SOLITEX® PLUS

SOLITEX® PLUS breathable membrane

- High performance underslating felt
- High nail tear resistance > 300 N
- Temperature resistant
- Resistance to wood preservatives
- High resistance to pelting rain
- NSAI AGRÉMENT Board approved
- BBA approved
- High diffusion ability s_d-value 0.04 m or g-value 0.20 MN·s/g
- Air impermeable, wind tight

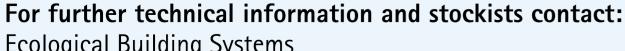


| Attribute | Norm | Value |
|---|---------------------------|---------------------------------------|
| Length | | 50 m |
| Width | | 1.5 m |
| Surface weight | BS EN 1849-2 | 170 g/m² |
| Thickness | BS EN 1849-2 | 0.55 mm |
| s _d -value / s _d -value humidity variable | BS EN ISO 12572 | 0.04 m / 0.02 m |
| g-value / g-value humidity variable | | 0.20 MN·s/g / 0.10 MN·s/g |
| Fire behaviour | BS EN 13501-1 | E |
| Exposure time | | 3 months |
| Water column | BS EN ISO 811 | > 2500 mm |
| Water resistance un-/aged* | BS EN 13859-1 | W1 / W1 |
| Tensile strength MD/CD | BS EN 13859-1 (A) | 450 N/5 cm / 330 N/5 cm |
| Tensile strength MD/CD aged* | BS EN 13859-1 (A) | 495 N/5 cm / 350 N/5 cm |
| Elongation MD/CD | BS EN 13859-1 (A) | 15 % / 15 % |
| Elongation MD/CD aged* | BS EN 13859-1 (A) | 15 % / 15 % |
| Nail tear resistance MD/CD | BS EN 13859-1 (B) | 370 N / 400 N |
| *) Artificial ageing by long term | BS EN 1297/ BS EN 1296 | passed |
| Flexibility at low temperature | BS EN 1109 | -40 °C/-40 °F |
| Temperature resistance | | -40 °C to +100 °C / -40 °F to +212 °F |
| | | |









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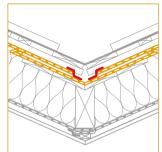
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... and the insulation is perfect



To achieve maximum performance using pro clima SOLITEX® PLUS breathable membrane the following fitting instructions are recommended

Valley





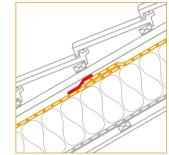
Lay a SOLITEX PLUS strip longitudinally along the middle of the valley (soaker stripe). Fold back the membranes by approx. 5 cm on their long sides and attach using staples sparingly. Stick the membranes placed over the valley membrane using TESCON VANA.

Laying roof area



The SOLITEX PLUS membrane is extremely stable in form, making it quick, easy and accurate to lay. The overlap on the membranes should be at least 100 mm, a distance which is easy to stick to using the printed-on markings at 150 mm intervals. A greater overlap is recommended if the roof pitch is less than the regulation amount. The membrane is attached using rust-resistant wide-headed pins or staples in the top third of the lining area.

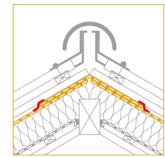
Sticking the membranes





Install the membranes with 10-15 cm overlap. The membranes should be fastened in a manner that is protected against moisture in the upper third of the overlap area of the membrane that will later be the overlay and underneath the counter batten. Use galvanised staples (min. 10 mm wide and 8 mm long). Fasteners should not be applied in areas where water run-off is collected (e.g. in roof valleys).

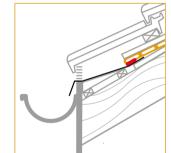
Ridge and rake





In the case of fully insulated rafters, place SOLITEX PLUS over the ridge/hip and attach in place using staples in the area of the counter batten. Overlap relative to the membrane underneath by at least 22.5 cm. Stick the membrane overlap using TESCON No.1 / TESCON VANA or pro clima DUPLEX double-sided adhesive tape. Ridge ventilation should be provided in the case of cold attics where insulation is applied at joist level. To do so, install SOLITEX PLUS in such a way that it stops 5 cm before the ridge. In addition, permanent ventilation fittings should be provided in the unconverted attic. Please refer to BS 5250 for further ventilation guidelines for various roof types.

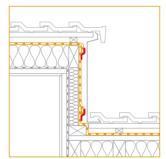
Eaves





pro clima SOLITEX PLUS must be joined at the eaves in a waterproof manner. Position the membrane on a UV stable eave flashing or eave strip. Stick in place using the double-sided pro clima DUPLEX adhesive tape or the single-sided TESCON No.1 / TESCON VANA adhesive tape, ensuring that there are no folds or creases.

