



ADHERO[®] Roofing Application Guide



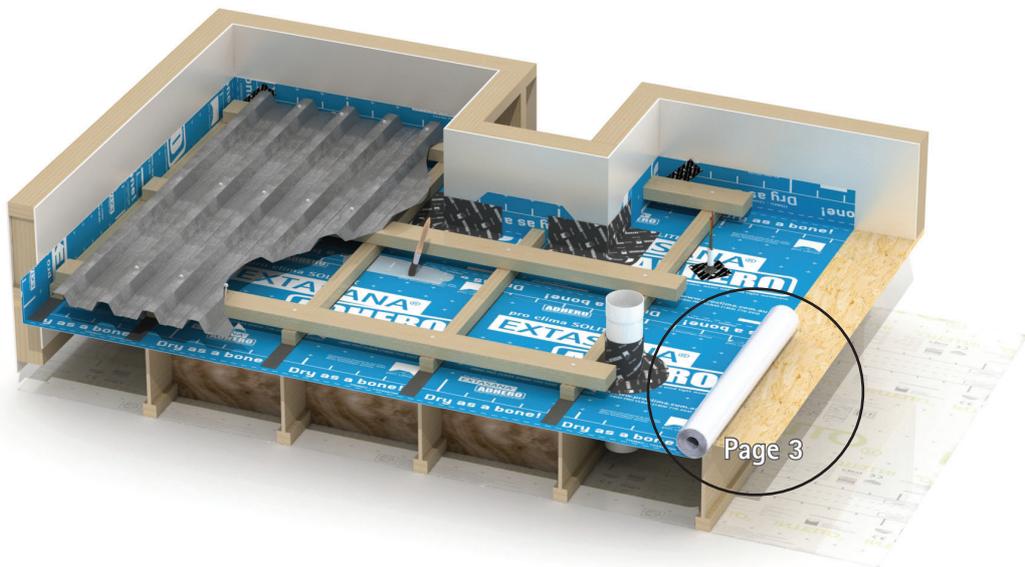
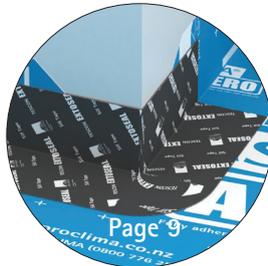
SOLITEX EXTASANA ADHERO[®] system for roofs

Fully adhered membrane over rigid timber substrates
for ultimate protection on roofs





Ventilated With Counter Battens: $3^\circ \leq \text{Pitch} < 5^\circ$



IMPORTANT

TESCON® NAIDECK is used with screw fixing of the vertical battens to provide sealing of the fasteners.

The SOLITEX EXTASANA ADHERO low pitch roofing solution is designed to drain condensate only

INTELLO® PLUS is always recommended for use with the SOLITEX EXTASANA ADHERO® low pitch roofing solution.

pro clima SOLITEX EXTASANA ADHERO® With Above Sheathing Ventilation – below 5° pitch

pro clima SOLITEX EXTASANA ADHERO® used in combination with a ventilated cavity between the SOLITEX EXTASANA ADHERO® and the roof sheeting is the preferred method of installation. This provides moisture removal pathway in winter and a heat removal pathway in summer. the recommended batten size should be minimum 40mm high, combined with eave ventilation equivalent to 20,000mm²/m of eave length and 20,000mm²/m at the highest side. This system may be used on low pitch CLT and SIPS panels in the same manner as shown.

