



External weathertightness

System brochure for Ireland and the UK

Roofing underlays

Breather membranes

Timber protection



Reliable solutions for sealing building envelopes

Roofing underlays

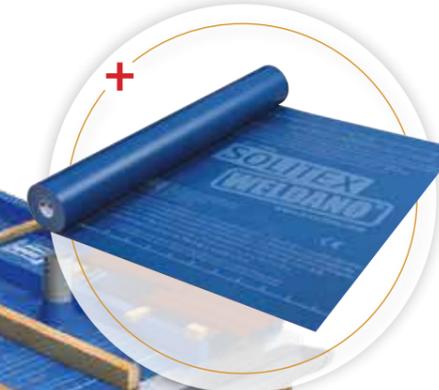
SOLITEX PLUS and SOLITEX PLUS connect
 Roofing underlay system with active moisture transport: Provides protection against wind and keeps the underlying structure dry
 From page 12



SOLITEX UM connect
 Roofing underlay system for increased noise insulation and moisture protection underneath metal roof coverings
 Page 22

Weldable rainproof/waterproof underlays

SOLITEX WELDANO 3000
 Diffusion-open, homogeneously weldable roofing underlay for rainproof/watertight sub-roofs
 Page 24



Breather membranes

SOLITEX FRONTA
 All breather membranes (WRBs) for use behind rainscreen cladding
 From page 32



For example:
SOLITEX FRONTA QUATTRO FB
 Flame-resistant breather membrane (WRB) for open-jointed cladding with gap widths up to 35 mm
 Page 32

Fire class B



Timber protection

SOLITEX ADHERO
 System with full-surface adhesive airtightness and weathering-protection membranes
 Page 28

Two all-rounders for interior and exterior use

Adhesive tape
 TESCON VANA



Adhesive sealant
 ORCON F



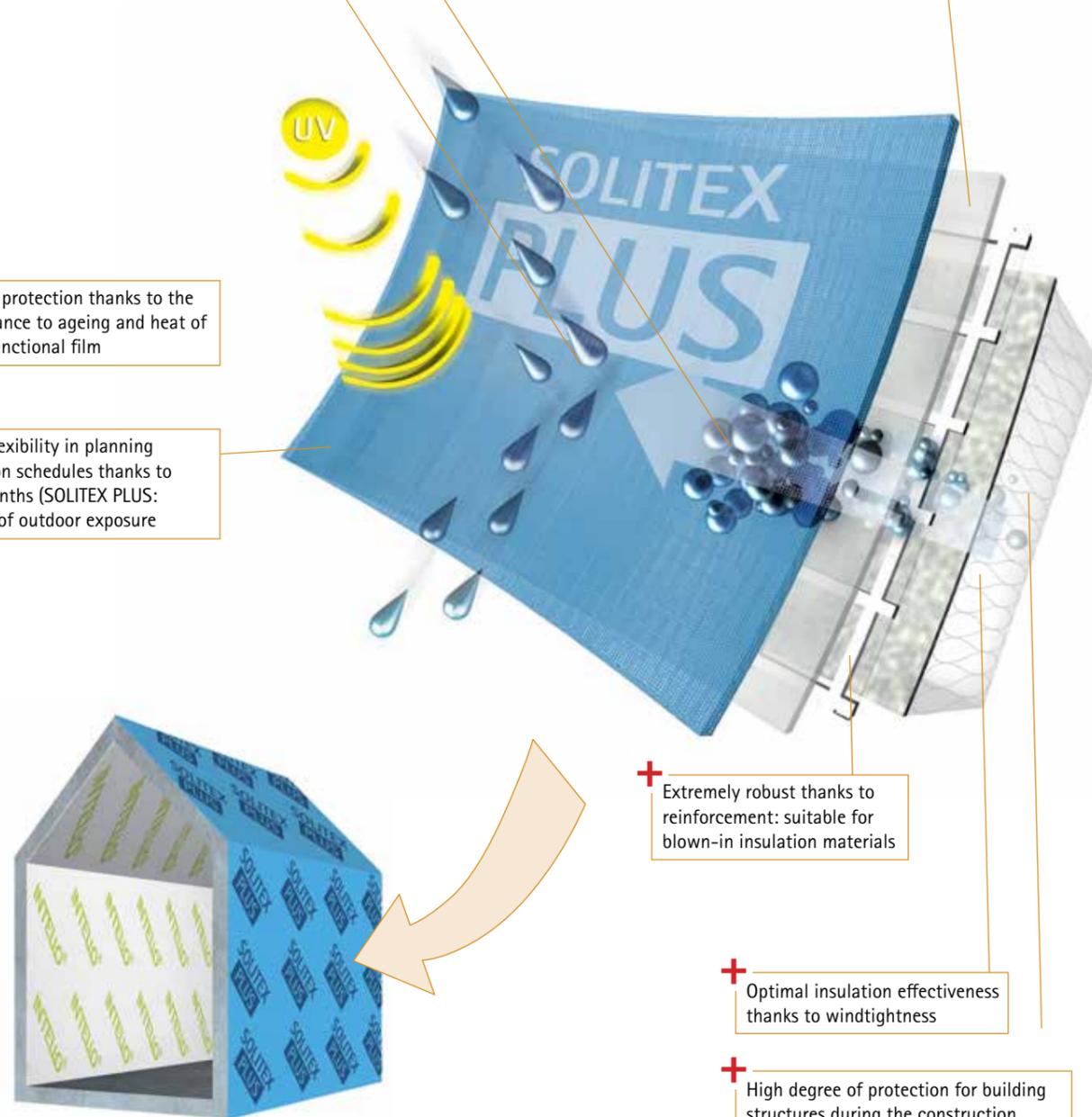
pro clima SOLITEX system Best possible protection for roofs and walls

+ Ensures well-protected building components: highly diffusion-open and maximum protection against driving rain

+ Dry building components: pore-free TEEE functional film actively transports moisture to the outside

+ Permanent protection thanks to the high resistance to ageing and heat of the TEEE functional film

+ Maximal flexibility in planning construction schedules thanks to up to 6 months (SOLITEX PLUS: 3 months) of outdoor exposure



+ Extremely robust thanks to reinforcement: suitable for blown-in insulation materials

+ Optimal insulation effectiveness thanks to windtightness

+ High degree of protection for building structures during the construction phase: suitable as a temporary covering during the construction period



+ Silver Bark House, Co. Down, Northern Ireland

Sleek, timber-clad home built to passive house standards. The architects and developer won the prestigious overall award in the Sustainability category at the 2023 RIAI Architecture Awards for this project.

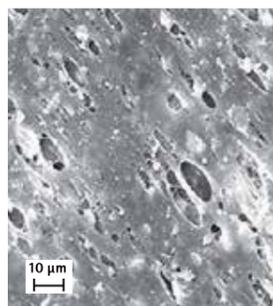
Developer:	FourSeven Ltd.
Architects:	Marshall McCann Architects
Timber construction:	Fallis Passive Design & Build
Building type:	Residential
Airtightness:	Ecological Building Systems
Weathering protection:	SOLITEX ADHERO 1000, TESCON VANA

pro clima actively transports moisture to the outside

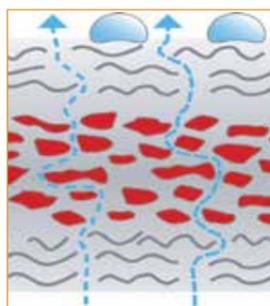


Conventional technology: Micropore membranes

No active moisture transport = Damp structure



Microscopic image of a conventional underlay membrane. Porous membranes allow moisture to escape by means of convective flow. Pores offer only moderate reliability for diffusion and watertightness against driving rain.



Micropores in a functional film:

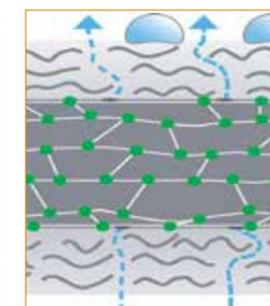
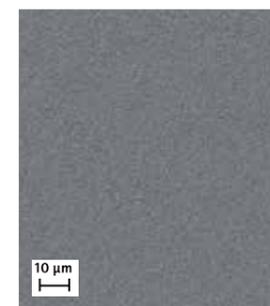
- ✗ Conventional protection against driving rain
- ✗ Passive moisture transport
- ✗ Large vapour partial pressure gradient required
- ✗ Wet membrane becomes more closed to diffusion



In the case of conventional PP membranes with micropores, water vapour passes to the outside through tiny holes. If a lot of vapour has to pass through, a film of moisture may form on the inside of the membrane. As a result, the membrane becomes more watertight and moisture damage may potentially occur. Moisture transport to the outside is a passive process that only works if there is a relatively high partial pressure gradient for water vapour. However, this is not always the case on modern, well-insulated structures. There is protection against water from the outside as water drops are too large and cannot enter through the pores due to their surface tension. However, if there is driving rain or if solvents or substances contained in wood reduce this surface tension, significant amounts of water can penetrate into the thermal insulation and cause mould formation and moisture damage.

Pore-free SOLITEX technology for greater protection

Active moisture transport = Dry structure, no condensation



Pore-free SOLITEX membrane:

- ✓ Maximum protection against driving rain
- ✓ Water column up to 10,000 mm
- ✓ Active moisture transport
- ✓ Minimal vapour partial pressure gradient required
- ✓ Wet membrane becomes more open to diffusion
- ✓ No 'tent effect'
- ✓ Can be used as a temporary covering



A monolithic, pore-free SOLITEX membrane viewed at the same magnification. The monolithic membrane reliably facilitates active diffusion and ensures particularly good watertightness against driving rain.

