

RECOMMENDATIONS FOR INSTALLATION: TRASPIR

APPLICATION ON WALL - EXTERNAL SIDE



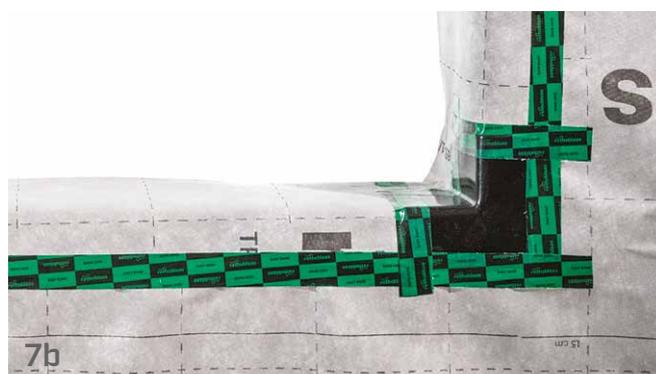
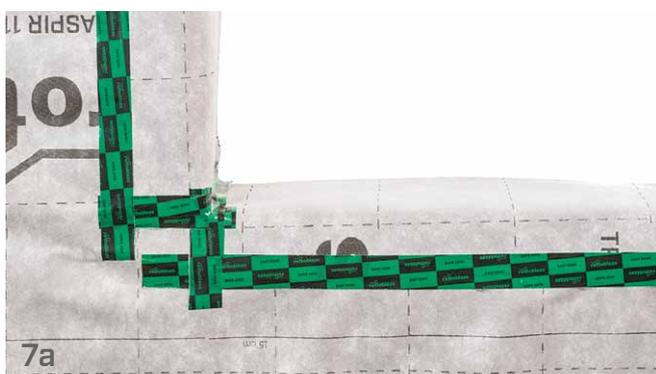
1 TRASPIR 95, TRASPIR 110, TRASPIR ALU 120, TRASPIR 135, TRASPIR 150, TRASPIR EVO 160, TRASPIR ALU FIRE A2 430

2a DOUBLE BAND, SUPRA BAND, BUTYL BAND
OUTSIDE GLUE

2b ALU BAND, EASY BAND, SPEEDY BAND, FLEXI BAND, FLEXI BAND UV, FACADE BAND, SOLID BAND, PLASTER BAND

RECOMMENDATIONS FOR INSTALLATION: TRASPIR

APPLICATION ON WINDOW - EXTERNAL SIDE



1 TRASPIR 95, TRASPIR 110, TRASPIR SUNTEX 120, TRASPIR 135, TRASPIR 150, TRASPIR EVO 160, TRASPIR ALU FIRE A2 430

2 MARLIN, CUTTER

5 HAMMER STAPLER 47, HAMMER STAPLER 22, HAND STAPLER, STAPLES

6 EASY BAND, SPEEDY BAND, FLEXI BAND, FLEXI BAND UV, FACADE BAND, SOLID BAND, SMART BAND, PLASTER BAND ROLLER

RECOMMENDATIONS FOR INSTALLATION: TRASPIR UV

APPLICATION ON WALL - MEMBRANE WITH DOUBLE TAPE



APPLICATION ON WALL - MEMBRANE WITHOUT DOUBLE TAPE



3 DOUBLE BAND, FACADE BAND, FRONT BAND UV

RECOMMENDATIONS FOR INSTALLATION: TRASPIR UV

APPLICATION ON WINDOW - EXTERNAL SIDE



1 HAMMER STAPLER 47, HAMMER STAPLER 22, HAND STAPLER, STAPLES

2 MARLIN, CUTTER

6 FACADE BAND, FRONT BAND UV

7a ALPHA

7a PLASTER BAND OUT

RECOMMENDATIONS FOR INSTALLATION: TRASPIR

APPLICATION ON ROOF - EXTERNAL SIDE



1 TRASPIR 150, TRASPIR NET 160, TRASPIR EVO 160, TRASPIR 200, TRASPIR ALU 200, TRASPIR FELT UV 210, TRASPIR EVO 220, TRASPIR DOUBLE NET 270, TRASPIR EVO 300, TRASPIR DOUBLE EVO 340, TRASPIR ALU FIRE A2 430