SYSTEM

Weather Resistive Barrier

Roof



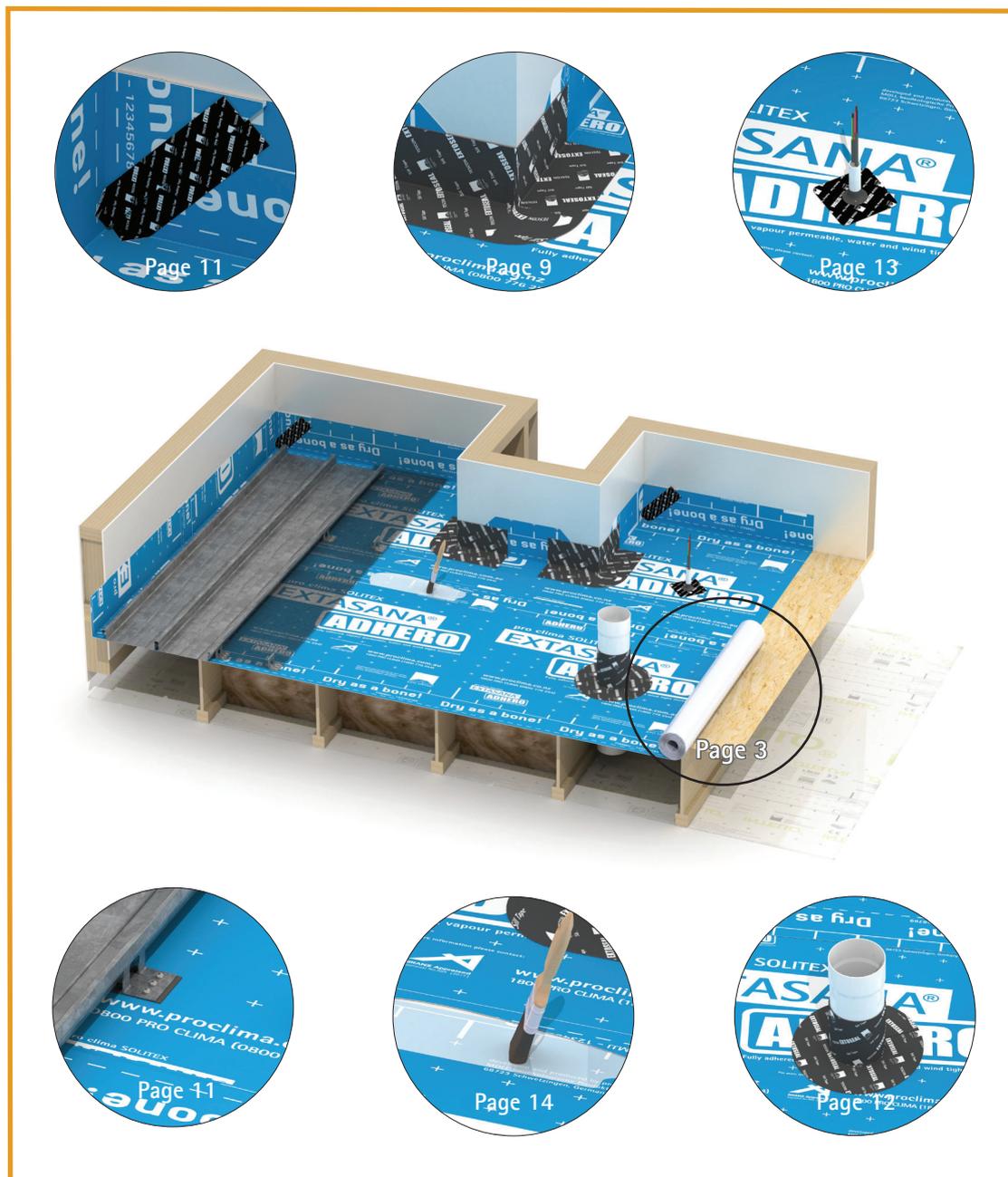
Drained With 3D Separation Mesh: $3^\circ \leq \text{Pitch} < 5^\circ$

IMPORTANT

For the pro clima SOLITEX EXTASANA ADHERO® system for low pitch standing seam roofs, it is always recommended to use INTELLO® PLUS Intelligent Air Barrier for vapour control and to protect the rigid board from moisture damage.

The colour of the roofing plays an important role in the moisture balance of the systems and should be checked by a WUFI® professional.

www.wufi.co.nz



pro clima SOLITEX EXTASANA ADHERO® With Standing Seam over 3D Separation Mesh – below 5°

pro clima SOLITEX EXTASANA ADHERO® used in combination with a standing seam metal cladding should have a 3D separation mesh installed. The 3D separation mesh provides a separation layer between the SOLITEX EXTASANA ADHERO® for drainage and to limit the risk of "oil canning". Light coloured roofing has a higher risk of moisture related condensation issues in all climates. INTELLO® PLUS intelligent air barrier is recommended for use with all standing seam systems utilising SOLITEX EXTASANA ADHERO® and it is recommended calculations are done by a WUFI® professional. This system may be used on low pitch CLT and SIPS panels in the same manner as shown.



Ventilated With Counter Battens: Pitch $\geq 5^\circ$



IMPORTANT

TESCON® NAIDECK is used with screw fixing of the vertical battens to provide sealing of the fasteners when roof pitch is below 10 degrees

The SOLITEX EXTASANA ADHERO® roof solution is designed to drain condensate only.

