



**TYVEK® AND AIRGUARD®
FOR EVERY TYPE OF CONSTRUCTION**



HEALTHIER, MORE COMFORTABLE INTERIOR CLIMATES

A proven solution with experienced local and international technical support

the
Original
proven since 1990

EXTERIOR



Tyvek® Housewrap

Tyvek® Acrylic Tape

AirGuard® Control

BBA Certificate 90/2548

- High vapour permeability (SD <2cm) protects against condensation
- High water resistance (>1500mm) - frame protection from factory to site to completion
- Durability - proven in use for over 40 years
- No performance gap - functions as designed
- 4 months UV exposure with no loss of performance

INTERIOR

BBA Certificate 90/2548

- Vapour control layer with limited vapour transmission
- Airtight and water resistant
- Superior mechanical strength
- Reduces convective heat losses
- Considerably reduces vapour transmission through the construction
- In areas of high humidity, AirGuard® Reflective is recommended

Buildings deserve a lifetime of protection



MORE ENERGY EFFICIENT BUILDINGS

EXTERIOR

INTERIOR



Tyvek® Reflex - Tyvek® Metallised Tape - AirGuard® Reflective

BBA Certificate 90/2548

- Low-emissivity breather membrane
- High vapour permeability (SD <3cm)
- High water resistance (>2000mm) -frame protection from factory to site to completion
- Wind-tightness - used in energy efficient structures of <0.6 ACH
- A unique lacquered surface, guaranteeing long term performance
- Buildings warmer in winter and cooler in summer

BBA Certificate 90/2548

- Air & vapour control layer which boosts your thermal insulation
- Reflects ca 95% of radiant heat
- Highly vapour resistant
- Considerably reduces vapour transmission through the construction
- Greatly improved u-values
- Considerably reduces convective and radiated heat loss
- Metalised surface with a very low emissivity of 0.05

The superior durability of Tyvek® is proven in performance



FREEDOM IN ARCHITECTURE & DESIGN

EXTERIOR



Tyvek® UV Facade - Tyvek® UV Facade Tape

BBA Certificate 90/2548

- For structure with open jointed rainscreen cladding
- Cladding gaps up to 30mm (with a 10 year guarantee)
- 50 year life expectancy
- High vapour permeability - SD 3,5 cm - guards against condensation
- High water resistance >3000mm - total protection from factory to completion

INTERIOR



AirGuard® Control - Tyvek® Acrylic Tape

BBA Certificate 90/2548

- Vapour control layer with limited vapour transmission
- Airtight and water resistant
- Superior mechanical strength
- Reduces convective heat losses
- Considerably reduces vapour transmission through the construction

Where other products suffer damage, Tyvek® withstands UV exposure



IMPROVED FIRE SAFETY

EXTERIOR

FLAME
RETARDANT



INTERIOR



Tyvek® FireCurb™ Housewrap - Tyvek® Metallised Tape - AirGuard® Reflective

BBA Certificate 90/2548

- Flame retardancy - tested to EN13501-1 & achieves up to Euroclass B
- High water resistance - >1300mm
- High vapour permeability - SD 1.5cm - guards against condensation
- Suitable for all types of construction including timber frame, SIPS & cladding

BBA Certificate 90/2548

- Air & vapour control layer which boosts your thermal insulation
- Reflects ca 95% of radiant heat
- Highly vapour resistant
- Considerably reduces vapour transmission through the construction
- Greatly improved u-values
- Considerably reduces convective and radiated heat loss
- Metalised surface with a very low emissivity of 0.05

Don't build with anything that won't stand the test of time!



TYVEK® STRUCTUREGUARD™

The professional choice for exceptional protection, improved durability and energy efficiency especially in commercial buildings



BBA Certificate 90/2548

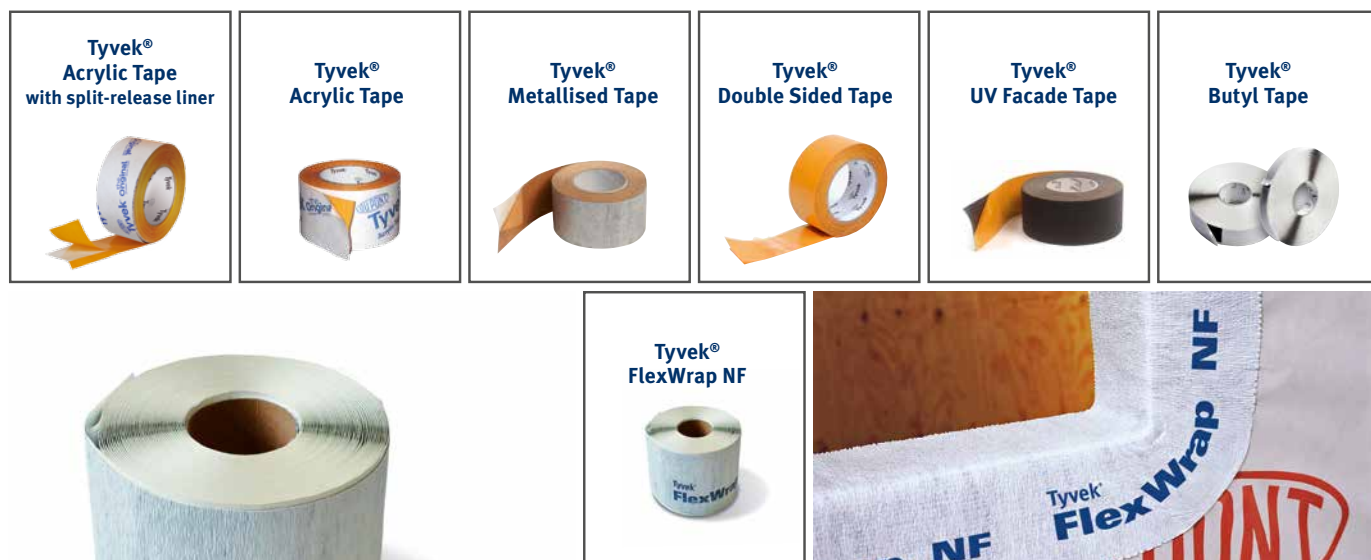
- Good airtightness for energy efficiency and Part L compliance
- Highly water resistant, exceeding W1 (1.5m water head) standard, even after ageing
- Exceptional long-term durability and UV resistance (tested to 4 months UV exposure)
- Can be used in all wall constructions including commercial and residential
- Windtight – protecting insulation performance
- Strong, lightweight and flexible for easy site installation
- 10 year limited product warranty
- Good nail tear resistance
- Roll size 1.4 x 100m & 2.7 x 100m

