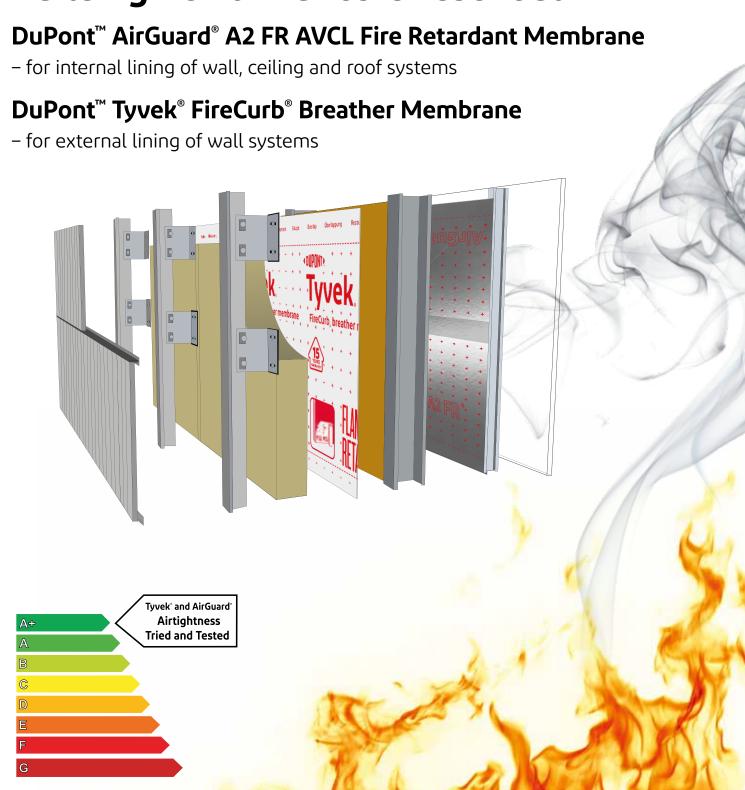


# When the Safety of Others and Long Term Building Performance is Essential



# Class A2 Fire Retardant AVCL Membrane DuPont™ AirGuard® A2 FR

Airtight Vapour Control Layer for use within the internal lining of roof, ceiling and wall systems





DuPont™ AirGuard® A2 FR AVCL: a Fire Retardant Airtight Vapour Control Layer for use within the internal lining of roof, ceiling and wall systems. Enhancing the building fabric in terms of airtightness, energy efficiency and moisture management, improving indoor air quality and providing exceptional fire safety to the building and its occupants.

#### **Surpassing the Fire Regulations**

Today the fire performance of materials used in buildings is under closer scrutiny than ever before and the regulations continue to be updated. DuPont has introduced a step change in their building membranes offering: a fire retardant AVCL with European Fire Classification A2.

#### Membrane & Tape System – Independent Classification: A2-s1,d0

For DuPont™ AirGuard® A2 FR AVCL to provide effective airtightness and vapour control it is crucial that all laps, junctions and penetrations are sealed. In order to give assurance that a complete system is 'fire-safe,' a full system test, including horizontal and vertical lap sealing with DuPont™ AirGuard® FR System tape has been successfully tested according to EN 13501-1 at the Prüfinstitut Hoch → Classification Report, KB-Hoch-200148-5, 18.08 2021.



- Fire-retardant
- Reaction to fire: A2-s1, d0 to EN 13501-1: 2007+A1:2009
- DuPont<sup>™</sup> AirGuard<sup>®</sup> A2 FR AVCL and DuPont<sup>™</sup> AirGuard<sup>®</sup> FR System tape



DuPont<sup>™</sup> AirGuard<sup>®</sup> FR System Tape

- Tested and classified for free-span, on mineral wool slab, gypsum plasterboard or fibre cement board
- Fire Classification surpasses all national building regulations and standards for construction materials used in walls in the UK and Ireland

- Suitable for all building types, heights and proximities
- High vapour resistance, limiting interstitial condensation
- Suitable for high humidity buildings, such as swimming pool halls etc
- Thermal benefit; low emissivity/reflective surface
- 100% Airtightness
- Extremely robust
- Exceptional tear and tensile strength characteristics
- 25 year warranty for the DuPont™ AirGuard® A2 FR AVCL membrane



## THE DUPONT™ TYVEK® BUILDING KNOWLEDGE CENTRE

www.building.dupont.co.uk

# DuPont™ Tyvek® FireCurb® breather membrane advantages at a glance

- Compliance with national Fire Regulations & Standards for use in hi-rise buildings
- Reaction to fire: B-s1,d0
- Self-extinguishes when ignited limits propagation of flames
- Class W1 essential water resistance to EN 13859
- Halogen-free flame retardant coating considerably limits the formation of droplets and reduces smoke
- Greater safety during and after installation
- Long term investment protection
- Has all the tried, tested and trusted properties Tyvek® is known for
- Strong technical support for all Tyvek® and AirGuard® products

## **DuPont™ Tyvek® FireCurb® breather membrane**

breather membrane for use in the external lining of wall systems





DuPont™ Tyvek® FireCurb® breather membrane: a flame retardant breather membrane for buildings based on a new patented technology, enabling a Euroclass B (EN 13501-1) that potentially saves lives and could prevent costly damages.