INTELLO® PLUS is always recommended for use with the SOLITEX EXTASANA ADHERO® roofing solution.

pro clima SOLITEX EXTASANA ADHERO® – 5° or higher pitch

pro clima SOLITEX EXTASANA ADHERO® used in combination with a ventilated cavity between the SOLITEX EXTASANA ADHERO® and the roof sheeting is the preferred method of installation. This provides a moisture removal pathway in winter and a heat removal pathway in summer.

The recommended batten size should be at least 20mm high, combined with eave ventilation equivalent to 20,000mm²/m of eave length and 5,000mm²/m at the highest side. No primer is required in joints and junctions on roof pitches 5° or more. TESCON NAIDECK is not required on roof pitches of 10° or more.

SYSTEM

Weather Resistive Barrier

Roof



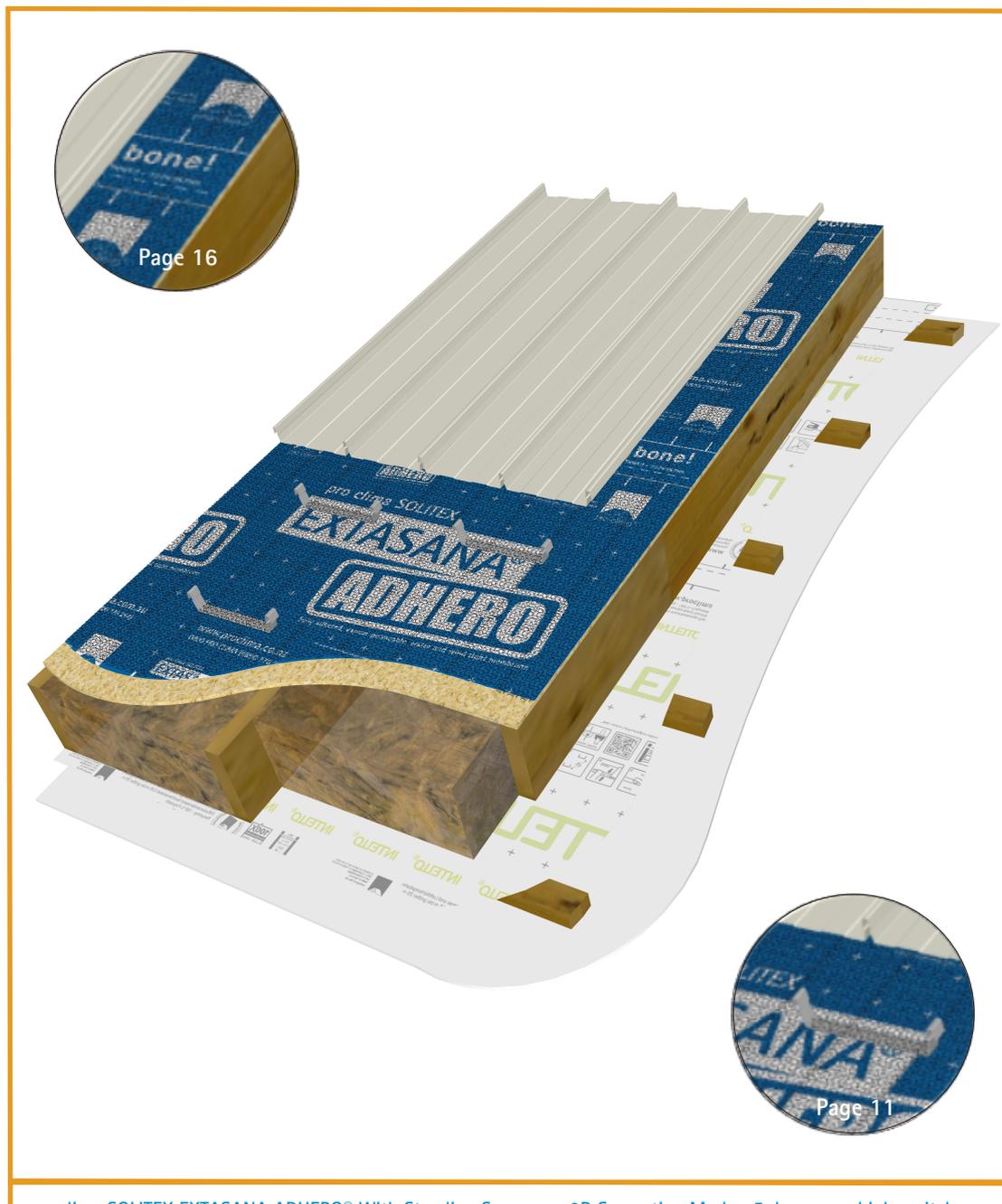
Drained With 3D Separation Mesh: Pitch $\geq 5^\circ$

