



## Visqueen High Performance Vapour Barrier

Visqueen High Performance Vapour Barrier is a multi-layer reinforced polyethylene barrier with a 20 micron aluminium foil. The barrier is coloured blue on the upper surface and silver on the reverse. The product is supplied in single wound rolls (not folded), 2m x 50m long.

### FEATURES AND BENEFITS

- Versatile application - used within floor, wall and roof constructions
- Suitable for BS 5250:2021 humidity classes 3, 4 and 5 - prevents damage to structure and insulation
- Single wound roll - rapid installation

### APPROVALS AND STANDARDS

- BS 5250:2021 Management of moisture in buildings - code of practice
- UKCA CE UKNI Mark EN 13984:2013
- Quality Management System ISO 9001:2015
- Occupational Health and Safety System ISO 45001:2018
- Environmental Management System ISO 14001:2015

### USAGE

Visqueen High Performance Vapour Barrier is an air and vapour control layer (AVCL) and is used in high condensation risk buildings to reduce the risk of interstitial condensation occurring within the structure as well as improving the airtightness of the building.

The barrier restricts the passage of warm, moist air from within the building from permeating into the floor, wall or roof structure.

The barrier is designed to be installed to the warm side of floors, walls and roofs subjected to humidity levels greater than 50% at 20°C (BS 5250:2021 humidity classes 3, 4 and 5) e.g. dwellings with high occupancy, sports halls, canteens, school classrooms, hospitals, laundries and swimming pools.

### SYSTEM COMPONENTS

- VisqueenPro Double Sided Vapour Tape, 20mm x 50m
- VisqueenPro Single Sided Vapour Tape, 75mm x 15m
- VisqueenPro Single Sided Vapour Edge Tape, 150mm x 15m

### STORAGE AND HANDLING

Visqueen High Performance Vapour Barrier should be stored horizontally, under cover in its original packaging. Care should be taken when handling the product in line with current manual handling regulations.

## PREPARATION

Ensure surfaces are smooth, clean and dust free. When bonding the barrier to the substrate, e.g. timber or metal studs, the surface should be dry.

The barrier can be cut with a sharp retractable safety knife or robust scissors.

## INSTALLATION

Visqueen High Performance Vapour Barrier should be installed in accordance with the recommendations of BS 5250:2021. Management of moisture in buildings - code of practice. The barrier should be installed on the warm side of the insulated structure, with care being taken to ensure that all laps, penetrations and abutments are sealed. The membrane should be continuous in order to ensure optimum vapour control performance.

Where the barrier is to be fixed to timber or metal studs, apply sufficient strips of VisqueenPro Double Sided Vapour Tape to the vertical and horizontal studs, head and sole plates, etc to ensure that the barrier remains in position until the plasterboard or construction board is mechanically fixed in position over the barrier. Progressively peel off the tape release film and apply the barrier ensuring adhesion at the tape locations .e.g. by rolling with a seam roller.

The barrier should be installed with the foil (silver) side facing the warm inside of the building.

All joints in the barrier should be lapped by a minimum of 75mm and sealed with VisqueenPro Single Sided Vapour Tape applied centrally over the lap. To aid formation laps should be made over a solid substrate.

Ensure barrier continuity at the junction of horizontal and vertical substrates. Seal abutments with VisqueenPro Vapour Edge Tape applied centrally over the junction. Failure to suitably connect the barrier to other building elements will severely reduce vapour control performance.

Ensure the barrier is not damaged in service due to residual heat from light fittings. The barrier should not be subjected to gravity forces (unsupported) such as on the underside of roof decks or the underside of floor structures, and should be suitably mechanically secured to ensure that it remains in position during service.

Visqueen air and vapour control layers (AVCLs) do require permanent mechanical fixing, normally achieved by over-boarding the AVCL with a plasterboard or other construction board.

## USABLE TEMPERATURE RANGE

It is recommended that Visqueen High Performance Vapour Barrier and all associated system components should not be installed below 0°C.

## ADDITIONAL INFORMATION

Care should be taken to prevent the AVCL from becoming punctured, stretched or displaced when installing plasterboard or other construction board over the installed AVCL.

For additional detailing information, contact Visqueen Technical Services +44 (0) 333 202 6800.

The information in this datasheet was correct at the time of publication. It is the user's responsibility to obtain the latest version of the datasheet as it is updated on a regular basis. The information contained in the latest datasheet supersedes all previously published editions.

PROPERTY	TEST METHOD	UNITS	COMPLIANCE CRITERIA	RESULT
Visible defects	EN 1850 -2	-	Pass/Fail	Pass
Length	EN 1848-2	m	-0%/+10%	50
Width	EN 1848-2	m	-0%/+10%	2
Thickness	EN 1849-2	mm	12.5%/+12.5%	0.52
Mass	EN 1849-2	g/m <sup>2</sup>	12.5%/+12.5%	345
Tensile strength - MD	EN 12311	N	MLV	515
Tensile strength - CD	EN 12311	N	MLV	550
Tensile elongation - MD	EN 12311	%	MLV	17
Tensile elongation - CD	EN 12311	%	MLV	15
Joint strength	EN 12317-2	N	MLV	332
Watertightness 2kPa	EN 1928	-	Pass/Fail	Pass
Resistance to impact	EN 12691	mm	>MLV	200
Low temperature flexibility	EN 495-5	°C	-40	Pass
Durability (artificial ageing)	EN 1296 and EN 1928	-	Pass/Fail	Pass
Durability chemical resistance	EN 1847	-	Pass/Fail	Pass
Resistance to tearing (nail shank) CD	EN 12310-1	N	MDV	358
Resistance to tearing (nail shank) MD	EN 12310-1	N	MDV	368
Mean water vapour resistance factor	EN 1931	(μ)	MDV	3500000
Mean water vapour resistance	EN 1931	MNs/g	MDV	7000
Mean water vapour permeability	EN 1931	g/m <sup>2</sup> /day	MDV	0.03
Reaction to fire	EN 13501-1	Class	MDV	F
Water vapour resistance - Sd	EN 1931		MDV	>1500

## HEALTH AND SAFETY INFORMATION

Refer to the Visqueen High Performance Vapour Barrier material safety datasheet (MSDS).