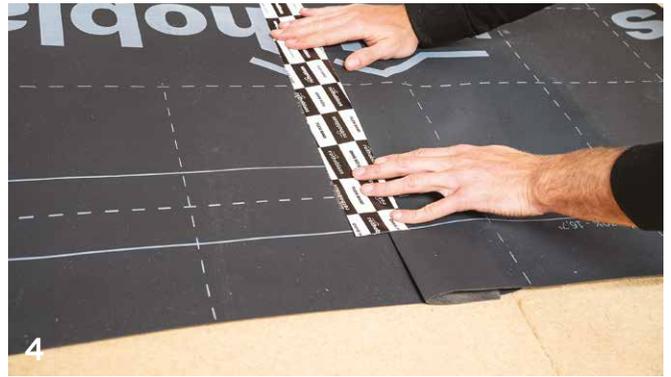
2 HAMMER STAPLER 47, HAMMER STAPLER 22, HAND STAPLER, STAPLES

5b EASY BAND, SPEEDY BAND, FLEXI BAND, FLEXI BAND UV, SOLID BAND, PLASTER BAND
ROLLER

5c DOUBLE BAND, SUPRA BAND, BUTYL BAND
OUTSIDE GLUE

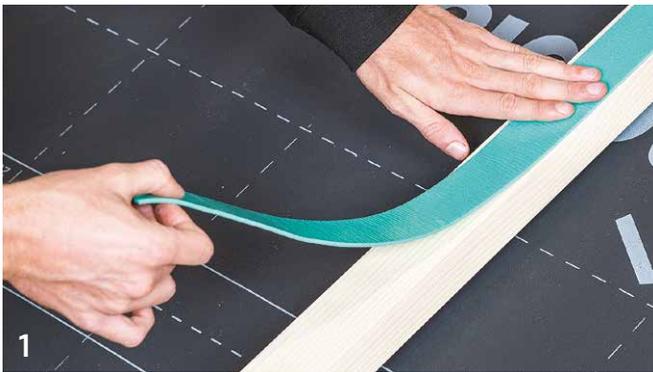
RECOMMENDATIONS FOR INSTALLATION: ROOF

TRANSVERSAL HEAD OVERLAPPING SEALING



4 EASY BAND, SPEEDY BAND, FLEXI BAND, FLEXI BAND UV, SOLID BAND, PLASTER BAND

SEALING FASTENING SYSTEMS



1 GEMINI

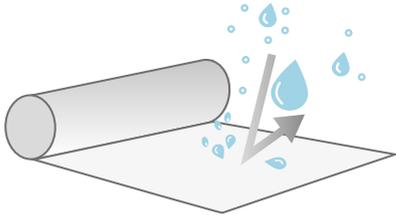


1 NAIL PLASTER, NAIL BAND

MEMBRANE PERFORMANCE

The membranes undergo various tests to determine their performance. Based on these, it is possible to choose the most suitable solution for your project.

WATERTIGHTNESS



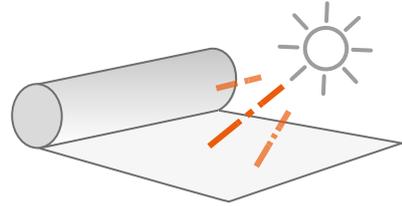
Ability of the product to temporarily prevent the passage of water during construction and in case of accidental breakage and dislocation of the roof covering. Passing this test is not sufficient to make the products suitable to replace the sealing layer and to withstand standing water for long periods.

This property indicates resistance to penetration of water. Standard **EN 13859-1/2** establishes the following classification:

- **W1:** High resistance to penetration of water
- **W2:** Medium resistance to penetration of water
- **W3:** Low resistance to penetration of water

Standard **EN 13859-1** and **2** establishes a requirement of resistance to 200 mm of static water pressure for 2 hours (classification W1). **NOTE:** for vapour control membranes and control layers, the word "conforming" is only used when the product meets the most severe requirements of the test indicated above (200 mm static water pressure for 2 hours).

UV STABILITY AND AGEING



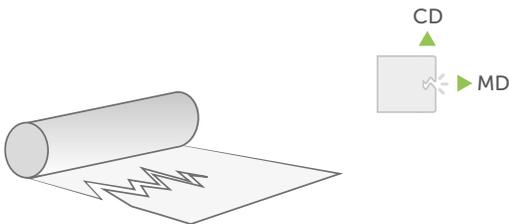
Is the value relative to annual median radiation in the Central Europe zone, formulated based on EN 13859-1/2 (55 MJ/m²).

The test method consists of exposing the specimen to continuous UV irradiation at elevated temperature for 336 hours. This corresponds to a total UV radiation exposure of 55 MJ/m². For walls that do not exclude UV exposure with open joints, artificial ageing by UV must be extended over a period of 5000 hours.