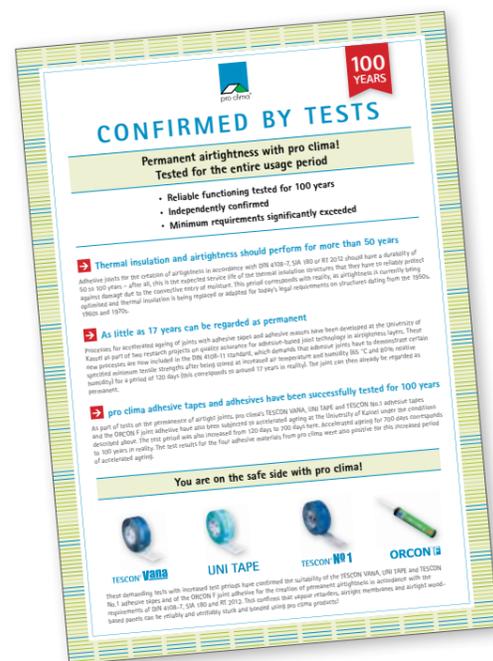
Pore-free membranes actively transport moisture to the outside – the more moisture is present, the faster it is transported. Their diffusion resistance drops in this case. Only a minimal partial pressure gradient for water vapour is required for moisture transport. The particularly high protection against driving rain results from the fact that there are no pores present. High impact speeds or water drops with reduced surface tension are also not a problem for the SOLITEX underlay system.

Adhesion for 100 years – Reliable adhesion that lasts as long as the building itself!



The adhesive bonds created when implementing the interior airtightness and exterior weathertightness layers must be reliable and durable. This applies both to the overlaps of membranes with one another and also to the joints between membranes and any penetrations or adjacent building components. Adhesion is important because these two sealing layers ensure that the thermal insulation structure will perform effectively and, at the same time, is protected against mould and moisture damage. And everything should of course continue to work properly in the long term – ideally for the entire service life of the building component, meaning at least 50 years. There is large variability in terms of the quality levels that can be found on the marketplace – unfortunately including some products that are barely fit for purpose.

But how can you identify a good adhesive tape? To provide even more reassurance in this regard, we have had the pro clima adhesive tapes TESCON VANA, TESCON No.1, UNI TAPE and the ORCON F adhesive sealant tested independently by the University of Kassel in Germany. These four pro clima adhesive products are the only products that have demonstrated 100 years of adhesive performance in these tests. This is a unique achievement for all products worldwide. As a result, building structures are better protected in the long term.



**100 YEARS
ADHESION**

✓ successfully tested
✓ unique worldwide

TESCON VANA · TESCON No.1 · UNI TAPE · ORCON F

proclima.com/100years

Reliable even in the presence of moisture

Vapour control or underlay membranes can easily become damp or even properly wet during installation. Rain or the formation of condensation on building component surfaces are unavoidable features of everyday reality on building sites. Anybody who doesn't wish to compromise in terms of the durability of adhesive bonds or the practicalities of installation procedures should opt for TESCON adhesive tapes. The water-resistant pro clima SOLID acrylate adhesive guarantees reliable adhesive bonds for both interior and exterior applications – even in damp or wet conditions.



More information on this topic:

Reliable adhesion – How do adhesives work?
proclima.info/en/reliable-adhesion



Reliability even in damp or wet conditions

The water-resistant SOLID adhesive ensures quick and permanent joints with the subsurface – for both interior and exterior applications. The joints created are immediately sealed and can be subjected to loading. This facilitates:

- Reliable airtightness even with increased humidity – as typically encountered during the construction phase as a result of plastering or the installation of screed
- Reliable windtightness on roofs and facades, even in rainy weather or wet conditions



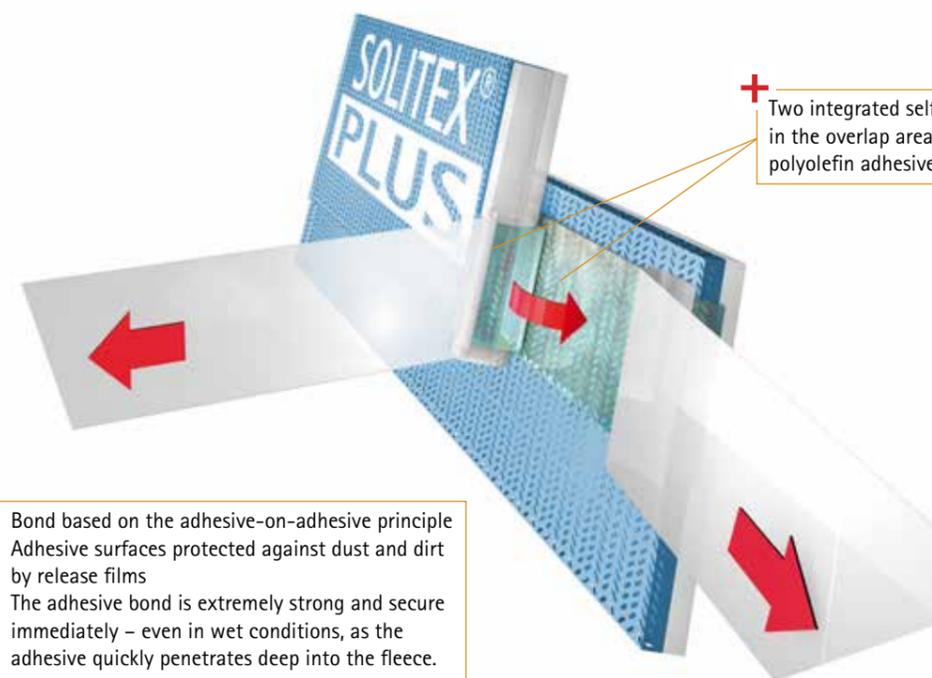
Water-resistant SOLID adhesive

vimeo.com/503067958



TESCON VANA is being stuck to a piece of SOLITEX MENTO roofing underlay membrane under water here. When a mechanical load is applied as a test, the fleece layer of the underlay membrane tears internally ('failure of the substrate'). The adhesive bond itself is still intact!

Quicker reliable sealing with pro clima connect technology



Two integrated self-adhesive strips in the overlap area with water-resistant polyolefin adhesive.



- ✓ Bond based on the adhesive-on-adhesive principle
- ✓ Adhesive surfaces protected against dust and dirt by release films
- ✓ The adhesive bond is extremely strong and secure immediately – even in wet conditions, as the adhesive quickly penetrates deep into the fleece.



pro clima connect technology is also available on the INTELLO X, DASAPLANO and DA airtightness systems for retrofit projects and external roof insulation.

vimeo.com/503096028



Roofing underlays

SOLITEX PLUS and SOLITEX PLUS connect
Roofing underlay system with active moisture transport: Provides protection against wind and keeps the underlying structure dry
From page 12



SOLITEX UM connect
Roofing underlay system for increased noise insulation and moisture protection underneath metal roof coverings
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Weldable rainproof/waterproof underlays

SOLITEX WELDANO 3000
Diffusion-open, homogeneously weldable roofing underlay for rainproof/watertight sub-roofs
Page 24



Two all-rounders for interior and exterior use

Adhesive tape
TESCON VANA



Adhesive sealant
ORCON F



Roofing underlay membranes, e.g.

SOLITEX® PLUS

Reinforced roofing underlay for pitched roofs and suspended timber floors

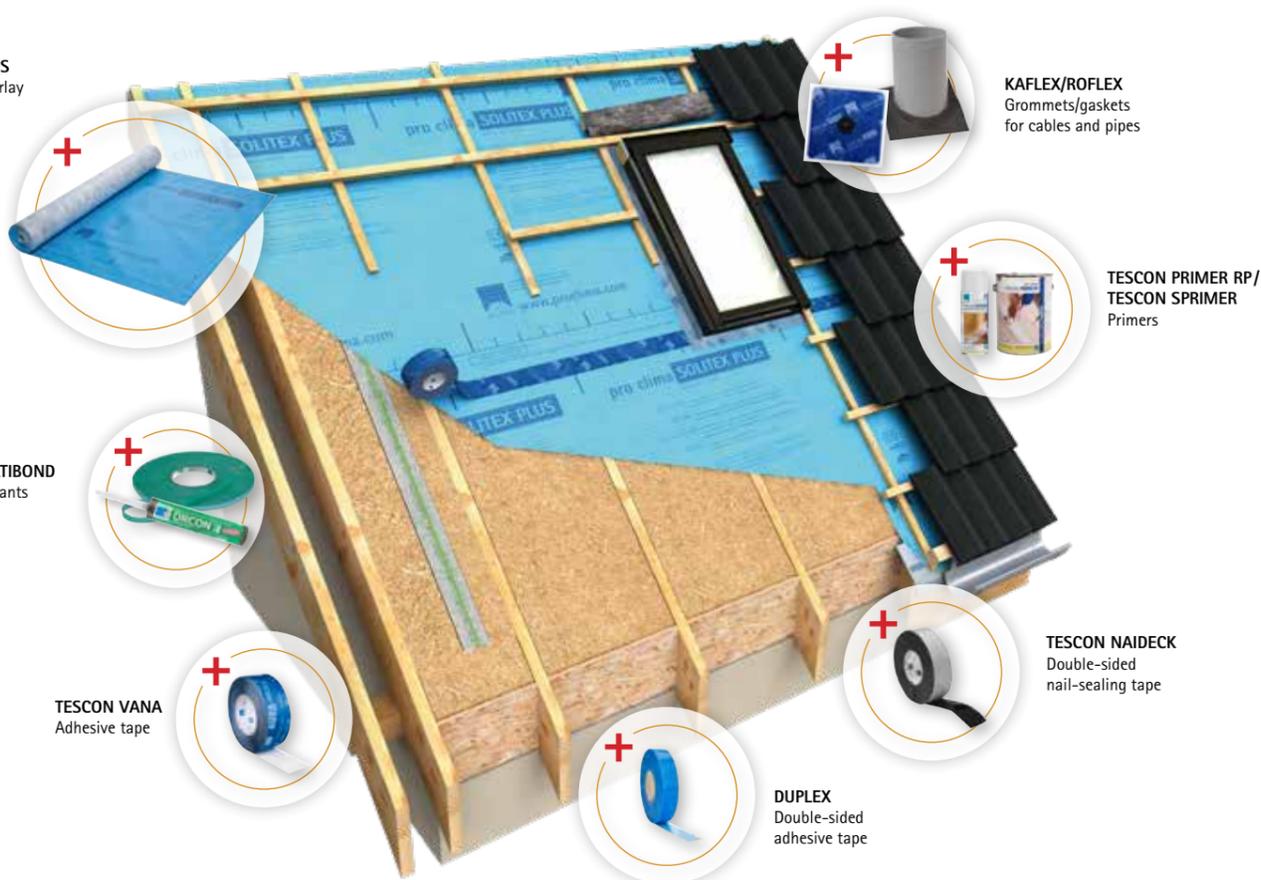
Areas of application:

Diffusion-open roofing underlay for installation hanging freely across the rafters or else over roof sheathing, MDF and wood-fibre underlay panels or thermal insulation materials of all kinds, including blown-in insulation. The membrane can also be used to windproof the underside of an insulated suspended timber floor (see page 17).

