

IKO SYSTEMS T-O VAPOUR CONTROL LAYER

PRODUCT INFORMATION

IKO Systems T-O (Torch-On) VCL is a high performance vapour control layer composed of a polyester reinforced aluminium core, coated with a specially formulated quick melt SBS modified bitumen. The lower surface has a sacrificial film which rapidly melts during the torching operation.

Surface	Product Code
Fine Sand	62120000



USE

Vapour Control Layer within a warm roof build up, exclusive to IKO specification roofing systems.

INDEPENDENT ACCREDITATION



Agrément Certificate
86/1640
Product Sheet 1



0086-CPD-13970-13VCL

FEATURES & BENEFITS

Aluminium Core - gives increased resistance to the passage and penetration of water vapour

High tensile polyester base – robust carrier material

SBS modification – low temperature flexibility

PERFORMANCE & COMPOSITION

Composition:	Modified Bitumen with Aluminium Core
Form:	Roll
Colour:	Fine sand
General Dimension Data	
Length:	12m
Width:	1m
Mass/Weight:	3.1kg/m ²
Roll Weight:	37kg
Carrier:	Polyester
Performance Data	
Water Vapour Resistance	
S_d value (m):	2436
Water tightness (kPa) (EN1928):	
	50
Maximum Tensile Force (EN 12311-1):	
	Longitudinal ≥650
	Transverse ≥500
Elongation (EN 12311-1):	
	Longitudinal ≥30
	Transverse ≥35
Resistance to Tearing (EN 12310-1):	
	Longitudinal ≥250
	Transverse ≥300
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.
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 term WARM ROOF is used to describe a construction where the insulation is placed above the roof deck..

The subsequent waterproofing system is then placed onto the upper surface of the insulation as illustrated within Figure 1.

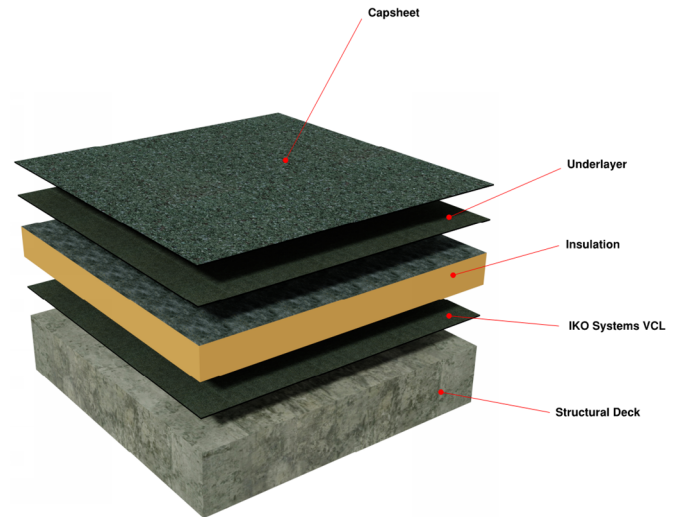


Figure 1 – typical Warm roof build up (BUR)

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. Combustible deck materials such as timber should not be torched to directly and appropriate practice should be used in such instances.

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 1:60 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 Systems T-O (Torch on) VCL is 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.

Torch applied materials should only be applied by those competent, conversant and capable of undertaking roofing works safely and that are experienced in the use of roofing torches and procedures.

Care must be taken when torching 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 combustibility, structural strength, falls and drainage provision.

The deck surface receiving the **IKO Systems T-O Vapour Control Layer (VCL)** must be clean, dry and fit for purpose. It must be prepared with **IKOpro Quick Dry Primer** as stated within the respective IKO Specification document.

SETTING OUT

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

IKO Systems T-O Vapour Control Layer (VCL) should be set out to facilitate 75mm side laps and 100mm end laps. A minimum 50mm link with the waterproofing layers at all detailing and upstand abutments must be achieved, with completed detailing encapsulating the insulation entirely.

BONDING

Install **IKO Systems T-O Vapour Control Layer (VCL)** to the prepared substrate as soon as the **IKO Quick Dry Primer** is dry.

The membrane must be fully bonded to the prepared substrate by using the torch-on application method, ensuring that a constant flow of bitumen is maintained across the whole width of the roll and that a continuous bead of bitumen (5-15mm) is exuded from all side and end laps to demonstrate a good seal has been achieved (Figure 2).

When approaching an angle where the sheet will change from a horizontal to a vertical configuration, press the membrane firmly into position ensuring a full bond is achieved throughout the detail.

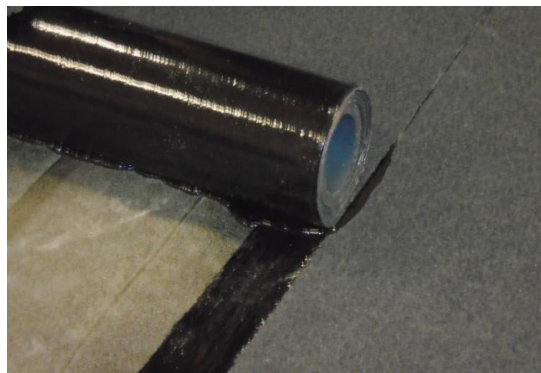


Figure 2 - Side lap formation.

DETAILING

All waterproofing detailing must be undertaken in accordance with the requirements of the specific information given with the IKO Specification document. All waterproofing detailing must be undertaken as separate flashings.

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 IKO Specification documents.

DISCLAIMER

Where this product is used on a project directed by an IKO Specification document, and where omission or differing information exist, the IKO Specification document will take precedence.

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.