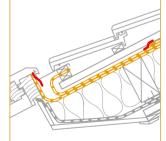
Dormer windows





Allow around 15 cm of SOLITEX PLUS to run up onto the dormer cheek and attach it at the upper membrane edge using staples. SOLITEX PLUS can also be used in the area of dormer cheeks to provide protection against outdoor exposure during the construction

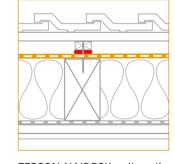
Penetration of roof windows, chimneys, pipes and other roof fittings





Installation of a gutter above/adjacent to the roof window is recommended by fitting a second SOLITEX PLUS membrane as an underlay. This must be guided into the overlap area of the next continuous roofing membrane above the integrated roof element. Create the gutter in such a way that moisture is guided by a continuous counter batten into the next adjacent field that does not have an integrated roof element.

Nail sealing





TESCON NAIDECK nail sealing tape prevents water entering through nail, staple or screw holes during the construction phase, for example. Stick the tape to the back of the counter battens before attaching them. After putting the counter batten in place on the rafters, remove the backing paper and gradually affix the batten using nails, for example. This is essential in low pitch or very exposed roofs.

Fitting instructions to comply with Installation Guidelines

General

- The pro clima SOLITEX PLUS system can be used as an underlay or sarking membrane. It stops cold air from flowing through the building structure and ensures that the thermal insulation performs to its optimum efficiency (see diagram A & B).
- SOLITEX PLUS underlays are not effected when used with undried timber preservatives (water or solvent based).
- SOLITEX PLUS underlays can be used as a temporary water resistant roof covering for not more than 3 months prior to the installation of slates or tiles.
- SOLITEX PLUS should be stored in dry conditions, protected from the weather.
- · Please refer to relevant national standards such as the NSAI Irish Code of Practice for Slating and Tiling for additional good practice guidance. .
- Counter battens are recommended and considered best practice for optimum performance of vapour permeable roof underlays. A counter batten provides a clear zone for moisture to drain from the roof, especially at the building phase. It also provides a clear ventilation zone between the roof covering and the membrane allowing vapour to safely disperse and also to reduce overheating between the roof covering and membrane.
- When used unsupported without counter-battens, a nominal 10mm drape must be provided between supports to allow a clear drainage path for moisture and prevent excessive deflection under wind loads. (see diagram C) .

Laying Instructions

- pro clima SOLITEX PLUS is installed with the blue covering fleece side (with writing) facing outwards. Provided the roof is counter battened, SOLITEX PLUS may be installed taut parallel or perpendicular to the eave. Horizontal installation (perpendicular to the eave) is preferable with regard to water flow paths during the construction phase. When it is used as a sarking membrane, the rafter spacing is limited to 100 cm. Use clout nails or fastening staples that are at least 10 mm wide and 8 mm long to attach the membranes. The membranes can only be fastened with staples in the protected overlap area. The maximum distance between fasteners is 10 to 15 cm. Provide membrane overlaps of at least 10 cm in the case of roof pitches greater than 35°. Provide overlaps as per the following table for lower roof pitches.
- SOLITEX PLUS should be overlapped minimum 100 mm (an overlap line is clearly marked on each roll). Overlaps of the membrane should be in accordance with BS 5534:2014 Annex A, Figure A.2, with horizontal laps secured by battens.
- Fix the underlay using good quality extra large clout head nails, galvanised or copper.
- SOLITEX PLUS can be easily cut with a sharp knife and remains flexible at all normal working temperatures.

| Roof pitch | Horizontal lap slope | Vertical lapacross slope |
|----------------|----------------------|--------------------------|
| 12.5° - 14.0° | 225 mm | 100 mm minimum |
| 15.0° - 34.0° | 150 mm | 100 mm minimum |
| 35.0° and over | 100 mm | 100 mm minimum |

Diagram A

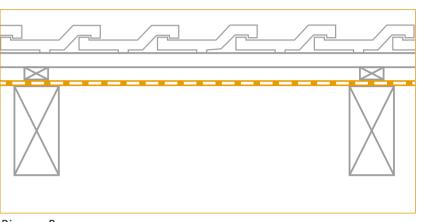


Diagram B

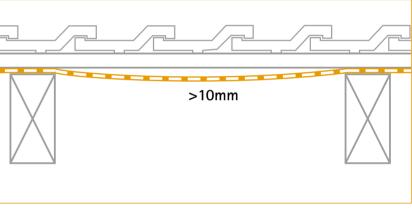


Diagram C

System core components



SOLITEX PLUS (connect) 4-ply sarking membrane and roof lining membrane, reinforced



ORCON F For bonding to adjacent components



TESCON VANA For sticking membrane overlaps



TESCON No.1 Flexible multi-purpose adhesive tape for airtight bonds



TESCON NAIDECK Double-sided nail sealing tape

Supplementary products for detail solutions



TESCON PROFIL For joints at windows, doors and corners



DUPLEX Double-sided adhesive tape for sticking membrane end joints and other joints



TESCON PRIMER RP For quick and easy application of primer



KAFLEX / ROFLEX Seal grommets for cable and pipe feed-throughs



ROFLEX exto Vent pipe grommet for the windproof adhesion to pipes of vent tiles



TESCON INCAV / INVEX Self-adhesive 3D shaped elements for interior and exterior corners

For further technical information and stockists contact:

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