Advantages:

- ✓ Dry building structures: pore-free TEEE functional film with a humidity-variable s_d value of between under 0.02 m and 0.04 m
- ✓ High tear-resistance thanks to reinforcement: suitable for blown-in insulation, particularly good protection against penetration, high nail tear resistance
- ✓ Flexible planning of construction schedules thanks to 3 months of outdoor exposure
- ✓ High ageing resistance and thermal stability thanks to the TEEE functional film
- ✓ Provides protection during the construction period: suitable as a temporary covering
- ✓ Quick and reliable adhesion thanks to the integrated self-adhesive strips on the 'connect' membrane variant

SOLITEX PLUS
Roofing underlay
membrane



ORCON F /
ORCON MULTIBOND
Adhesive sealants

KAFLEX/ROFLEX
Grommets/gaskets
for cables and pipes

TESCON PRIMER RP/
TESCON SPRIMER
Primers

TESCON NAIDECK
Double-sided
nail-sealing tape

DUPLEX
Double-sided
adhesive tape



Technical specifications:

Protective and covering fleece		Polypropylene microfibre
Functional film		Monolithic TEEE
Reinforcement		Polypropylene non-woven fabric
Self-adhesive strips		Water-resistant SOLID adhesive
Surface weight	EN 1849-2	170 g/m ²
Thickness	EN 1849-2	0.55 mm
Water vapour resistance factor μ	EN ISO 12572	73
s_d value	EN ISO 12572	0.04 m
Humidity-variable s_d value	EN ISO 12572	<0.02 to 0.04 m
g value	EN ISO 12572	0.20 MN-s/g
Humidity-variable g value	EN ISO 12572	<0.1 to 0.2 MN-s/g
Fire class	EN 13501-1	E
Outdoor exposure		3 months
Water column	EN ISO 811	> 2 500 mm
Watertightness, non-aged/aged*	EN 1928	W1 / W1
Tensile strength MD/CD	EN 13859-1 (A)	495 N/5 cm / 310 N/5 cm
Tensile strength MD/CD, aged*	EN 13859-1 (A)	495 N/5 cm / 350 N/5 cm
Elongation MD/CD	EN 13859-1 (A)	25% / 20%
Elongation MD/CD, aged*	EN 13859-1 (A)	15% / 15%
Nail tear-resistance MD/CD	EN 13859-1 (B)	270 N / 270 N
*) Durability after artificial ageing	EN 1297 / EN 1296	Passed
Flexibility at low temperature	EN 1109	-40 °C
Temperature resistance		Permanent -40 °C to 100 °C

Supply forms:

SOLITEX PLUS: Lengths: 15 m or 50 m; width: 1.50 m
SOLITEX PLUS connect: Length: 50 m; width: 1.50 m



pro clima's full range of roofing underlay membranes

- Installation videos
- Detailed CAD drawings
- And much more:



proclima.info/en/underlays



SOLITEX PLUS
Reinforced roofing underlay
for pitched roofs and
suspended timber floors



SOLITEX PLUS connect
Reinforced roofing underlay
with self-adhesive strips



Underlay with seam and perforation
protection. No nail-sealing tape
required as per ETA.

SOLITEX QUANTHO 3000 connect
Medium-weight roofing underlay
with self-sealing perforations and
waterproof adhesive strips



SOLITEX MENTO 1000
Light-weight roofing
underlay, outdoor
exposure: 3 months



SOLITEX MENTO 3000
Medium-weight roofing
underlay outdoor exposure:
4 months



Outdoor exposure: 6 months

SOLITEX MENTO 5000
Heavy-weight roofing
underlay



Suitable for blown-in insulation

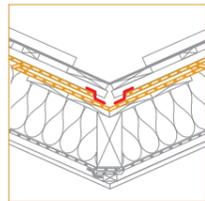
SOLITEX MENTO PLUS
Reinforced roofing
underlay



SOLITEX WELDANO 3000
Diffusion-open, weldable roofing
underlay membrane

Installation guide for SOLITEX® PLUS as an underlay membrane on pitched roofs

Valleys



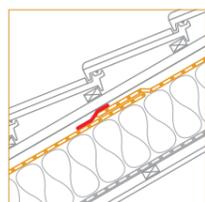
Install a strip of SOLITEX PLUS longitudinally along the middle of the valley (soaker strip). Fold back the edges of the membrane strip by approx. 5 cm on each side and fasten using staples sparingly. Tape the underlay membranes subsequently installed over this valley membrane using TESCON VANA.

Pitched roof areas



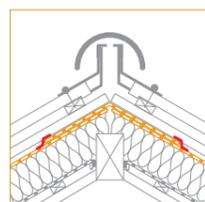
The SOLITEX PLUS membrane is extremely stable in form, making it quick, easy and accurate to lay. The overlap on the membranes should be at least 10 cm. The marking that is printed onto the membrane will serve as a guide here. A greater overlap is recommended if the roof pitch is less than the regulation pitch of 35° – see table of roof pitches on page 17. The membrane is attached using rust-resistant wide-headed pins or staples in the top third of the lining area.

Taping the membrane overlaps



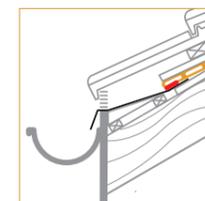
Install the membranes with 10–15 cm overlap. In the overlap area, apply fasteners only in the top third of the overlap area. Ensure that the upper membrane lies over the lower membrane in the finished overlap to create a waterproof arrangement. Use galvanised staples (min. 10 mm wide and 8 mm long). Fasteners should not be applied in areas where water run-off is collected (e.g. in roof valleys).

Ridge and rake



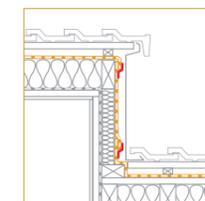
In the case of fully insulated rafters, place SOLITEX PLUS over the ridge/hip and attach in place using staples in the area of the counter batten. Overlap relative to the membrane underneath by at least 22.5 cm. Tape the membrane overlap using TESCON No.1 / TESCON VANA or pro clima DUPLEX double-sided 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



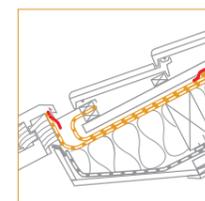
pro clima SOLITEX PLUS must be sealed in a waterproof manner at the eaves. The bottom edge of the membrane should be positioned over UV-stable eave flashing or an eave strip. Stick in place using the double-sided pro clima DUPLEX adhesive tape or the single-sided TESCON No.1 / TESCON VANA adhesive tape, ensuring that there are no folds or creases.

Dormer windows



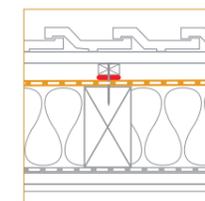
Allow around 15 cm of SOLITEX PLUS to run up onto the dormer cheek and attach it at the upper membrane edge using staples. SOLITEX PLUS can also be used in the area of dormer cheeks to provide protection against outdoor exposure during the construction phase.

Sealing of penetrations at 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 on low pitch or very exposed roofs.

General installation conditions on pitched roofs

- 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 diagrams A & B).
- SOLITEX PLUS underlays are not affected 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.
- For additional good practice guidance, please refer to relevant national standards such as the NSAI Irish Code of Practice for Slating and Tiling or the BS 5534 British Standard Code of Practice for Slating and Tiling.
- Counter battens are recommended and considered best practice for optimum performance of vapour-permeable roofing underlays. A counter batten provides a clear zone where moisture to drain from the roof, especially during the construction phase. It also provides a clear ventilation zone between the roof covering and the membrane, allowing vapour to safely disperse, and also helps to reduce overheating between the roof covering and membrane.
- When used unsupported without counter-battens, a nominal 10 mm drape must be provided between supports to allow a clear drainage path for moisture and prevent excessive deflection under wind loads (see diagram C).
- SOLITEX PLUS is installed with the blue covering fleece side (printed side) facing outwards. Provided the roof is counter batted, 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 the membrane is used as a sarking membrane, the rafter spacing is limited to 100 cm. Use good-quality galvanised or copper nails or fastening staples that are at least 10 mm wide and 8 mm long to attach the membranes. **In the overlap area, staples should only be applied in the protected overlap area.** The maximum distance between fasteners is 10 to 15 cm.
- SOLITEX PLUS should be overlapped with a minimum of 100 mm in the case of roof pitches greater than 35°; provide wider overlaps as per the table below for roof pitches below 35°. An overlap guideline is clearly printed on each roll. Membrane overlaps should be implemented in accordance with BS 5534:2014 Annex A, Figure A.2, with horizontal laps secured by battens.
- SOLITEX PLUS can be easily cut with a sharp knife and remains flexible at all normal working temperatures.