IMPORTANT

For the pro clima SOLITEX EXTASANA ADHERO® system for low pitch standing seam roofs, it is always recommended to use INTELLO® PLUS Intelligent Air Barrier for vapour control and to protect the rigid board from moisture damage.

The colour of the roofing plays an important role in the moisture balance of the systems and should be checked by a WUFI® professional.

www.wufi.co.nz



pro clima SOLITEX EXTASANA ADHERO® With Standing Seem over 3D Separation Mesh – 5 degrees or higher pitch

pro clima SOLITEX EXTASANA ADHERO® used in combination with a standing seam metal cladding should always have a 3D separation mesh installed. The 3D separation mesh provides a separation layer between the SOLITEX EXTASANA ADHERO® for drainage and to limit the risk of "oil canning". Light coloured roofing has a higher risk of moisture related condensation issues in all climates. INTELLO® PLUS is recommended for use with all standing seam systems utilising SOLITEX EXTASANA ADHERO® and it is recommended calculations are done by a WUFI® professional. No primer is required in joints and junctions on roofs pitches of 5° or more. TESCON NAIDECK is not required on roofs pitches of 10° or more.



Mass Timber Roof With Counter Battens: Pitch $\geq 5^\circ$



IMPORTANT

TESCON® NAIDECK is used with screw fixing of the vertical battens to provide sealing of the fasteners when roof pitch is below 10°

The SOLITEX EXTASANA ADHERO® roof solution is designed to drain condensate only.

INTELLO® PLUS is always recommended

for use with the SOLITEX EXTASANA ADHERO® roofing solution.

pro clima SOLITEX EXTASANA ADHERO® on Cross Laminated Timber – 5° or higher pitch

pro clima SOLITEX EXTASANA ADHERO® used in combination with a ventilated cavity between the SOLITEX EXTASANA ADHERO® and the roof sheeting is the preferred method of installation. This provides a moisture removal pathway in winter and a heat removal pathway in summer.

The recommended batten size should be at least 20mm high, combined with eave ventilation equivalent to 20,000mm²/m of eave length and 5,000mm²/m at the highest side. No primer is required in joints and junctions on roof pitches above 5° . TESCON NAIDECK is not required on roof pitches above 10° .

