PROCTOR PASSIVE

PROCTOR GROUP AUSTRALIA

SMARTVAP 100

Air barrier with variable vapour diffusion resistance

Product Description

ProctorPassive SmartVap 100 (SmartVap) is a two layer AS4200.1 compliant light duty air barrier and variable vapour diffusion resistance retarder.

Applications

When installed as a continuous layer, SmartVap will form an air tight layer, improving the efficacy of ventilation systems and thermal efficiency of the building enclosure. The effective management of air and vapour passage through wall, ceiling and floor assemblies can help protect the building fabric and insulation from condensation and related problems such as mould, timber rot, corrosion and loss of thermal resistance.

SmartVap should not be used on the exterior side of insulation in cold and temperate climates as an alternative to a vapour permeable sarking, where there is a risk that condensation will form on the interior face of the retarder.

Variable vapour diffusion resistance

The functional layer of SmartVap is a polyamide film. Such films passively adjust vapour diffusion resistance depending on the humidity where located. The polyamide absorbs water vapour from the air, opening the molecular pores thus adjusting vapour diffusion resistance according to ambient humidity conditions.

SmartVap is not "smart" enough to tell what season it is, and it would be simplistic to claim vapour tight in winter and vapour open in summer. The vapour resistance of SmartVap is not seasonal, but is influenced by the relative humidity on both sides of the membrane where it is located, whatever the season.

When the ambient humidity is low the diffusion resistance is higher. When the ambient humidity is high, the diffusion resistance is lower. This functionality can assist the building fabric to dry towards the interior when relative humidity is higher, and vapour pressure is lower on the interior side of the membrane.

Durability

Although ProctorPassive SmartVap can be used as temporary protection during construction, it can not be used as a primary waterproofing membrane. The product may be damaged by careless handling, high winds or vandalism, and should not be left uncovered for longer than is absolutely necessary. Any damaged areas should be replaced before completion.

Ensure that ProctorPassive SmartVap is covered as soon as possible, and **not left exposed to UV for longer than 4 weeks**. ProctorPassive SmartVap is not to be used in installations where it could be exposed to long term UV radiation.

Benefits

- Air tight
- Semi-translucent for ease of installation
- Variable water vapour diffusion resistance
- High water resistance
- Non perforated
- Non conductive
- Lightweight and easy to handle
- AS4200.1 testing and compliance

Sample Specification

Vapour and air retarder should be ProctorPassive SmartVap 100 vapour and air retarder membrane, tested to AS/NZS 4200.1:1994 standards, installed in accordance with the product user guide.

Duty classification: Light
Air permeance (EN12114:2001): <0.02 m³/(h.m².50Pa)
Emittance: Non-reflective
Flammability Index: Low
Notes: Non conductive and not subject to corrosion

Health and Safety

Information on any known health risks on our products is listed in the Material Safety Data Sheets available from Proctor Group Australia.

Disclaimer

The details supplied here are based upon good practice and currently available information and should be read in conjunction with the most up to date product user guide. Please check that the this product is suitable for your particular application. Please contact us to discuss your project and any particular technical enquires.

Proctor Group Australia Pty Limited
Unit 8, 171-175 Newton Road
Wetherill Park NSW 2164
P O Box 7186
Wetherill Park DC NSW 1851
Australia

T 1800 174 900
F 02 9604 7468
E info@proctorgroup.com.au
W **www.proctorgroup.com.au**

acoustic insulation
construction membranes
geosynthetic engineering
thermal insulation

SmartVap 100 Air Barrier

with variable vapour diffusion resistance

Classifications under AS4200.1

Criteria	Reference	Test Result
Duty Classification	Table 1 AS/NZS 4200.1:1994	Light*
Vapour Permeability	ASTM E96 (Procedure B) Wet cup 23˚C/ 50% RH	0.55 µg/N.s
Vapour Resistance	ASTM E96 (Procedure B)	1.83 MN.s/g
Vapour Barrier Classification	AS4200.1:1994	Low
Vapour Control Membrane Classification	AS4200.1:2017	Vapour Permeable Class 3
Air Tightness	ISO 5636-5	Air Barrier (≥ 0.1 MNs/m³)
Emittance	AS/NZS 4201.5	Non-reflective
Water Barrier	AS/NZS 4201.4	High
Absorbency	AS/NZS 4201.6	Unclassified
Resistance to Dry De-Lamination	AS/NZ 4201.1	Pass
Resistance to Wet De-Lamination	AS/NZ 4201.2	Pass
Shrinkage	AS/NZ 4201.3	< ±0.5%
Burst Strength	AS 2001.2.19	> 200N
Flammability Index	AS/NZ 1530 Part 2	≤ 5
Tensile Strength	AS 1301.448	
- Machine Direction (kN/m)		2.5 kN/m
- Lateral Direction (kN/m)		1.9 kN/m
Edge Tear Resistance	TAPPI T470	
- Machine Direction (N)		134N
- Lateral Direction (N)		104N

* ProctorPassive SmartVap 100 is classified as light duty in accordance with the value specified for bursting strength.
** ProctorPassive SmartVap is a multilayer laminate product and is not therefore suitable for testing to AS1530.1. Please note that ProctorPassive SmartVap is a polyamide based material and therefore does not meet the deemed to satisfy requirements in the National Construction Code (NCC) as a non-combustible material.

European Air Tightness & Vapour Resistance Testing

Criteria	Reference	Test Result
Air Permeability	EN 12114:2001	<0.02 m³/(h.m².50Pa)
Vapour Resistance	EN 1931 B Dry Cup 23°C RH 75%	10.5 MNs/g
	EN 12572 (A) Dry Cup 23°C RH 50%	11.25 MNs/g
	EN 12572 (C) Wet Cup 23°C RH 93/50%	1.15 MNs/g
	Sd value range for film	0.15m to 5m

Standard Sizes & Packaging

Width	Length	Material per roll	Coverage per roll	Weight per roll	Rolls per pallet
1500mm	30m	45m²	42m²	5.5kg	72