Resistance to water penetration, tensile strength and elongation must be determined after artificial ageing.

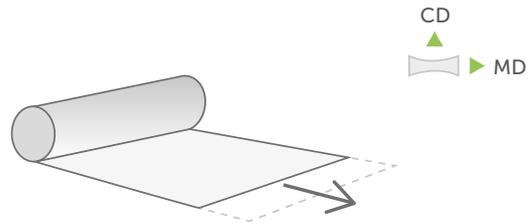
Note: actual climatic conditions are variable and depend on the application context, so it is difficult to establish an exact match between artificial ageing tests and actual conditions.

TENSILE STRENGTH



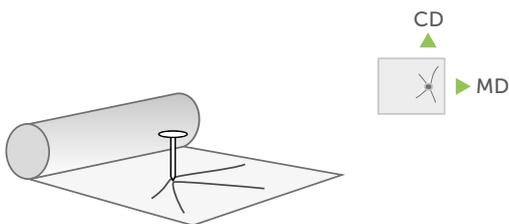
Force exercised both longitudinally and transversally, to determine the maximum load, expressed as N/50 mm.

ELONGATION



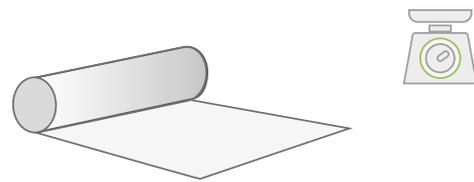
Indicates the maximum elongation percentage the product can suffer before failure.

RESISTANCE TO NAIL TEARING



Force exercised both longitudinally and transversally with the insertion of a nail, to determine the maximum load, expressed in N (Newton).

MASS PER UNIT AREA



Mass per unit area expressed in g/m². High mass per unit area ensure great mechanical performance and superior abrasion resistance.

MD / CD: longitudinal/transversal values with respect to the direction the membrane rolls

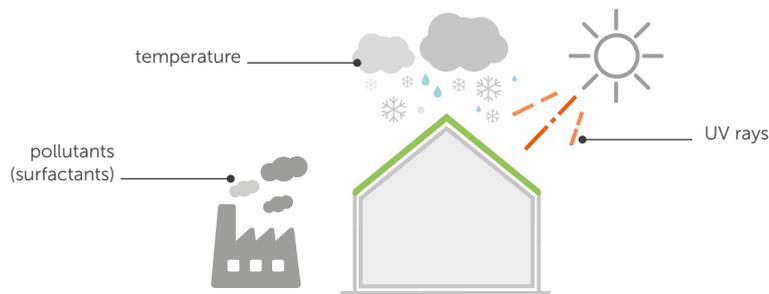
DURABILITY



The polymers from which the synthetic membranes are made have been specially engineered to perform their function in the product and have excellent properties.

Certain stress causes, such as UV radiation, high temperatures and pollutants, affect these properties.

For example: the mechanical properties of a new membrane and a membrane exposed to ultraviolet (UV) radiation for 6 months are different. This is because UV attacks the chemical structure of certain polymers which, if not adequately protected by UV stabilisers, affect the properties of the finished product.



In order to maintain the properties of the product, it is important to choose it taking into account the conditions it will be exposed to throughout its life, from construction to operation, and to protect it as much as possible (the construction phase is a source of stress and accelerated ageing).

Durability is affected by the sum of these sources of stress: temperature, UV and pollutants.

CORRELATION BETWEEN EXPERIMENTAL AND ACTUAL RESULTS

The data obtained from the ageing tests are comparative and not absolute data. The relationship between test exposure and outdoor exposure depends on a number of variables, and no matter how sophisticated the accelerated ageing test may be, it is not possible to find a conversion factor: in accelerated ageing tests the test conditions are constant, whereas during real outdoor exposure they are variable. The most that can be expected from accelerated laboratory ageing data is a reliable indication of the relative strength ranking of a material compared to other materials.

In the reality of a construction site, a product tends to be subject to more than one cause of stress and the conditions are unpredictable. Each application context has specific conditions, with effects that are difficult to measure with a standard test.

Therefore, it is important to maintain large safety margins, for example by choosing products with better properties even where not specifically required.

Given highly variable weather and radiation conditions, the value may change based on the country and weather conditions at the time of application.



SEASONAL VARIATIONS



PRODUCT ORIENTATION



LATITUDE



ALTITUDE



YEARLY RANDOM VARIATIONS IN TIME

Microporous films are made from hydrophobic polymers, which are themselves incapable of interacting with water and are generally more rigid. They require special processing to allow water to pass through them. This makes them more susceptible to pollutants.