SYSTEM

Weather Resistive Barrier

Roof

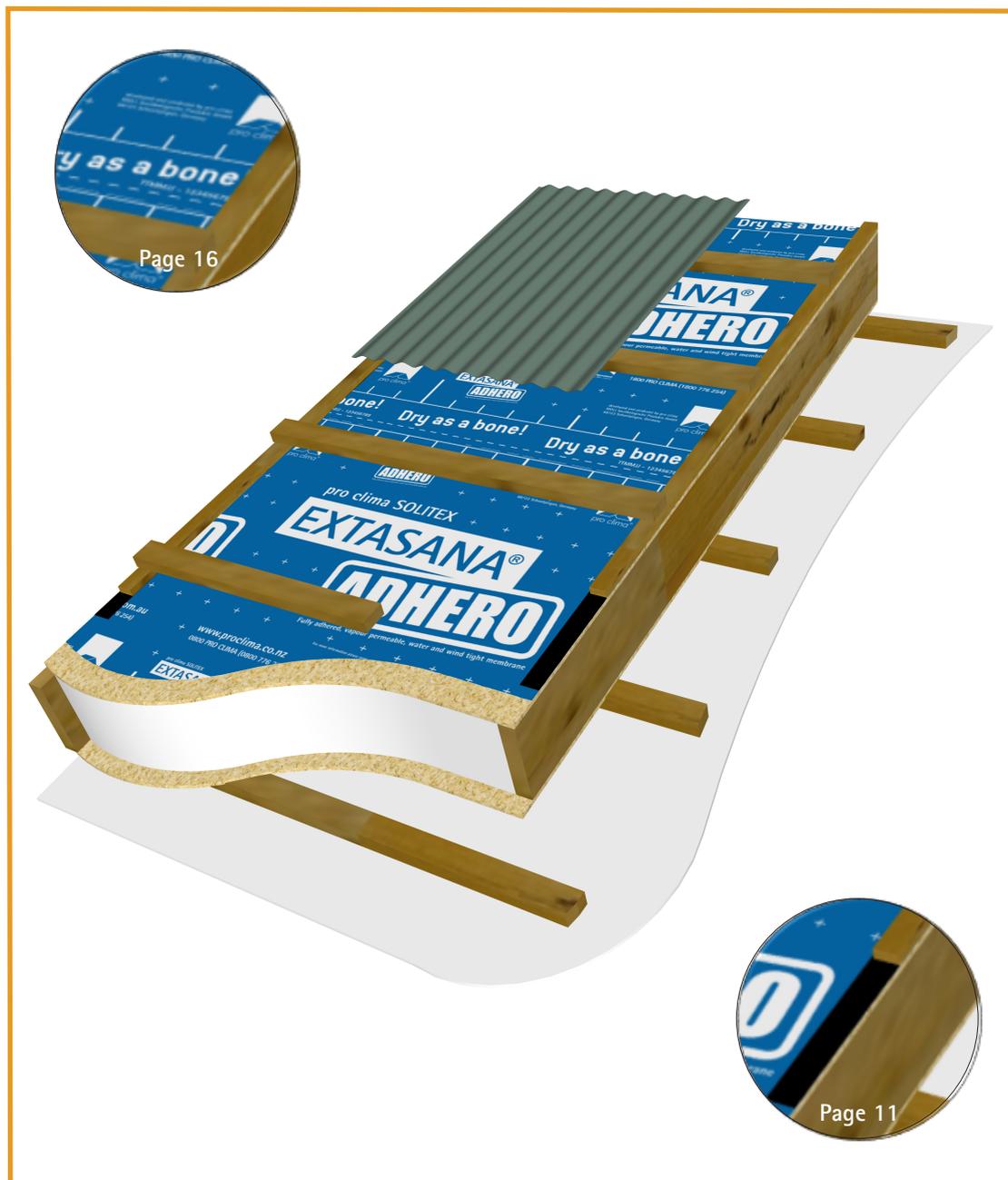
Ventilated SIPS With Counter Battens: Pitch $\geq 5^\circ$

IMPORTANT

TESCON® NAIDECK is used with screw fixing of the vertical battens to provide sealing of the fasteners when roof pitch is below 10° .

The SOLITEX EXTASANA ADHERO® roof solution is designed to drain condensate only.

INTELLO® PLUS is always recommended for use with the SOLITEX EXTASANA ADHERO® roofing solution.



pro clima SOLITEX EXTASANA ADHERO® on SIPS – 5° or higher pitch

pro clima SOLITEX EXTASANA ADHERO® used in combination with a ventilated cavity between the SOLITEX EXTASANA ADHERO® and the roof sheeting is the preferred method of installation. This provides a moisture removal pathway in winter and a heat removal pathway in summer. The recommended batten size should be at least 20mm high combined with eave ventilation equivalent to $20,000\text{mm}^2/\text{m}$ of eave length and $5,000\text{mm}^2/\text{m}$ at the highest side. No primer is required in joints and junctions on roof pitches above 5° . TESCON NAIDECK is not required on roof pitches above 10° .



Applying SOLITEX EXTASANA ADHERO® to a Rigid Roof Substrate



1

Ensure The Rigid Substrate is Dry and Clean

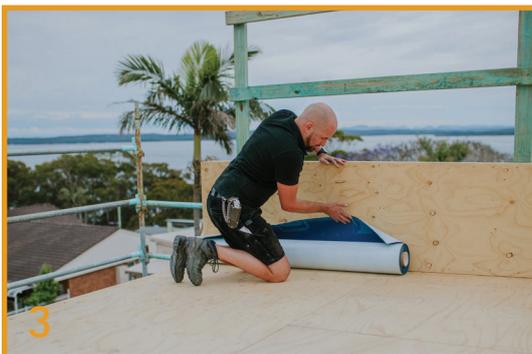
Before applying the SOLITEX EXTASANA ADHERO® ensure the substrate is dry and clean from dust and debris.