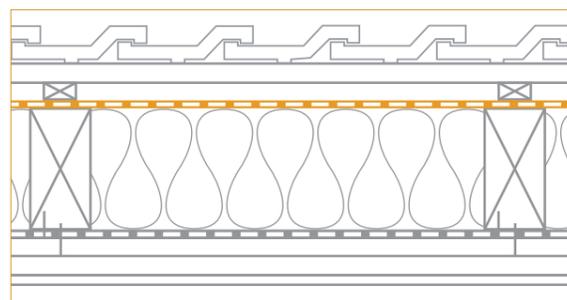


Diagram A

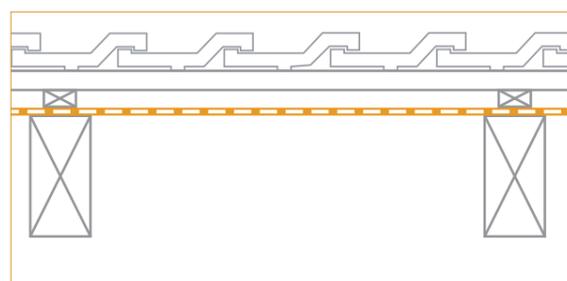


Diagram B

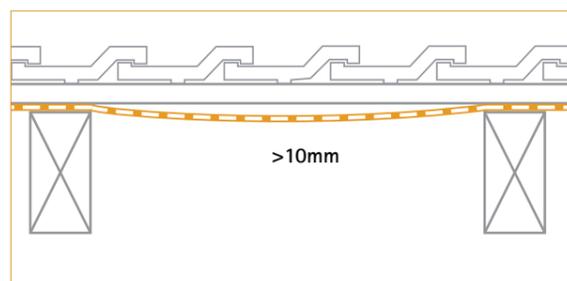


Diagram C

Roof pitch	Horizontal overlap	Vertical overlap
12.5° - 14.0°	225 mm minimum	100 mm minimum
15.0° - 34.0°	150 mm minimum	100 mm minimum
35.0° and over	100 mm minimum	100 mm minimum

Alternative application: SOLITEX PLUS as an external breather membrane when retrofitting insulation to suspended timber floors



The ground floors of older houses in Great Britain and Ireland often feature suspended timber floors with a ventilated chamber underneath. As a result, the rooms on the ground floor can be difficult to heat, as the cold air under these suspended floors leads to draughts and heat losses. The solution to this problem is to retrofit appropriate insulation, together with an airtightness/vapour control layer on the interior side and a breather membrane on the exterior side.

SOLITEX PLUS can be used as a windtight breather membrane that is installed using a 'sub-and-top' method underneath the insulation when retrofitting insulation to suspended timber floors. In this installation method, the membrane is draped over the joists to create troughs that support the insulation material. The reinforced SOLITEX PLUS membrane is sufficiently strong to be able to support this weight load.

A vapour control membrane such as pro clima DA is then installed over the insulation to provide airtightness, as shown in the illustration.

Further information about this application can be found at

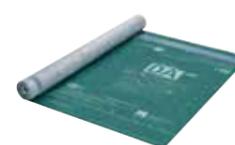
proclima.info/en/soliteX-plus-suspended-floors



System products for this application



SOLITEX PLUS
Reinforced roofing underlay for pitched roofs and suspended timber floors



DA
Vapour control membrane for external insulation and roof retrofits



TESCON VANA
All-round adhesive tape for interior and exterior use



CONTEGA SOLIDO SL
Full-surface adhesive plaster/window-sealing tape, for interior use



ORCON F
All-round adhesive sealant for interior and exterior use



TESCON SPRIMER
Sprayable primer for interior and exterior use

Internal airtightness can be installed from the outside underneath the between-rafter insulation using the 'sub-and-top' method

DASATOP® system

Retrofit vapour control membrane for 'sub-and-top' installation from the outside

Areas of application:

Suitable as a 'sub-and-top' vapour control and airtightness membrane for all structures with diffusion-open roofing underlay membranes (e.g. pro clima SOLITEX). Also suitable in combination with wood-fibre underlay panels and MDF panels, and with fleece-laminated foam insulation materials (PUR, PIR, EPS etc.) with a thickness of 50 mm and greater.

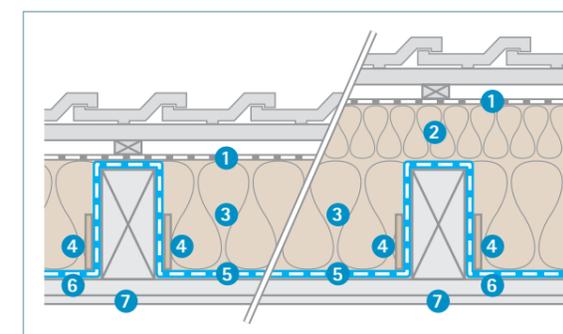


Advantages:

- ✓ Best possible reliability thanks to 'sub-and-top' installation
- ✓ Protects building components: humidity-variable s_d value allows for installation into the spaces between rafters and over the tops of the rafters
- ✓ Time-saving installation: no adhesion to rafters required
- ✓ Can be installed with or without additional external insulation
- ✓ Easy to work with: particularly robust thanks to fleece reinforcement
- ✓ Excellent values in hazardous substance testing, has been tested according to the ISO 16000 evaluation scheme



Typical cross-section:



'Sub-and-top' solution with/without insulation covering:

- 1 Roofing underlay membrane, e.g. pro clima SOLITEX PLUS
- 2 Optional: wood-fibre underlay panel, MDF panel, mineral-fibre external roof insulation of any thickness, or PUR / PIR / EPS fleece-laminated of at least 50 mm
- 3 Insulation between rafters/framework, fibrous
- 4 Secured with DASATOP FIX strips
- 5 DASATOP
- 6 Service cavity, if necessary
- 7 Inner cladding

Technical specifications:

Protective and covering fleece		Polypropylene
Membrane		Polyethylene copolymer
Surface weight	EN 1849-2	90 g/m ²
s_d value	EN 1931	1.60 m
Humidity-variable s_d value	EN ISO 12572	0.05 to 2 m
g value	EN 1931	8 MN-s/g
Humidity-variable g value	EN ISO 12572	0.25 to 10 MN-s/g
Outdoor exposure		4 weeks
Tensile strength MD/CD	EN 12311-2	195 N/5 cm / 105 N/5 cm
Temperature resistance		Permanent -40 °C to 80 °C

Supply forms:

Length: 50 m; width: 1.50 m, 3.00 m

Further information on airtightness membranes for roof retrofits from the outside

- Installation videos
- Detailed CAD drawings
- And much more:

proclima.info/en/airtightness-roof-retrofit



DASATOP
Retrofit vapour control membrane for 'sub-and-top' installation from the outside

INTELLO X connect
Hydrosafe® high-performance vapour control membrane with self-adhesive strips, for external insulation and roof retrofits

DASAPLANO 0,01 connect
Airtightness membrane for roof retrofits from the outside, with self-adhesive strips

DA connect
Vapour control membrane for external insulation and roof retrofits, with self-adhesive strips



Roofing underlay membranes, e.g.

SOLITEX® QUANTHO 3000 connect system

Medium-weight roofing underlay with waterproof self-adhesive strips and self-sealing perforations

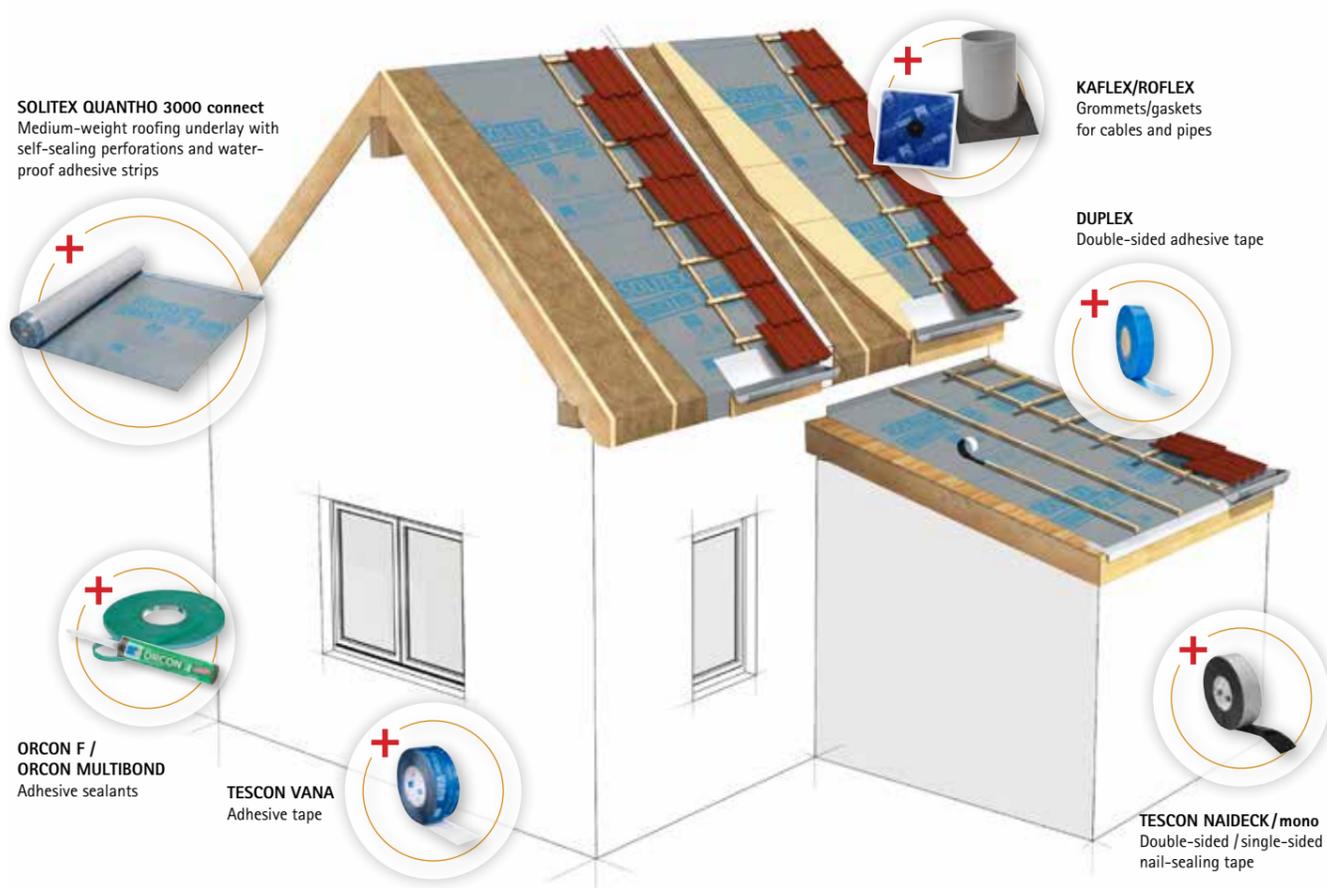
Areas of application:

For use as a diffusion-open roofing underlay over roof sheathing, MDF and wood-fibre underlay panels, and over all thermal insulation materials, including blown-in insulation materials.



