quantity of the tanking membrane and any primers for the next day's use in a warm environment prior to use. This will ensure the desired performance is achieved i.e. good flexibility and membrane adhesion.

## IMMEDIATELY PRIOR TO WORK

Storage of the product at the place of work should be no less satisfactory than that experienced within the main storage areas to prevent damage immediately before use i.e. flat, dry and clean.

# CONSTRUCTION

For situations requiring a fully bonded gas barrier and damp proof membrane, IKO Hyload Tanking Membrane Gastite SA can be used within the floor and as a detailing membrane vertically within the cavity to ensure continuity of loose laid gas barriers and gas resistant DPC.

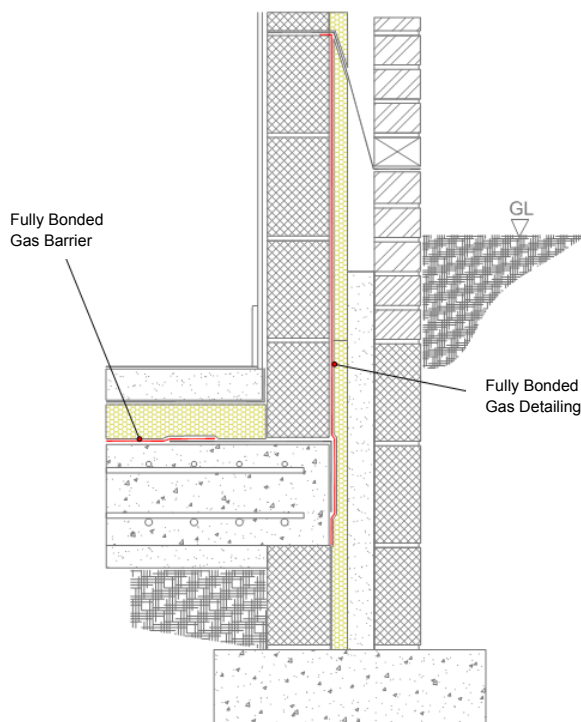


Figure 2 – Typical Damp Proofing Membrane Application

For structural waterproofing situations where there is an additional requirement for gas resistance, IKO Hyload Tanking Membrane Gastite SA is categorised as post applied membrane for **Type A Barrier protection** under BS8102:2009, and as part of a designed system can be applied both externally and alternatively as a layer sandwiched within the construction fabric.

Figures 2, 3 and 4 show a typical arrangement of the membrane in each instance. More comprehensive arrangement drawings can be provided by IKO Technical Services on request.

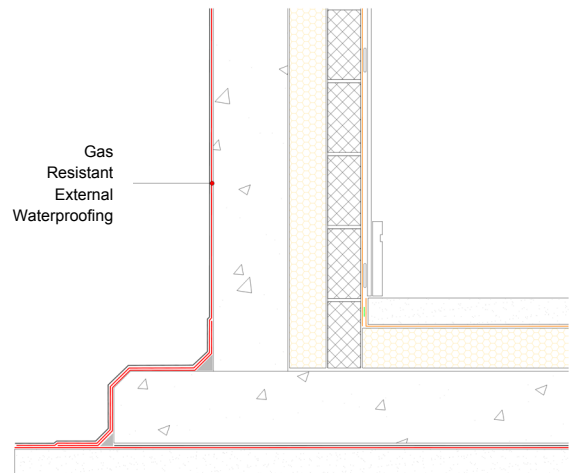


Figure 3 – Typical External Membrane Application

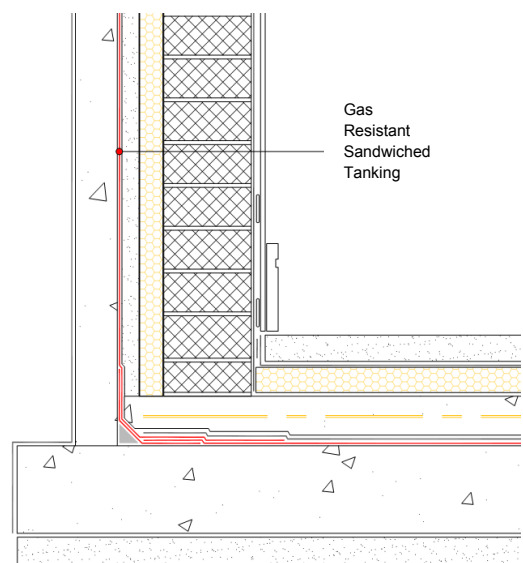


Figure 4 – Typical Sandwiched Membrane Application

## SUBSTRATE PREPARATION

Installation should only be conducted upon concrete substrates that are of a wood floated or similar finish; surfaces subject to tamping operation should not have undulations greater than 5mm.

All surfaces should be clean, dry and free from contaminants and surface latency; additionally any sharp protrusions or low points should be suitably rectified prior to applying the primer.

When application is to be undertaken upon masonry, the surface should be free from projections and flush pointed.

## **PRIMING**

All substrate areas receiving the membrane must be primed with **IKOpro SA Bitumen Primer**, applied at temperatures between +10°C and +25°C.

Thoroughly stir before use, ensuring a full working of the liquid in the tin.

Do not thin the material for any reason.

The primer should be applied to the prepared surface by brush or roller to give one uniform, even coating at a rate of 3-4m<sup>2</sup> per litre. A brush should be used to ensure the primer is applied fully into corners and areas of detailing.

Porous surfaces may require an additional full coat of the product, but be aware that over application of the product may result in longer drying times. Drying time is approximately 1 hour at 10°C.

At higher temperatures the product may dry faster, with lower temperatures slowing this drying process.

## **APPLICATION**

### **HORIZONTAL APPLICATION**

Measure and cut to the required size, inclusive of detailing allowances as defined by the detailed arrangement drawings.

Once aligned, 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 sheet, 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 surface.

The horizontal membrane should be terminated in accordance with the relevant detailing, and as soon as practicable, protected with Hyload Protection Boards or sand/cement screed.

### **VERTICAL APPLICATION**

After cutting to the appropriate length, remove 300mm of release film and bond the membrane firmly to the substrate.

Working progressively, remove the release film and press the membrane onto the surface working from the centre outwards to remove any air bubbles.

The upper edges of membrane must be fixed using IKO Hyload DPC Fixing Strip and Pins, or turned into a chase, wedged and sealed with IKOpro Stickall.

If membrane installations are not completed in one operation i.e. staggered work stages for large vertical expanses, the top edge of the membrane must be suitably restrained until follow on application continues.

Completed vertical applications must be protected. External applications may achieve this protection by either installing IKO Hyload Protection Boards or IKO Plasdrain drainage layers prior to backfilling operations.

Sandwiched tanking operations will utilise the requisite masonry fabric and subsequent 40mm sand/cement lean mix as its protection.

### **OVERLAPS**

All laps must be a minimum 100mm wide and lap joints should be checked for security as work proceeds. Laps should be pressed with a roller to ensure a secure seal.

At perimeters where the membrane is sealed to a wall DPC, reinforcing strip or other specified material, a minimum 100mm laps should be achieved to ensure full continuity unless otherwise stated by a specific detail.

### **ANGLES & CORNERS**

These should be provided with a suitable fillet or splay and reinforced with a 330mm wide piece of IKO Hyload Tanking Membrane Gastite SA equidistant across the previously primed area. Preformed Cloak Units are available for changes of direction, notably those addressing 3 planes of application i.e. corners.

## **DURABILITY**

The membrane, when fully protected and subjected to normal service conditions, will provide an effective barrier for the life of the structure in which it is incorporated.

## **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.