

VapR-free Plus

MERCURY
BUILDING PRODUCTS

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High Performance Vapour Permeable Pitched Roof Underlay

KEY FEATURES



HIGH VAPOUR PERMEABILITY



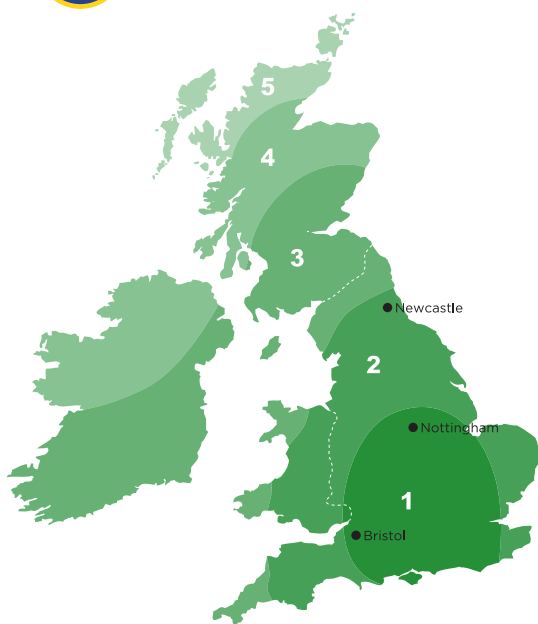
HIGHLY WATER RESISTANT



DURABLE



VERSATILE



VapR-free Plus is a multi layer laminate film composite made of polyolefin materials, resulting in a pitched roof underlay that has high vapour permeability, but is also highly water resistant.

VapR-free Plus is suitable for warm and cold pitched roofs in both commercial and domestic buildings.

Manufactured without the use of CFC's, *VapR-free Plus* is 100% recyclable and is extremely durable with high tensile and nail tear strength properties. These, coupled with excellent UV and heat stability properties will ensure that *VapR-free Plus* has a life span in excess of 30 years.

VapR-free Plus roof underlay has received BBA approval and complies with BS5534: 2014+A1 Code of Practice for the slating and tiling of pitched roofs.

Recommendations for the use of vapour permeable membranes in pitched roofs are contained in BS5250: 2011.

BRE Approved

VapR-free Plus has been approved and tested in accordance with BS5534: Anex A 2015 - Wind Uplift Resistance and is suitable for use in:

Wind Zones 1 - 2 with a Battened Lap

Wind Zones 1 - 5 with a Taped Lap

Quality Assurance



INSTALLATION

Cold Pitched Roofs

When installed as a partially supported system, *VapR-free Plus* should be fixed in the traditional method for roof tile underlays, laid parallel to the eaves and draped between the rafters. This will ensure that any moisture reaching the underlay will drain away. It is held in place by the tile battens and fixed using staples or large headed nails.

VapR-free Plus can also be installed by pulling it taut from gable to gable, provided that a 25mm counter batten is fixed to each rafter.

Warm Pitched Roofs

VapR-free Plus can be laid vertically or parallel to the eaves, when fully supported by the insulation, and held in place using counter battens (minimum height of 25mm). These, in conjunction with the 25mm tile battens will ensure a minimum 50mm clear airway above the underlay, and will assist natural air movement through the batten space. The battens should be fixed in place using staples or large headed nails.

Prevention of Condensation

The complete roof construction, ceiling boards, underlay, insulation and roof tiles should be considered as a total roof system with regards to condensation risk. Details of this can be found in our BBA certification. The risk of condensation is greatest during the first heating period, when moisture levels are high.

Roof Space Ventilation

The NHBC requires that for all New Build Homes, ridge or high level ventilation is installed when a vapour permeable membrane such as *VapR-free Plus* is used. We recommend the membrane should stop 5 - 30mm from the apex of the roof, and a ventilated dry ridge system be used to achieve the required level of ventilation.

General

VapR-free Plus must be installed with the green printed side face up and overlapped according to the minimum stated dimensions, as detailed opposite. Trimming is achieved using a sharp knife. When partially supported by a horizontal lap between the battens, an extra batten should be introduced 25mm from the bottom edge. This will restrain the lap from opening under wind uplift.

Weather Tightness

VapR-free Plus is highly water resistant and prevents the ingress of wind driven rain. It can be used as a temporary roof covering and left exposed to the elements, however this period should be kept to a minimum. Installation should be as recommended in our technical leaflet with regards to overlaps, fixings, draped between rafters or counter-battens, and direct contact with uncured treated timber be avoided.

Eaves

Mercury Building Products strongly recommend the use of *VapR-free Plus* Underlay Support Trays in both open and closed eave construction.

Packaging and Storage

VapR-free Plus is wrapped in polythene and delivered on a pallet. Individual rolls should be stored on their sides on a clean, dry and flat surface and protected from direct sunlight.

TECHNICAL DATA

Property	Units	Value
Weight	g/m ²	142
Water Vapour Resistance	Sd (M) MN/sg	c.0.02 0.18
Water Vapour Transmission	g/m ² /24 hr	1112
Fire Rating	-	EN13501-1
Exposure Times UV Degradation	-	3 months

PRODUCT DATA

Roll Width (linear metres)	1.5	1
Roll Length (ft)	50	50
Coverage/roll/m ²	75	50
Roll weight/kgs	10.5	7.1
Rolls/Pallet	42	49

MINIMUM OVERLAP DETAIL

Roof Pitch	Horizontal Laps		Vertical Laps
	Partially Supported	Fully Supported	Either
12.5° to 14°	225	150	100
15° to 34°	150	100	100
35°	100	75	100

Detail	Minimum Overlap Detail Horizontally and Vertically (mm)
Verge	25
Hips	150
Ridge	150
Valleys	300
Eaves	25

BS 5534: Anex A1: 2015 Wind Uplift Resistance

<i>VapR-free Plus</i> tested wind uplift resistance (N/m ²)	Approved use Geographical Wind Zone
354mm Batten gauge Battened lap Exceeds 820	1 - 2
250mm Batten gauge Battened lap Exceeds 1600	1 - 5
354mm Batten gauge Taped lap Exceeds 1600	1 - 5
354mm Batten gauge Integrel Taped lap Exceeds 1600	1 - 5

These values of uplift resistance are for a roof with a ridge height ≤15m, a maximum batten gauge of 345mm, a pitched roof between 12.5° and 75°, a site altitude ≤100m and where topography is not significant. Full details of BS5534: Anex A: 2015 can be found in our BBA certificate and the BS5534:2014 Code of Practice for slating and tiling.

TECHNICAL SALES SUPPORT

For further information please call our Technical and Sales Support Service Department on 01246 268084 or email orders@vaprfree.co.uk



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