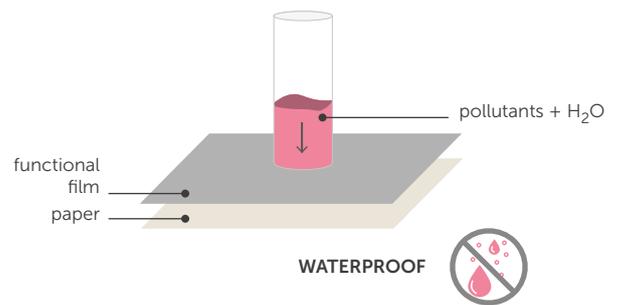
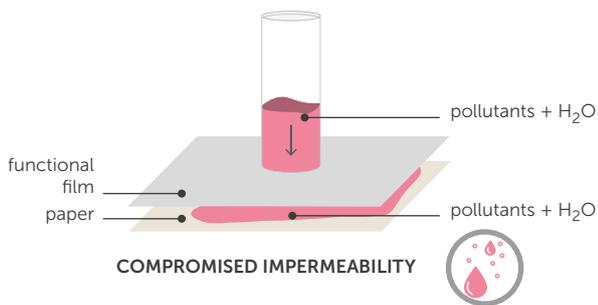
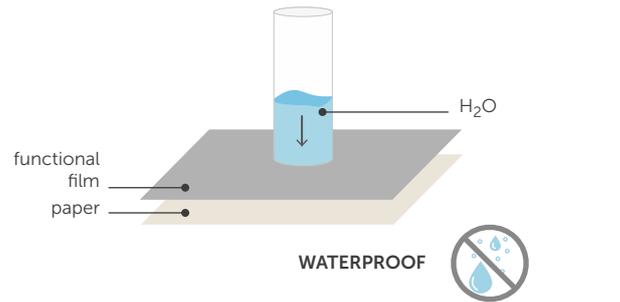
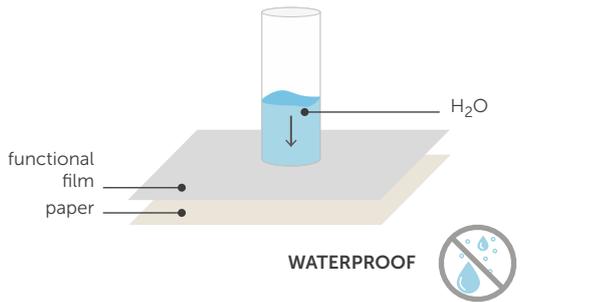
Monolithic films are made from hydrophilic polymers, which are able to interact chemically with water and are generally more elastic.

MICROPOROUS MEMBRANES

MONOLITHIC MEMBRANES

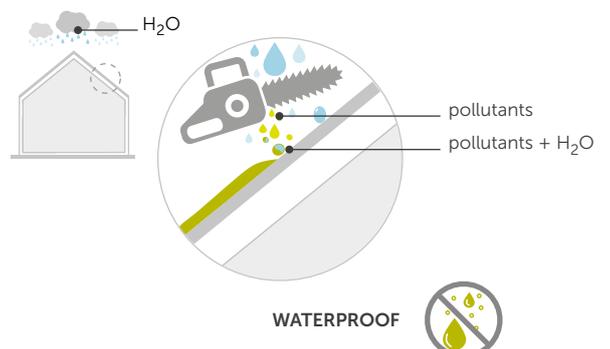
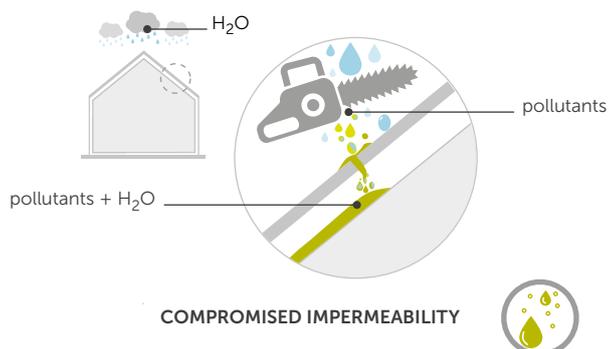
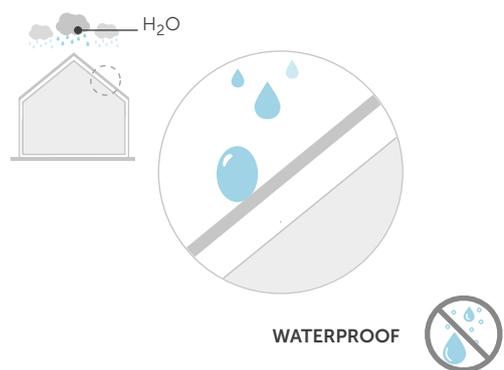
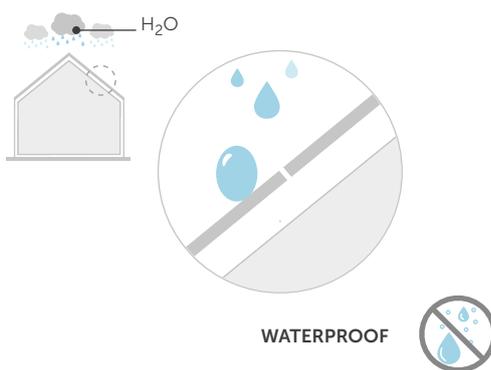
LABORATORY TEST

