



Tyvek.

ENERGY EFFICIENT SOLUTIONS FROM DUPONT™ TYVEK® AND DUPONT™ AIRGUARD® BUILD AIRTIGHT AND CONDENSATION FREE

DUPONT™ AIRGUARD® CONTROL - S_d 5 m

Strong AVCL for optimal airtightness in roofs, walls and floors



- Vapour control layer with limited vapour transmission
- Airtight and water resistant
- DuPont™ Tyvar® spunbond & Ethylen-Butylacrylate Copolymer
- CE conformity for plastic and rubber vapour control layer (EN 13984)
- Superior mechanical strength
- Reaction to Fire: Class E
- Lightweight - easy to install
- Considerably reduces convective heat losses
- Considerably reduces risk of condensation into the insulation

DUPONT™ AIRGUARD® REFLECTIVE - S_d 2000 m

AVCL which boosts your thermal insulation



- Highly vapour resistant
- Airtight and water resistant
- A composite of polypropylene, polyethylene and an aluminium foil
- CE conformity for Plastic and rubber vapour control layer (EN 13984)
- Superior mechanical strength
- Reaction to Fire: Class E*
- Reflects ca. 95% of radiant heat
- Considerably reduces risk of condensation into the insulation
- Considerably reduces convective heat losses

DUPONT™ AIRGUARD® SMART - S_d 0,05 ... > 30 M

AVCL with variable vapour resistance



- Extreme vapour resistance range from 0.26 MNs/g to more than 150 MNs/g, (sd value 0,05 m - more than 30 m), therefore highly adaptable one of the widest vapour resistance spans known in the market
- Combines drying-out and vapour control function in one layer
- High drying-out potential = high protection against structural damage
- High tensile strength offering superior insulation support/retention
- Very robust - offering versatility in site work
- Airtight
- Transparent allowing the timber members to be easily located for fixing
- Easy to install - suitable for use in roof or wall constructions

DUPONT ACCESSORIES

Create airtight, windtight and watertight seals

- DuPont™ Tyvek® Acrylic Tape



- DuPont™ Tyvek® Butyl Tape



- DuPont™ Tyvek® Metallised Tape



- DuPont™ Tyvek® Double Sided Tape



- DuPont™ FlexWrap™ NF



Specifications	DuPont™ AirGuard® Control	DuPont™ AirGuard® Reflective	DuPont™ AirGuard® Smart
Style name	8327AD	5814X	8407A
Roll size	1.50 m x 50 m, 9 kg	1.50 m x 50 m, 12 kg	1.50 m x 50 m, 11 kg
Mass per unit area	108 g/m ²	149 g/m ²	139 g/m ²
Water vapour transmission value (s _d)	5 m	2000 m	0,05 ... > 30 m
Maximum tensile force MD/XD	200/170 N/50 mm	440/210 N/50 mm	360/300 N/50 mm
Resistance to tearing MD/XD	240/240 N	230/250 N	310/330 N
Fire class	E	E	E
Temperature resistance	-40/+80°C	-40/+80°C	-40/+80°C
Bendtsen airpermeability	0 ml / min	0 ml / min	0 ml / min
Emissivity	0.05	0.05	0.05



Why is airtightness so important ?

As we progress into the future with more energy efficient and sustainable building methods we are becoming more aware of the shortcomings of uncontrolled air leakage. Heat loss by convection isn't something that is highlighted by a standard U-value calculation, but is a significant cause of energy loss and carbon emissions nonetheless. By limiting the leakage of heated/conditioned air from buildings, it is possible to reduce energy consumption and costs and therefore by utilising DuPont air and vapour control membranes the more stringent air tightness and u-value performance requirements of the future building regulations expected through to 2016 can be help to be met.

The European Commission made commitments to reduce carbon emissions through the European Energy Performance of Buildings Directive (EPBD). It shall assist upon request Member States in setting up national or regional financial support programmes with the aim of increasing energy efficiency in buildings.

Achieve optimal airtightness and long-term performance

The energy efficiency of a building can be significantly improved by making the inside of the building airtight and vapour resistant. Uncontrolled air leakage occurs through gaps between and around insulation layers and through hairline cracks in plasterboard linings. These invariably occur during the building drying out process, but are also caused by settlement and thermal movement over the life of the building. Any layer in the building envelope where total continuity is not achieved is a potential weak point

Air & vapour control layers (AVCL's) suitable for roofs, walls and floors help to reduce convective heat losses but also provide highly engineered vapour control for breathing systems. When installed continuously with all laps and penetrations sealed, an AVCL will provide effective condensation control and airtightness for all

building types. With an ever increasing requirement to conserve energy the portfolio of DuPont™ Tyvek® products can help you achieve these environmental goals.

Air & vapour control layers (AVCL's) DuPont™ AirGuard® - Optimal protection from the inside

Due to the new regulation coming from the European Energy Performance of Buildings Directive, the requirements on the energy performance of buildings have been increased. Because of air leakage from the building interior, heat losses through convection can occur. Choosing the right air & vapour control layer (AVCL) will help create a thermally efficient, condensation-free structure.

Installing one of the DuPont™ AirGuard® AVCL generics will keep the insulation and wall structure dry and can help to reduce the energy consumption. On top of choosing the right AVCL it is important to make the building envelope airtight and windtight by sealing gaps between and around insulation layers, AVCL's and breather membranes. With DuPont accessories you can choose the right products to complement and enhance Tyvek® building envelope solutions. The adhesive tapes are specially designed for use with DuPont membranes to help reduce uncontrolled air leakages.



Product safety information is available upon request. This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing 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 license to operate under or a recommendation to infringe any patent right.