#### The building breather membrane that limits the propagation of flames

DuPont introduced a new level of building protection with the flame retardant breather membrane Tyvek® FireCurb®. When flames meet Tyvek® FireCurb®, they literally stop, die down ... and go out.

The membrane includes all of the well-known properties of Tyvek®, adding flame retardancy for even more comprehensive protection of walls.

#### Tyvek® FireCurb® breather membrane advantages at a glance

- Compliance with national Fire Regulations & Standards for use in hi-rise buildings
- Reaction to fire: B-s1,d0
- Self-extinguishes when ignited limits propagation of flames
- Halogen-free flame retardant coating considerably limits the formation of droplets and reduces smoke
- Greater safety during and after installation
- Long term investment protection
- Includes all durable Tyvek® characteristics essential for energy efficient and condensation free buildings:
- Class W1 water resistance to EN 13859
- Vapour resistance meets BS 5250 guidance for breather membranes (<0.6 MN.s/g)</li>
- IMPORTANT: Not all fire retardant breather membranes, on the market, reach the required sd and water vapour resistance standard <0.6MN.s/q</li>

#### **DuPont™ AirGuard® A2 FR AVCL**

| Properties <b>( €</b>              | Nominal  |
|------------------------------------|--|
| Style name and D code              | 5816X (D Code:- D15561632)                                 |
| Roll size/Weight                   | 1.2m x 50m / 10.4kg per roll                               |
| Thickness                          | 0.15 mm  |
| Mass per unit area                 | 165 g/m²   |
| Composition                        | Laminate of glass fibre-mesh with lacquered Aluminium foil |
| Reaction to fire* (EN13501-1)      | A2-s1,d0 (membrane tested by itself)                       |
| Reaction to fire* (EN13501-1)      | A2-s1,d0 (membrane & AirGuard® FR System tape)             |
| Water vapour transmission (Sd)     | 4.900 m  |
| Water vapour resistance            | 24.000 MN.s/g  |
| Emissivity                         | 0.05   |
| Thermal resistance (with airspace) | Walls: 0.66 m²K/W / Ceilings: 0.45 m²K/W                   |
| Water tightness (EN1928)           | Pass (Type A)  |
| Tensile force MD/XD                | 800/800 (N/500)  |
| Nail tear resistance MD/XD         | 170/150 (N/50 mm)  |

Tested freehanging & affixed on underlaying materials with EN13501-1 fire class A1 or A2-s1, d0.

IMPORTANT: To compliment this product, a flame retardant breather membrane should be used on the external side of the wall system. For this purpose, we would recommend you use DuPont™ Tyvek° FireCurb°. Please see www.flameretardant.tyvek.com

| Properties ( €                 | Nominal   |
|--------------------------------|---|
| Style name and D code          | 2066B (D Code:- D15085129)                          |
| Roll size/Weight               | 1.5m x 50m/5.5kg per roll                           |
| Composition                    | Flash-spun-bond HDPE with flame retardant coating   |
| Reaction to fire*              | (EN13501-1) B-s1,d0                                 |
| Temperature resistance         | -40 to +100° C                                      |
| Water vapour transmission (Sd) | 0.015 m   |
| Water vapour resistance        | 0.075 MN.s/g (less than 0.6 MN.s/g to BS 5250:2011) |
| Mass per unit area             | 68 g/m²   |
| Functional layer thickness     | 175 µm  |
| CE-Certificate of Conformity   | yes (0799-CPD-128)                                  |

\*(if installed freehanging, on mineral wool & cementitious boarding--> B-s1,d0 , if installed onto wood --> D-s2,d2)

IMPORTANT: To compliment this product in roof, ceiling and wall systems, a fire retardant air and vapour control layer (AVCL) should be used within the internal lining.

For this purpose we would recommend you use DuPont™ AirGuard® A2 FR.

To achieve optimal airtightness, we recommend the use of the following adhesive accessories.

Tyvek® Acrylic Tape

Roll size: 75 mm x 25 m



#### AirGuard® FR System Tape

Roll size: 75 mm x 25 m



#### Tyvek® Butyl Tape

Roll size: 20 mm x 30 m or 50 mm x 30 m



#### Tyvek® Double-sided Tape

Roll size: 50 mm x 25 m



#### Tyvek® FlexWrap NF/EZ (Check for maximum tape

width permitted)