LABORATORY TEST



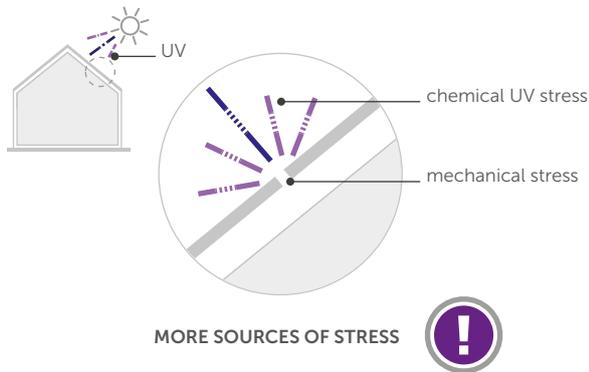
CASE ON SITE

CASE ON SITE



MICROPOROUS MEMBRANES

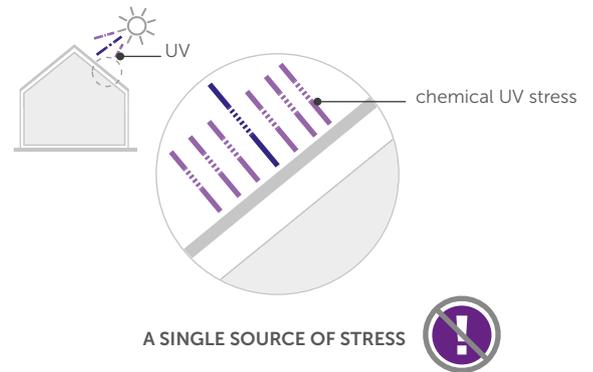
RESISTANCE TO ULTRAVIOLET RADIATION



The more sources of stress act simultaneously, the greater the degradation of polymers. In the production process microporous films are subjected to mechanical stress. If a microporous membrane is exposed to ultraviolet radiation, chemical stress is added to the mechanical stress. Respecting the maximum UV exposure of the membrane is important in order not to compromise the durability of the functional film.

MONOLITHIC MEMBRANES

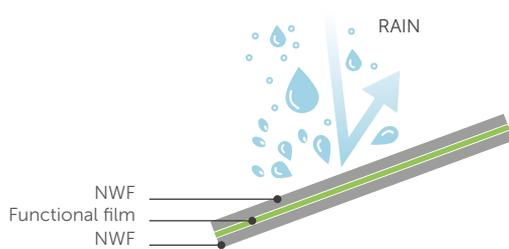
RESISTANCE TO ULTRAVIOLET RADIATION



No mechanical or thermal stresses are created in the production process of monolithic films. Therefore, when a monolithic membrane is exposed to ultraviolet radiation, this is the only source of stress for the functional film and degradation is less than it would be for a microporous film. The UV resistance of monolithic membranes is generally higher. However, it is important to respect the maximum UV exposure of the membrane in order not to compromise the durability of the functional film.

WATER REPELLENCY

All membrane surfaces are designed to be water-repellent. Water repellency can be provided through the choice of materials or by exploiting the texture of the surface. This is an important feature because it helps to keep the membrane dry.



HYDROFOBICITY

In some cases (TRASPIR EVO 300), the surfaces are made hydrophobic with a special treatment to further reduce interaction with water (the mechanism of non-interaction with water is similar to that of water repellency but is even more pronounced).

