

FLAMEOUT® BLOCK FR AVCLs

INSTALLATION INSTRUCTIONS



TECHNICAL HELPLINE
01347 825 200

APPLICATION

For all roof and wall internal installations to prevent moisture within the building's warm air from reaching the insulation layer and forming interstitial condensation. FlameOut Block AVCL membranes contribute to both BS 9250 for the airtightness in 'a well-sealed ceiling' and BS 5250 aiding the control of condensation within a roof space.

Due to their inert chemical composition, FlameOut vapour control membranes are compatible with insulation and roofing materials.

FlameOut vapour control layers are also suitable as a damp proof membrane. Because they are chemically inert, they are unaffected by mild acids and alkalis found in soils, do not rot or support mildew or other organic growth.

STORAGE & HANDLING

Always store membrane rolls horizontally in cool, dry conditions, away from direct sunlight.

Handle the material with care and ensure that the membrane is not punctured or damaged.

DESIGN DETAILS

1. CONTINUITY

FlameOut Block VCL Membranes should be continuous over the whole plan area of the structure. All laps should be sealed with the appropriate Powerbond sealing tape and the number of joints should be kept to a minimum by using the full width of the membrane

2. ROOF TYPES

a. *Cold Roofs* Cold roofs with the VCL membrane draped between purlins with the insulation above are harder to seal at the laps. Consideration should be given to supporting the laps. In high-risk areas a rigid lining sheet is recommended throughout to support the VCL membrane.

b. *Warm Roofs* Sealing the Vapour Control Membrane in warm roofs is much easier as it is supported by the structural deck directly beneath. Sealing tape allows for any slight expansion or contraction movement in the decking.

c. *High Risk Roofs* The 'NFRC Profiled Sheet Metal Roofing & Cladding - A Guide to Good Practice' suggests that the water vapour resistance of a VCL membrane within high-risk roofs should be at least 500 MNs/g.

3. SERVICE PENETRATIONS

Service penetrations should be kept to a minimum. Airtight seals are required around each point of entry. Particular attention is required to sealing all penetrations such as soil pipes, vent pipes and roof lights as well as the roof perimeter.

4. TIMBER FRAME DESIGNS

Timber frame fixings should not puncture the barrier.

INSTALLATION

Installation should be performed in conjunction with the recommendations specified in Design Details. The VCL membrane should be laid loose, flat and without wrinkles; ensure that the membrane is not creased or folded.

1. WORKING WITH THE MEMBRANE

a) Weather Conditions

(i) Cold makes the VCL becomes less supple and installations should be avoided whenever site temperatures fall below 5° C.

(ii) Installation in windy conditions is not recommended since the VCL becomes difficult to handle and is liable to flap in the wind.

b) The material can be cut using a sharp knife. Always overlap the cut edge.

c) All overlaps should ideally be 150mm, horizontally or vertically

2. JOINING OF ROLLS AND PANELS

a) The number of joints should be kept to a minimum by using the full width of the membrane.

b) Joints should only be made where the membrane is supported (i.e. not where the join bridges unsupported areas).

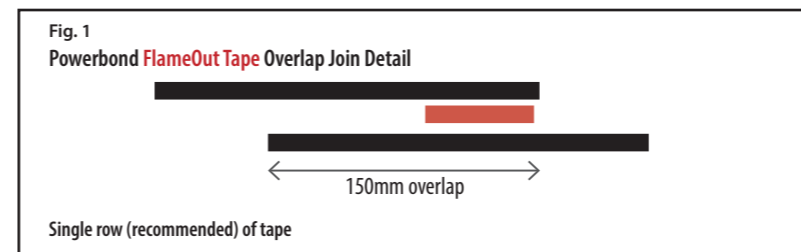
c) The surfaces should be clean and dry, free of any dirt, condensation, grease, etc.

d) Rolls or panels may be joined with a recommended overlap of 150mm:

(i) A continuous single row of Powerbond FlameOut Tape in the overlap is recommended for overlap sealing (Fig. 1)

(ii) All joins should be firmly pressed together using a hand-held pressure roller to ensure that the tape has adhered properly to the membrane.

(iii) Only apply tapes at an ambient temperature of 5° C.



3. SEALING

To maintain the integrity of the system, sealing should be performed as follows:

Service penetrations and corners - Where services and pipework need to penetrate the membrane, use Powerbond FlameOut Tape to create airtight seals around each point of entry. To avoid cutting the membrane, it is important that the membrane is folded into the corner and then reinforced by an additional protective layer of membrane.