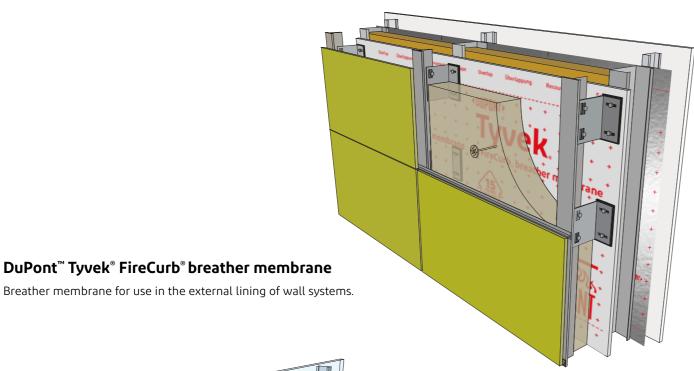
Roll size Tyvek® FlexWrap NF: 15cm x 23 m

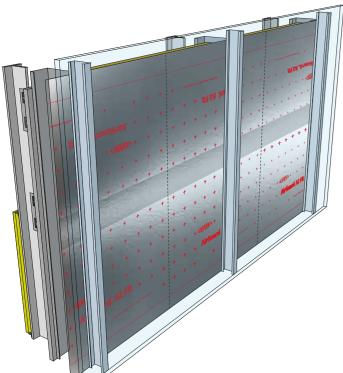


Roll size Tyvek® FlexWrap EZ: 60 mm x 10 m



For more detailed information on all our tapes and accessories please refer to our website www.building.dupont.co.uk





### Class A2 Fire Retardant AVCL Membrane DuPont™ AirGuard® A2FR

Airtight Vapour Control Layer for use within the internal lining of roof, ceiling and wall systems

Please see Installation Sheets on the website www.building.dupont.co.uk

#### ENHANCED FIRE AND SMOKE PROTECTION

These tried and tested products not only provide exceptional fire and smoke protection and peace of mind for occupants - they also enhance a building's airtightness and air quality while improving energy efficiency and moisture management.

www.FlameRetardant.tyvek.com www.building.dupont.co.uk www.energy-efficiency.dupont.com

## **DuPont™ AirGuard® FR System Tape**

#### For use with DuPont™ AirGuard® A2 FR AVCL

#### **PRODUCT DESCRIPTION & APPLICATION**

DuPont™ AirGuard® FR System Tape is a fire retardant, single-sided tape, with A2 Fire Class to EN 13501. Specially formulated for use with DuPont™ AirGuard® A2 FR AVCL for sealing all horizontal and vertical laps and around penetrations.

#### COMPOSITION

Glass fibre carrier with lacquered reflective aluminium surface and specially formulated adhesive backing and paper release liner.

#### **SPECIFICATIONS**

- Fire retardant
- A2-s1,d0 fire class with DuPont™ AirGuard® A2 FR AVCL
- A2-s1,d0 fire class on gypsum plasterboard/CP board
- Surpasses current fire regulations for membranes used in external walls
- Suitable for all building types, heights and proximities
- 100% Airtight for energy efficiency
- High vapour resistance limits interstitial condensation
- Reflective (low emissivity 0.05)
- Exceptional tensile strength characteristics
- Not hand tearable, please use cutting tool.



8 N/25mm

-40 to 80°C

Pass



For further information please contact:

DuPont™ Tyvek® Building Knowledge Centre Bristol & Bath Science Park Dirac Crescent Emersons Green Bristol, UK BS16 7FR

> Technical: 0117 970 9454/9455 Sales: 0117 970 9456



Visit: www.building.dupont.co.uk

Peel Force

Temperature range

Watertightness

**Technical enquiries:** Tyvek.construction@dupont.com

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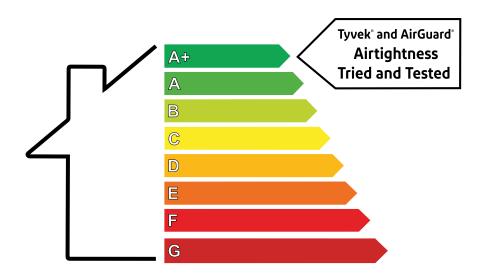
EN 1895

EN 1928

# DuPont<sup>™</sup> Tyvek<sup>®</sup> and DuPont<sup>™</sup> AirGuard<sup>®</sup>

DuPont<sup>™</sup> Tyvek<sup>®</sup> is at the forefront of building science, meeting the building codes of today and the future with construction materials you can trust. For the ultimate energy efficiency solution and the inner strength that buildings need, DuPont<sup>™</sup> Tyvek<sup>®</sup> partners AirGuard<sup>®</sup>, for superior performance and reliability in internal airtightness. With today's focus on the reduction of emissions and improved energy efficiency, you can count on a brand that has been at the heart of building solutions for decades and has a global building knowledge network. Tyvek<sup>®</sup> and AirGuard<sup>®</sup> are your guarantee of unbeatable energy efficiency.

With Tyvek® and AirGuard®, Trust is Built In.



For additional information please contact:

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Sales: 0117 970 9456

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www.building.dupont.co.uk www.construction.tyvek.co.uk www.energy-efficiency.dupont.com

For help with projects please contact our technical team at the Tyvek® Building Knowledge Centre or one of our Regional Managers (details above and on our web sites) For Installation guides and videos, technical data sheets, certification, case studies and other useful information