Another new innovative addition to our wide wall membrane offering



TYVEK® AND AIRGUARD® MEMBRANES + TYVEK® TAPES

A system to obtain the best air-tightness, water-tightness, durable and energy saving building performance





WHAT MAKES TYVEK® SO UNIQUE?

Protection against UV damage during temporary exposure time

During construction membranes often remain uncovered for weeks which can significantly reduce the performance life of certain membranes. Tyvek® can safely be exposed for up to 4 months WITHOUT impacting its long-term performance - saving energy and replacement costs.

Protection against reduced membrane performance over time

The functional layer of a membrane is the part that provides both the watertight and the vapour-open properties. By its nature, the functional layer of Tyvek® is ca. 6 to 8 times thicker than most common multi-layer products and is composed of 100% high UV and heat stabilised PE, which delivers excellent long term protection. Even a human hair is ca. 3 times thicker than the most common microporous films used in multi-layer products. **The quality of the functional layer is critical to preserving watertight performance over the expected lifetime of a building.**

<p>TYVEK®</p> <p>up to 220 micron functional layer</p>	<p>HUMAN HAIR</p> <p>80 micron</p>	<p>STANDARD ROOF UNDERLAY</p> <p>30 micron</p>	
<p>220 micron functional layer</p>	<p>Tyvek® UV Façade Tyvek® Reflex</p>		<p>Common microporous films of multi-layer products have a functional layer of only 30 micron.</p>
<p>175 micron functional layer</p>	<p>Tyvek® Housewrap Tyvek® FireCurb™ Housewrap Tyvek® StructureGuard</p>		

Would you trust a membrane with a vital protection layer that is thinner than a human hair?



WHAT MAKES TYVEK® SO UNIQUE?

15 years product warranty for membranes used in timber frame constructions



«In BS EN 13859-2 there are three classifications for water penetration - W1, W2 and W3 - where W1 is the best. TRADA Technology recommends the use of breather membranes of at least Class W2 for timber frame external walls. In areas of high exposure, or where liquid water penetration of the cladding is anticipated, use a breather membrane of Class W1».

Protection against water ingress during & after construction

- Tyvek® Supro provides 10 times better water hold out /resistance than the Class W1 industry standard.i.e. Tyvek® roof membranes >2 m ,Tyvek® wall membranes >1.5m water column.
- Very important when membranes are exposed
- Not all membranes offer well above W1 protection
- Membranes with insufficient water hold out can reduce the performance of the insulation

Protection against wind damage, meeting BS5534 regulation requirements

- Tyvek® Supro can be used in buildings across all 5 UK wind Zones. Importantly, with a taped lap Tyvek® Supro will meet all criteria regardless of site location, height or building condition/design. In full accordance with BS5534:2014. Not all membranes offer this level of wind protection.

Protection against wind infiltration, condensation and membrane delamination

The unique structure of Tyvek® creates an extra strong, durable weatherproof layer that is breathable across its entire surface, compared to micro-perforated products. Its superior airtightness can reduce building heat loss by up to 25% and reduce the effect of wind washing by up to 80%. The thermal stability and composition of the membrane means that there is no risk of delamination.





TYVEK® SUPRO / SUPRO PLUS

BBA CERTIFICATE NR 08/4548

- High water resistance > W1 standard, >2000mm - Total moisture protection
- High vapour permeability - SD 2cm - Protects against condensation
- Certified for non-ventilated roofs
- Wind tight - ensuring insulation performs as designed.
- 4 months UV exposure - with no loss of performance
- EN1107-2 compatible - long term dimensional stability
- Successfully protecting buildings for over 25 years
- Superior energy efficiency
- Tyvek® Supro Plus with integral tape

Recommendations as to methods, use of materials and construction details are based on the experience and current knowledge of DuPont and are given in good faith as a general guide to designers, contractors and manufacturers. This information is not intended to substitute for any testings you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions. DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a licence to operate under a recommendation to infringe any patent right.

¹ Only for the Tyvek® Timber Frame Solutions used in wall applications

DuPont Protection Solutions
Bristol Business Park
Coldharbour Lane
Bristol
BS16 1QD
Tel 01275 33 76 60
Sales 0844 068 722
www.construction.tyvek.co.uk



**FOR
GREATER
GOOD™**