4. ELONGATION

a) Whilst elongation of any vapour control layer should be avoided, FlameOut VCLs incorporate a reinforced grid to reduce the risk of elongation. VCLs should be laid loosely on the site in order to allow for any movement. They should not be pulled taught.

b) When covering the membrane, care should be taken to ensure that the membrane is not displaced, damaged or stretched.

5. INSPECTION

Prior to covering, the VCL barrier should be thoroughly inspected to verify the integrity of the joining and sealing and ensure that no damage has occurred to the membrane during installation. Any damage should be repaired to ensure an airtight seal. A competent installation contractor should carry out inspection and repair of the VCL membrane.

6. REPAIRS

Damaged areas must be repaired using patches of FlameOut VCL. The area must be clean, dry and free of dust and grease. The patch must not extend beyond 150mm of the damaged area. Fix the patch by using a continuous single row of Powerbond FlameOut Tape.

7. FURTHER INFORMATION

These installation instructions are based upon currently available good practice and information and only offered as a general guide.

Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user and the user must assume all risk and liability in connection therewith.

Check the suitability and safety of the products for the use envisaged with all current and applicable national standards.

IMPORTANT

Protect FlameOut Block VCLs from UV exposure. Cover and finish the construction of the VCL installation within a maximum of 3 months (for Western Europe).

NOTE

As per EN 13859-2, Clause 5.2.2, in the case of the VCL being used on a supporting structure, further flame retardant testing of the structure may be needed to determine the flame retardancy of the construction due to a possible difference in flame retardancy of the supporting construction materials (e.g. wood). FlameOut Block is Class B-s1,d0 when free hanging or directly installed on a supporting substructure with a flame retardant classification of A1 or A2.

DISCLAIMER OF EXPRESS AND IMPLIED WARRANTIES
Subject to the limitations, disclaimers and statements as set forth here, Industrial Textiles & Plastics Ltd represents to the Buyer that the product or products delivered to the Buyer conform(s) to the manufacturer's description and specifications attached to or delivered with the product.
The representation that Industrial Textiles & Plastics Ltd makes to the Buyer that the product or products conform(s) to the manufacturer's description and specifications applies only under such circumstances when the Buyer utilises the product or products as specified and under normal use for which said product was intended.

Any alleged nonconformity shall be made in writing to Industrial Textiles & Plastics Ltd specifically stating and describing any such alleged nonconformity.
The representation by Industrial Textiles & Plastics Ltd that the product or products delivered to the Buyer conform(s) to the manufacturer's description and specification as attached to or delivered with the product is expressly in lieu of all other representations, warranties, expressed or implied, and of all other obligations and liabilities, including consequential damages, on the part of Industrial Textiles & Plastics Ltd. Industrial Textiles & Plastics Ltd neither assumes nor authorises any person to assume for it any other liability in connection with the sale of the product.
The representation of conformity by Industrial Textiles & Plastics Ltd as represented by Industrial Textiles & Plastics Ltd shall in addition to the above be null and void in the event that the product is misused or handled in a negligent manner by Buyer or any third party. Industrial Textiles & Plastics Ltd shall not be liable for damages or delays, if such occur, on account of defective material or workmanship or

delays in shipment, nor will any allowances be granted for any repairs, alterations, work done or expense incurred in connection with any repairs, alterations or replacements except on specific written authority by Industrial Textiles & Plastics Ltd.
Industrial Textiles & Plastics Ltd shall in no way be liable or responsible for injuries or damages to persons or property arising out of the use or operation of the product as herein contemplated, and Buyer hereby agrees to indemnify and save harmless Industrial Textiles & Plastics Ltd from all such liability and responsibility.
Industrial Textiles & Plastics Ltd shall not be liable for any consequential damages for any reason including but not limited to those contemplated herein and whether such consequential damages may have been foreseeable, proximately caused or otherwise occurring.
Due to a policy of continued research and development, Industrial Textiles & Plastics Ltd reserves the right to alter specifications without notice. Products are offered subject to our normal Conditions of Sale, which are available on request.
Samples and specifications are of an illustrative nature and supplied free of charge. They do not form part of any contract or any intended

contract with the user. Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user and the user must assume all risk and liability in connection therewith.
This disclaimer of Express or Implied Warranties constitutes a significant limitation on the rights and remedies otherwise available to the Buyer, which the Buyer freely and voluntarily acknowledges and accepts as part of the consideration for the contract to purchase the product or products from Industrial Textiles & Plastics Ltd.
Test Results are obtained under laboratory conditions on new material and not under actual usage conditions. Test results only relate to the sample tested. No warranties or assurances of reliability, suitability or fitness for a particular purpose of specimens or data are offered. Assessment of suitability of such material and data for intended use is the sole responsibility of the customer.