Advantages:

- ✓ Maximum protection for the roof structure: excellent hail impact resistance as per ETA-23/0532 and the Swiss Association of Cantonal Fire Insurance Institutes (VKF/AEAI) with hail impact resistance class HR 5
- ✓ Efficient installation: serves as a roofing underlay with waterproof seams and self-sealing perforations for roof pitches $\geq 14^\circ$ without the need for additional sealing measures, as per ETA-23/0532
- ✓ Reliable rainproof roofs: serves as a sub-roof underlay for roof pitches $\geq 10^\circ$ with TESCON NAIDECK as an additional perforation-sealing measure over rigid substrates
- ✓ Quick waterproof adhesion: with sealing lip at the 'connect' self-adhesive strips on the long edges of the membrane
- ✓ Flexible planning of construction schedules: at least 3 months of outdoor exposure



NEW: The first 3-in-1 roofing underlay

- Excellent hail impact resistance (HR 5)
- Roofing underlay with seam and perforation protection, no nail-sealing tape required as per ETA-23/0532
- Rainproof sub-roof

Technical specifications:

Functional film, one side	TPU, monolithic	
Backing fleece	Polyester fleece	
Self-adhesive strips	Water-resistant SOLID adhesive	
Surface weight	EN 1849-2	230 g/m ²
s _d value	EN ISO 12572	0.16 m
Outdoor exposure		4 months * / 3 months **
Hail resistance	EN 13583	ETA-23/0532
Hail impact resistance	VKF / AEAI	Class HR 5
Tensile strength MD/CD	EN 13859-1 (A)	335 N/5 cm / 355 N/5 cm

* Central/Northern Europe & Canada/Northern US; ** Southern Europe, Southern US, rest of world

Supply forms:

Length: 50 m; width: 1.50 m



Further information on SOLITEX QUANTHO 3000 connect

- Installation instructions
- Detailed CAD drawings
- And much more:



Underlay with seam and perforation protection.
No nail-sealing tape required as per ETA.

SOLITEX QUANTHO 3000 connect
Medium-weight roofing underlay with self-sealing perforations and waterproof adhesive strips

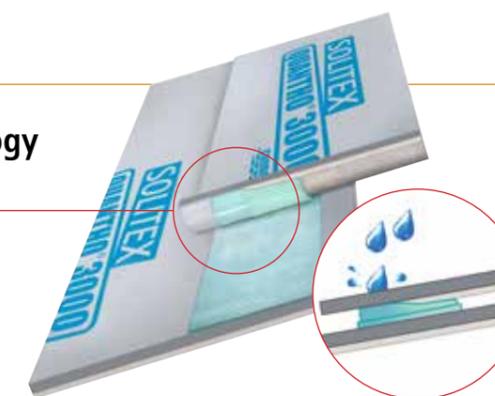


proclima.info/en/solite-quant-3000

Quicker reliable sealing – pro clima connect technology

With innovative sealing lip to protect against the capillary effect

- ✓ Bond based on the adhesive-on-adhesive principle
- ✓ Adhesive surfaces protected against dust and dirt by release films
- ✓ Adhesive bond is extremely strong and secure immediately – even in wet conditions
- ✓ New sealing lip principle protects against seepage



Roofing underlay for metal roof coverings

SOLITEX® UM connect system

Roofing underlay membrane with 3D separation mesh and self-adhesive strips

Areas of application:

For use as a roofing underlay or facade membrane for ventilated and non-ventilated structures in combination with all roof and facade materials such as titanium zinc, aluminium, stainless steel, galvanised steel, copper etc. Fibrous membranes offer greater protection for structures and are recommended by leading providers of metal roofs for this reason. The 8 mm thick 3D separation mesh made of fibrous PP protects the covering against waterlogging and dampens noise caused by rain or hail.



Advantages:

- ✓ Highest possible durability and thermostability thanks to the TEEE functional film
- ✓ Reliable drying out: highly permeable (s_d value = 0.05 m ; g value = 0.25 MN·s/g ; 65 US perms)
- ✓ Protects against corrosion and ensures improved noise insulation thanks to the 3D separation mesh
- ✓ Dry building components thanks to pore-free TEEE functional film that is resistant to driving rain
- ✓ Up to 3 months of outdoor exposure
- ✓ Quick and reliable adhesion thanks to the integrated 'connect' self-adhesive strips on the long edges of the membrane



Further information on SOLITEX UM connect

- Installation videos
- Detailed CAD drawings
- And much more:



SOLITEX UM connect
Roofing underlay membrane with 3D separation mesh and self-adhesive strips



Technical specifications:

Protective and covering fleece		Polypropylene microfibre
Functional film		TEEE, monolithic
Surface weight	EN 1849-2	420 g/m ²
s_d value	EN ISO 12572	0.05 m
g value	EN ISO 12572	0.25 MN·s/g
Outdoor exposure		3 months
Tensile strength MD/CD	EN 13859-1 (A)	220 N/5cm / 170 N/5cm
Temperature resistance		Permanent -40 °C to +100 °C

Supply forms:

Length: 25 m; width: 1.50 m

Weldable rainproof/waterproof roofing underlays

SOLITEX WELDANO® 3000 system

Diffusion-open, weldable roofing underlay membrane

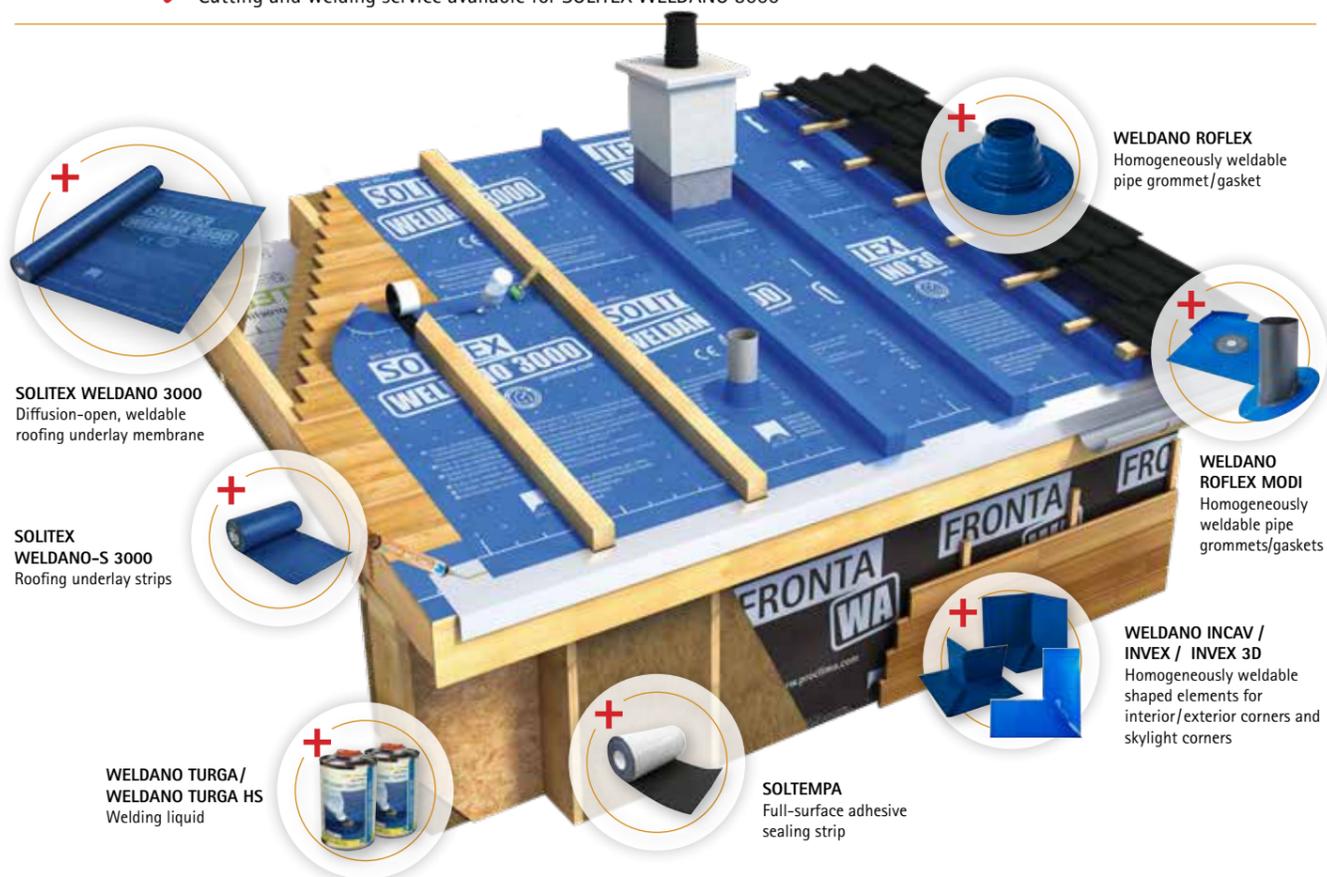
Areas of application:

For use as a 3-ply diffusion-open, homogeneously weldable, rainproof/watertight roofing underlay membrane. Suitable for installation over pressure-resistant substrates, e.g. timber sheathing, wood-based panels and wood-fibre underlay panels, and under roof-integrated solar panels.



Advantages:

- ✓ Reliable seam sealing: homogeneously weldable
- ✓ Suitable for use under roof-integrated solar panels*
- ✓ Excellent occupational safety: non-slip and abrasion-resistant surface
- ✓ Protects structural elements against dampness: diffusion-open, rainproof against driving rain and hail-resistant (HR 5)
- ✓ Easy to work with: robust with extremely high tear-resistance
- ✓ Suitable as a sub-roof underlay to fulfil the most stringent requirements
- ✓ Also keeps structural elements dry during the construction phase: excellent protection against driving rain thanks to monolithic membrane
- ✓ Cutting and welding service available for SOLITEX WELDANO 3000



SOLITEX WELDANO 3000
Diffusion-open, weldable
roofing underlay membrane

SOLITEX
WELDANO-S 3000
Roofing underlay strips

WELDANO TURGA/
WELDANO TURGA HS
Welding liquid

SOLTEMPA
Full-surface adhesive
sealing strip

WELDANO ROFLEX
Homogeneously weldable
pipe grommet/gasket

WELDANO
ROFLEX MODI
Homogeneously
weldable pipe
grommets/gaskets

WELDANO INCAV /
INVEX / INVEX 3D
Homogeneously weldable
shaped elements for
interior/exterior corners and
skylight corners



Technical specifications:

Functional film, both sides		TPU, monolithic
Backing fleece		Polyester
Surface weight	EN 1849-2	350 g/m ²
s _d value	EN ISO 12572	0.18 m
g value	EN ISO 12572	0.9 MN-s/g
Outdoor exposure		6 months ** / 4 months ***
Driving rain test	TU Berlin, GHS	Passed
Hail impact resistance	VKF / AEAI	Class HR 5
Tensile strength MD/CD	EN 13859-1 (A)	320 N/5cm / 400 N/5cm

** Central/Northern Europe & Canada/Northern US *** Southern Europe, Southern US, rest of world

*These panels have to be watertight and UV-impermeable.

Supply forms:

Length: 25 m; 50 m; 400 m; width: 1.50 m; 3.00 m

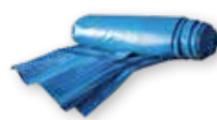


Further information on SOLITEX WELDANO 3000

- Installation videos
- Detailed CAD drawings
- And much more:



SOLITEX WELDANO 3000
Diffusion-open, weldable roofing
underlay membrane



SOLITEX WELDANO 3000
Cutting and welding service

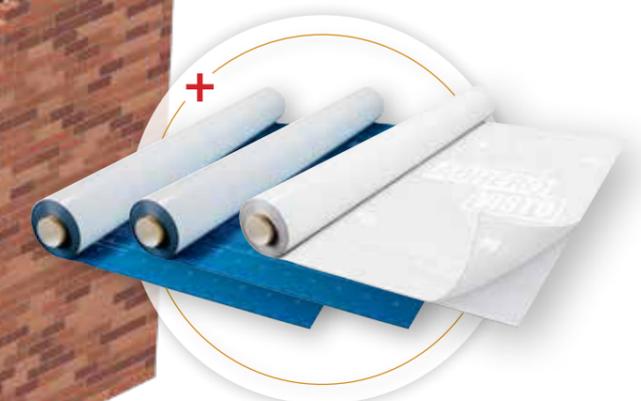
[proclima.info/en/
solitex-weldano-3000](http://proclima.info/en/solitex-weldano-3000)



[proclima.info/en/
solitex-weldano-3000/caws](http://proclima.info/en/solitex-weldano-3000/caws)



Temporary weather protection for timber during construction



SOLITEX ADHERO
System with full-surface adhesive airtightness and weathering-protection membranes
Page 28



System accessories



TESCON VANA
Adhesive tape



ORCON F
Adhesive sealant



ADHERO FLOOR DRAIN
Drainage fitting



AEROSANA VISCONN
Sprayable airtightness sealant

Weather protection concept during the construction phase

SOLITEX® ADHERO

Full-surface adhesive airtightness and weathering-protection membranes

Areas of application:

Temporary protection for floors during construction: Thanks to their full-surface adhesion, these membranes provide temporary protection for intermediate floors on multi-storey CLT (cross-laminated timber) or wooden-frame buildings during the construction period. Pitched roofs and walls (SOLITEX ADHERO 1000 and 3000): These membranes allow airtightness to be achieved on wood-based products and mineral substrates – e.g. on the exterior side of unplastered (fair-faced) masonry or concrete components with joints. For roofs, they also fulfil the requirements of the Central Association of the German Roofing Trade (ZVDH) for an underlay and for temporary coverings for the specified time periods.



Advantages:

- ✓ Protects the structure: maximum protection against driving rain
- ✓ For safe, practical construction work: robust and anti-slip surface
- ✓ Easy and reliable installation thanks to split release film – adheres immediately to substrates that have sufficient stability
- ✓ SOLITEX ADHERO 3000 / VISTO: Reliable sticking of membrane overlaps thanks to water-resistant SOLID adhesive
- ✓ Permanent protection thanks to the high resistance to ageing and heat of the membranes
- ✓ Up to 5 months of outdoor exposure

SOLITEX ADHERO 1000/3000/VISTO



Also available: Transparent membrane

Also available: Transparent membrane



Technical specifications:

Also available: Transparent membrane

	SOLITEX ADHERO 1000	SOLITEX ADHERO 3000	SOLITEX ADHERO VISTO
Protective and covering fleece	Polypropylene microfibre	Polypropylene microfibre	–
Fleece	–	–	Polypropylene
Functional film	TEEE, monolithic	TEEE, monolithic	Polyethylene copolymer
Adhesive	Special acrylate adhesive	Water-resistant SOLID adhesive	Water-resistant SOLID adhesive
Surface weight	180 g/m ²	240 g/m ²	210 g/m ²
s _p value	0.30 m	0.40 m	3.00 m
g value	1.5 MN-s/g	2.0 MN-s/g	15 MN-s/g
Outdoor exposure, pitched roofs*/walls	3 / 3 months	4 / 5 months	–
Outdoor exposure, temp. protection for floors	28 days	28 days **	3 months *** / 6 weeks ****
Hail impact resistance, pitched roofs/closed facades	Class HR 5	Class HR 5	–
Hail impact resistance, floors/walls	Passed	Passed / Class HR 4	Passed / Class HR 5

* Pitched roofs with pitch ≥14°

** 42 days after consultation with pro clima Technical Support

*** Central/Northern Europe & Canada/Northern US

**** Southern Europe, Southern US, rest of world

Supply forms:

Length: 30 m; width: 0.30 m; 0.50 m; 1.00 m; 1.50 m



Further information on SOLITEX ADHERO

- Installation videos
- Detailed CAD drawings
- And much more:



SOLITEX ADHERO 1000
Light-weight full-surface adhesive, diffusion-open airtightness and weathering-protection membrane



SOLITEX ADHERO 3000
Medium-weight full-surface adhesive, diffusion-open airtightness and weathering-protection membrane



Also available: Transparent membrane
SOLITEX ADHERO VISTO
Transparent full-surface adhesive airtightness and weathering-protection membrane

proclima.info/en/temporary-protection



German Social Accident Insurance (DGUV) certification for anti-slip surfaces



SOLITEX ADHERO 1000



SOLITEX ADHERO 3000



SOLITEX ADHERO VISTO

Breather membranes for exterior walls

SOLITEX FRONTA QUATTRO
Breather membrane (WRB) system for facades with open-jointed cladding with a gap width of up to 35 mm
Page 32



SOLITEX FRONTA QUATTRO FB
Flame-resistant breather membrane (WRB) for open-jointed cladding with a gap width of up to 35 mm
Page 32

Fire class B



SOLITEX FRONTA PENTA
Breather membrane (WRB) system for facades with open-jointed cladding with a gap width of up to 50 mm
Page 32



Three all-rounders for interior and exterior use

Adhesive tape
TESCON VANA



Adhesive tape
TESCON INVIS



Adhesive sealant
ORCON F



SOLITEX FRONTA WA
Breather membranes (WRB) system for closed rainscreen facades
Page 32



CONTEGA
Window-sealing system for timber and masonry constructions



SOLITEX ADHERO
System with full-surface adhesive airtightness and weathering-protection membranes
Page 28



SOLITEX FRONTA HUMIDA
Breather membrane (WRB) system for use on timber wall structures behind ventilated pre-wall shells
Page 32



Breather membranes (WRBs), e.g. with the

SOLITEX FRONTA® QUATTRO system

Breather membrane (WRB) for open-jointed cladding with a gap width of up to 35 mm, also available with self-adhesive strips

Areas of application:

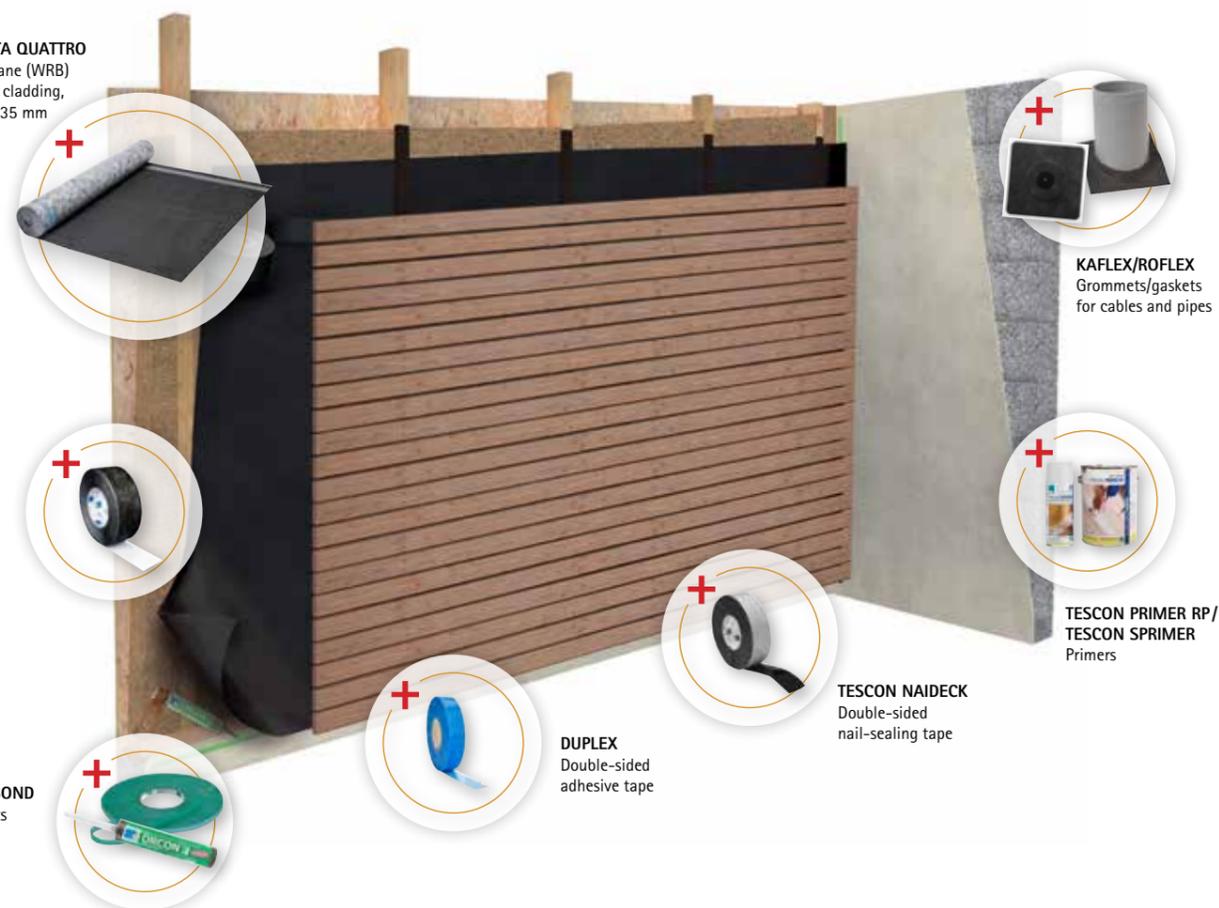
For use as a breather membrane (weather-resistant barrier, WRB) behind closed and open facades (open-jointed cladding up to a gap width of 35 mm; cladding width = at least 3 x gap width). Installation onto boarding, wood-based panels and all mat or panel-shaped thermal insulation materials.



Advantages:

- ✓ Well-protected building components: highly permeable and, at the same time, maximum protection against driving rain
- ✓ Dry building components: pore-free TEEE functional film actively transports moisture to the outside
- ✓ Not visible behind open-jointed cladding: black fleece with printed marking only in the overlap area
- ✓ Highest possible durability and thermostability thanks to the TEEE functional film
- ✓ 6 months of outdoor exposure

SOLITEX FRONTA QUATTRO
Breather membrane (WRB)
for open-jointed cladding,
gap width up to 35 mm



TESCON INVIS
Adhesive tape

ORCON F /
ORCON MULTIBOND
Adhesive sealants

DUPLEX
Double-sided
adhesive tape

TESCON NAIDECK
Double-sided
nail-sealing tape

KAFLEX/ROFLEX
Grommets/gaskets
for cables and pipes

TESCON PRIMER RP/
TESCON SPRIMER
Primers



Technical specifications:

		SOLITEX FRONTA WA	SOLITEX FRONTA HUMIDA
Protective and covering fleece		Polypropylene microfibre	Polypropylene microfibre
Functional film		TEEE, monolithic	Monolithic polymer mixture
Surface weight	EN 1849-2	100 g/m ²	115 g/m ²
s _d value	EN ISO 12572 * / EN 1931 **	0.05 m *	0.50 m **
g value	EN ISO 12572 * / EN 1931 **	0.25 MN-s/g *	2.5 MN-s/g **
Outdoor exposure		3 months	3 months
Tensile strength MD/CD	EN 13859-2 (A)	210 N/5cm / 140 N/5cm	220 N/5cm / 150 N/5cm
Durability after artificial ageing	EN 1297 / EN 1296	Passed	Passed
Temperature resistance		Permanent -40 °C to +100 °C	Permanent -40 °C to +100 °C

	SOLITEX FRONTA QUATTRO	SOLITEX FRONTA QUATTRO FB	SOLITEX FRONTA PENTA
Protective and covering fleece	Polypropylene microfibre	Polypropylene microfibre	3 x polypropylene microfibre
Functional film	TEEE, monolithic	Monolithic	2 x TEEE, monolithic
Surface weight	180 g/m ²	145 g/m ²	280 g/m ²
s _d value	0.05 m *	0.08 m *	0.2 m *
g value	0.25 MN-s/g *	0.4 MN-s/g *	1.0 MN-s/g *
Outdoor exposure	6 months	6 months	6 months
Tensile strength MD/CD	290 N/5cm / 220 N/5cm	260 N/5cm / 225 N/5cm	480 N/5cm / 340 N/5cm
Durability after artificial ageing	Passed (for walls with open joints)	Passed (for walls with open joints)	With 10,000 h of UV ageing instead of 5,000 h: Passed (for walls with open joints)
Temperature resistance	Permanent -40 °C to 100 °C	Permanent -40 °C to 80 °C	Permanent -40 °C to 100 °C



Supply forms:

Length: 50 m; width: 1.50 m; 3.00 m; SOLITEX FRONTA PENTA also available in L x W: 25 m x 3.00 m

Other membranes and further information on SOLITEX FRONTA QUATTRO

- Installation videos
- Detailed CAD drawings
- And much more:



Support and advice on technical issues



Technical Support in Great Britain and Ireland

Phone (GB): +44 1228 711511
 Phone (IRL): +353 46 9432104
info@ecologicalbuildingsystems.com

Technical Support from pro clima in Germany

Quick answers relating to building physics, construction, systems or products. Our engineers from the field of Timber and General Construction can help you quickly and simply in an expert manner and help you find solutions for cost-effective, reliable constructions that will create healthy living environments.

Phone: +49 6202 2782 45
support@proclima.com
proclima.info/en/technical-support

pro clima Project gallery



Here you can find out more about impressive building projects that use pro clima products:
proclima.info/en/project-gallery



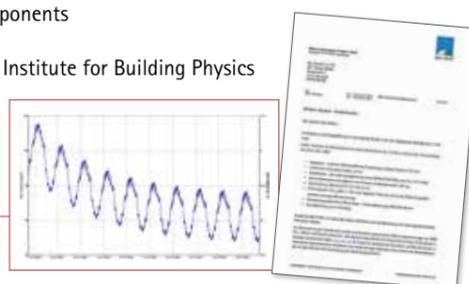
Component tests and building physics assessments

Feel free to contact us with your questions on the moisture-related evaluation of components. We can check and evaluate your building components – including flat-roof structures with complex building physics behaviour – and provide reassurance in terms of your liability as an advisor.



- ✓ Quick, free-of-charge evaluation of the moisture-related behaviour of components
- ✓ Greater reassurance and reduced liability for your advice services
- ✓ Testing and evaluation with building physics software from the Fraunhofer Institute for Building Physics
- ✓ Walls, floors/ceilings, pitched roofs
- ✓ Also for structures with complex building physics behaviour, e.g. flat roofs

Contact us at: support@proclima.com



From innovative passive house designs in Sweden to the conversion of an old barn into a craft brewery in Canada or circular timber construction methods in Japan – all around the world, architects and project planners are incorporating pro clima solutions into their mould-breaking designs

Examples:

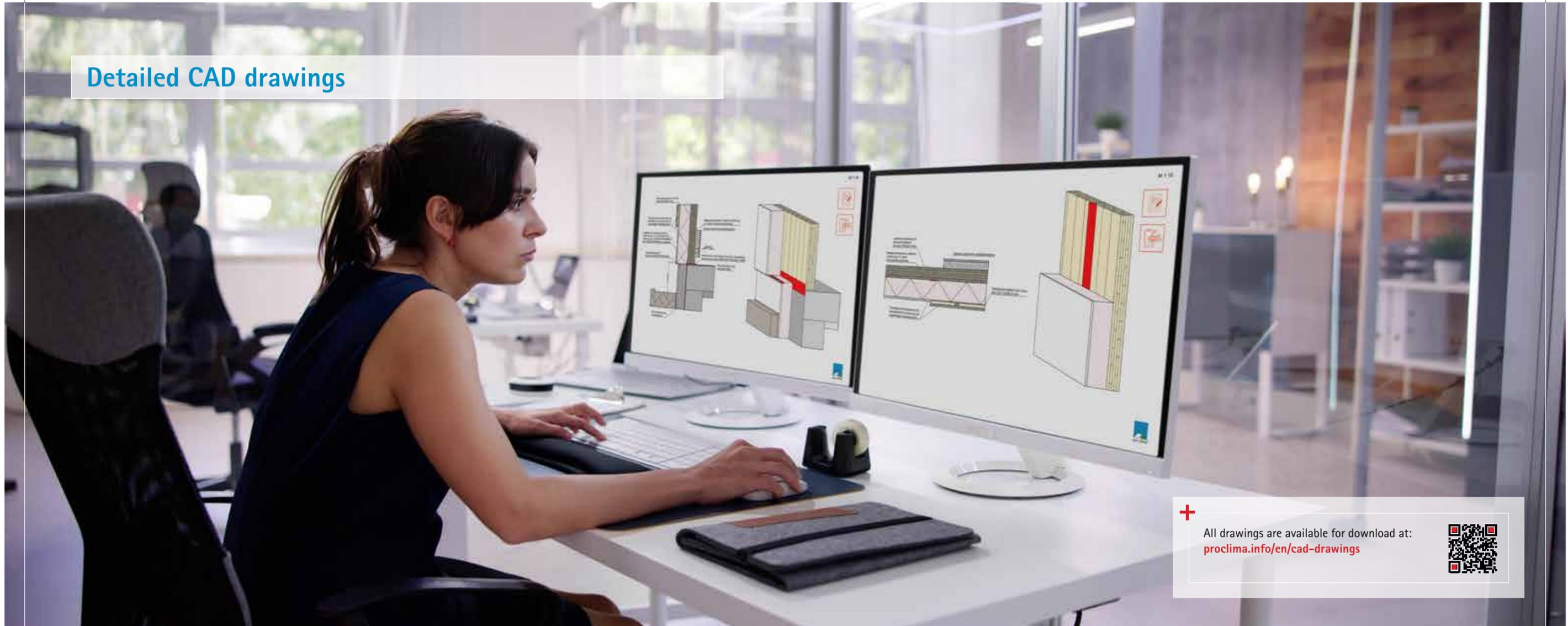
Kowhai Cabin in Ohakune, New Zealand



National Library of Australia, Canberra



Detailed CAD drawings

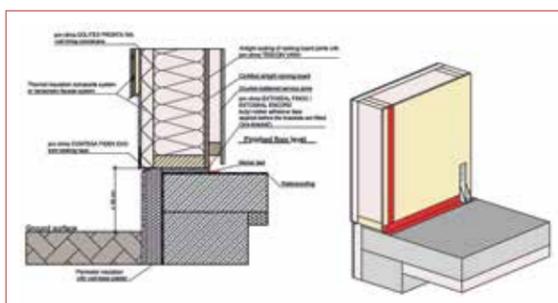


All drawings are available for download at:
proclima.info/en/cad-drawings

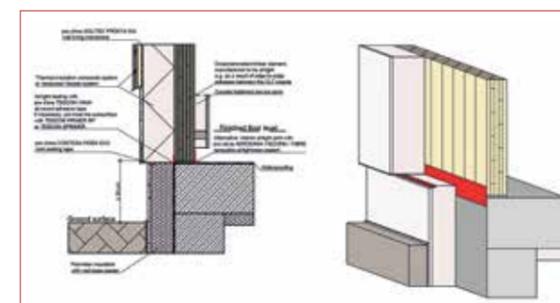


The pro clima database of CAD detail features provides you with a range of suggested solutions for planning and implementing your construction projects. Drawings showing how to achieve airtightness and weathertightness at detail features are available to be downloaded for free in the form of DWG files, DXF files or PDF files. The drawings are grouped by construction type (timber frame and solid timber construction) and by the type of details – for example: base joints, component transitions, pitched roofs, flat roofs, windows and penetrations. A number of variants are available for many of the construction situations.

Timber Frame Construction detail features

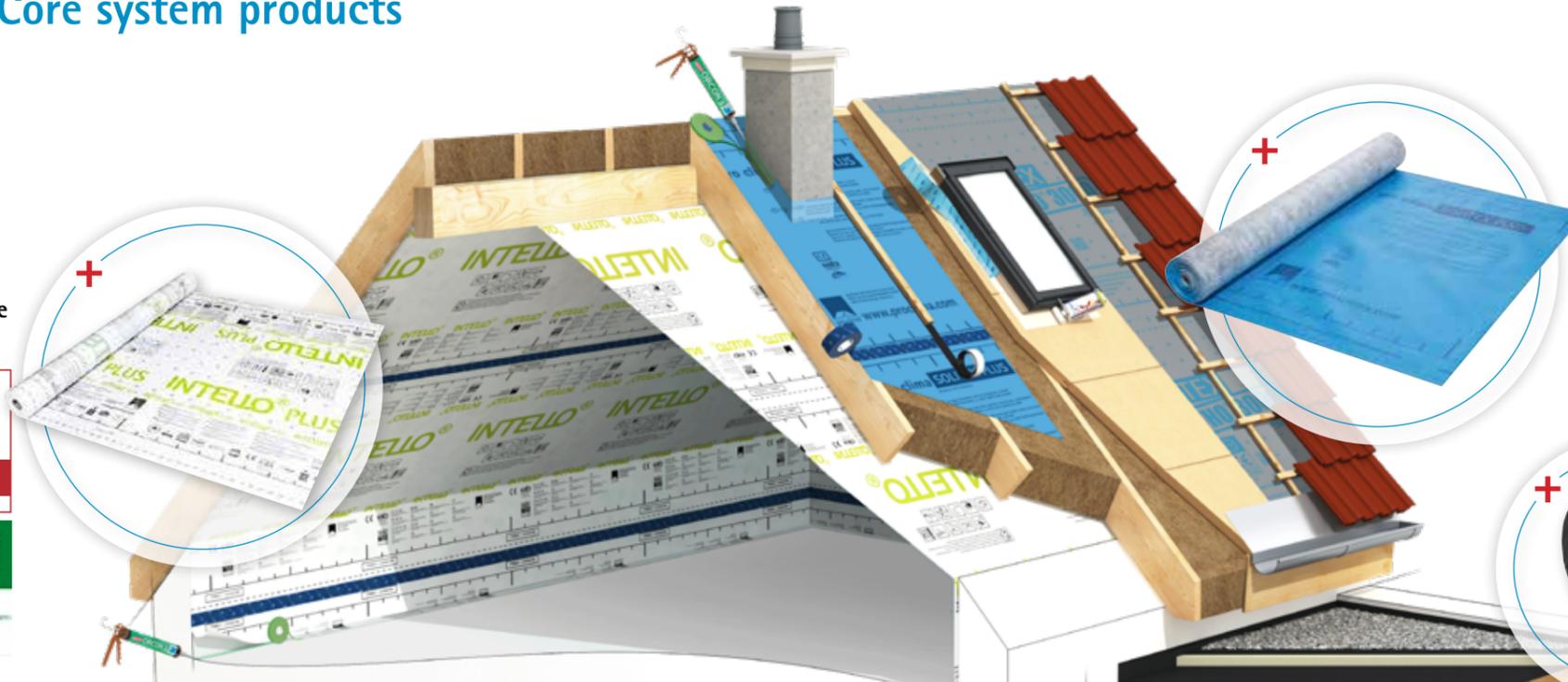


Solid Timber Construction detail features



pro clima's Core system products

Airtightness membrane
INTELLO PLUS



Roofing underlay membrane
SOLITEX PLUS



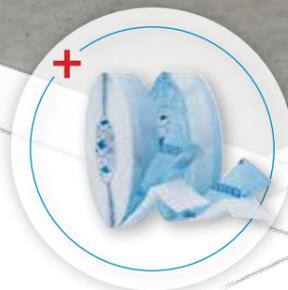
Adhesive sealant
ORCON



Adhesive tape
TESCON VANA



Pre-folded tape
TESCON PROTECT



Nail-sealing tape
TESCON NAIDECK



Primers
TESCON SPRIMER
TESCON PRIMER RP



Liquid sealants
AEROSANA VISCONN



Maximum versatility with our core system products

The pro clima core system consists of just these few products. With these products, you will have a reliable solution available to you for almost all your construction needs. And if you have to contend with special requirements, you can always make use of pro clima's full range.



Further information:
proclima.info/en/core-products



You can depend on us – pro clima warranty

You can count on the quality, durability and reliability of the pro clima system. In the unlikely event of problems, however, our comprehensive, transparent and fair warranty will support you:

- + ✓ **Comprehensive compensation if defects or damage occur**
- ✓ **The warranty period is twice as long as the statutory requirement if products are installed in combination with pro clima system products**
- ✓ **Dismantling and removal, disposal, replacement materials and new installation are included in this cover**

We provide the following warranties for the entire pro clima airtightness system, for individual pro clima products in combination with all approved thermal insulation materials, and for the SOLITEX weathertightness system for pitched roofs and facades:

pro clima
10 year-
system-warranty
comprehensive · transparent · fair
proclima.info/en/system-warranty

10-year warranty

... if products are installed solely in combination with pro clima standard products, insofar as products are available within the pro clima system for the relevant application.

6-year warranty

... if products are installed in combination with products from third parties.

+ The benefits for you:

- ✓ Systematic coordination of products with one another and also with the relevant subsurfaces.
- ✓ Selection of connection products and accessories is made easy by the system product recommendations and installation instructions provided by pro clima.
- ✓ 95% of pro clima products are installed on project sites within three months of first being dispatched from pro clima.
- ✓ Warranty claims arising from purchase contracts for construction materials and building components generally expire after five years. pro clima offers a system warranty for up to 10 years, which means you can really depend on us!



The complete scope of this warranty can be found here:
proclima.com/products/system-warranty



pro clima EPDs help to deliver sustainability and transparency

As a pioneer in ecological and sustainable construction, we at pro clima have always provided transparent product information. EPDs are the logical next step along this path.

An Environmental Product Declaration (EPD) documents and describes the environmental impact of construction materials, products and components on the basis of their ecobalances and their functional and technical properties. This quantitative, objective, verified information relates to the entire life cycle of the relevant construction product. For this reason, EPDs serve as an important foundation for the assessment of the sustainability of built structures.

pro clima EPDs can be downloaded here:

proclima.info/en/epd



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Reliable system solutions for sealing building envelopes



The **INTELLO system** ensures well-protected building structures. Hydrosafe high-performance vapour control system with a humidity-variable s_d value of between 0.25 and over 25 m, DIBt approval for construction in accordance with standards.



Retrofitting made easy
DASATOP combines ease of installation with reliability in service. Airtightness solution for roof refurbishment from the outside.



Practical solutions for window joints
 Intelligent sealing tapes create reliable, durable joints between windows/doors and walls. Sealing systems tested by the IFT (Institute for Window Technology) in Rosenheim, Germany, for interior use, exterior use and sub-sill flashing.



pro clima adhesive technology creates reliable, durable seals both indoors and outdoors. Dependable adhesive tapes with water-resistant SOLID acrylate technology, solvent-free adhesives and primers, grommets/gaskets and solutions for detail features.



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For over 20 years, Ecological Building Systems has been at the forefront of environmental and sustainable building products supplying a range of innovative airtightness solutions and natural insulations backed up with expert technical support.

As product suppliers in the UK and Ireland, we're happy to assist you with your projects and have expert technical and sales advice on hand.



Call us

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