2

Check For Sharp Protrusions and Edges

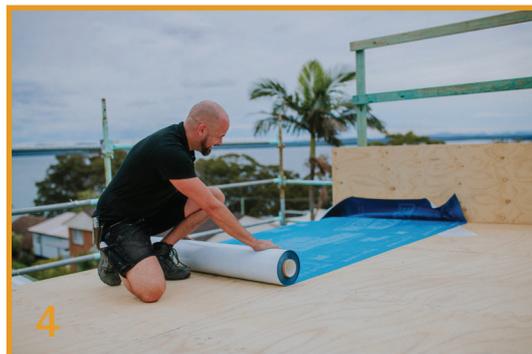
Before applying the SOLITEX EXTASANA ADHERO® ensure there are no nails, screws or splinters that may damage the membrane.



3

Rolling Out the SOLITEX EXTASANA ADHERO®

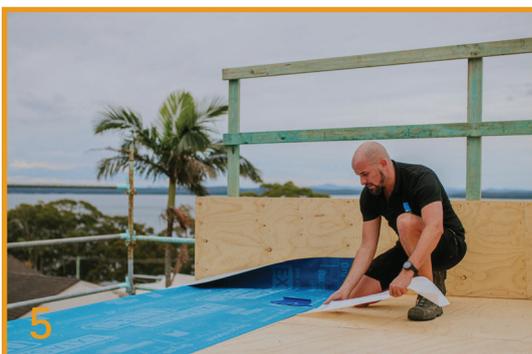
Start with sufficient product to extend vertically up the parapet or wall by 200 mm.



4

Roll Out the Membrane

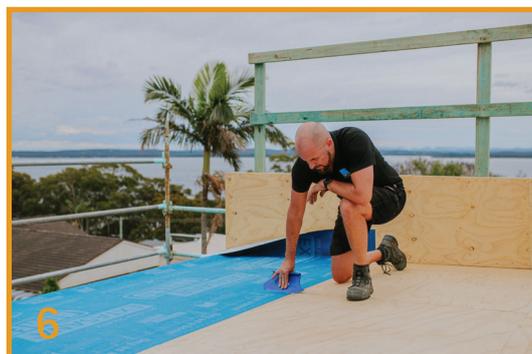
Use a chalk line to align the first course of membrane. Roll the membrane out.



5

Adhere Alignment Strip

After positioning and rolling out the membrane along a horizontal chalk line, remove the 250 mm release paper and adhere to substrate.



6

Apply Pressure to Alignment Strip

Apply pressure to activate the adhesive backing on the alignment strip by using the PRESSFIX XL tool. This ensures maximum adhesion and durability.

IMPORTANT

The substrate must be clean and dry for optimum results.

Careful alignment of the first course makes the whole installation easier.

On roof pitches above 5 degrees, PRIMER RP is not required at the joints and junctions.



SOLITEX EXTASANA ADHERO®
Full-adhesive backed membrane drains condensate and protects low-pitch roof systems from water damage.

SYSTEM

Weather Resistive Barrier

Roof



Overlapping SOLITEX EXTASANA ADHERO® below 5° Pitch

IMPORTANT

The release film is split into two parts that are 250 and 1250 mm wide. Adhere the 250 mm wide alignment strip first for best outcomes. To ensure that the wider release film can be removed easily later on, pull off a corner of this film and fold it over. This will then be easier to grip later.

For roof systems below 5° TESCON® PRIMER RP in this system will require approximately 1 bottle of TESCON® PRIMER RP for 1 roll of SOLITEX EXTASANA ADHERO®.



PRESSFIX XL

A large malleable plastic tool for applying pressure to pro clima SOLITEX EXTASANA ADHERO® to ensure long term durable bonding.



TESCON® PRIMER RP

Applied to substrates to prepare for optimum adhesion such as concrete, masonry, timber, fiber cement, plywood, oriented strand board (OSB), and other porous or friable surfaces.



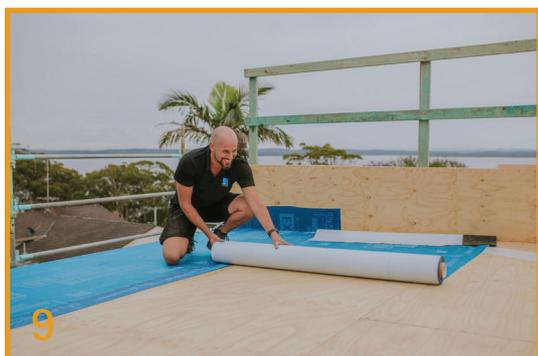
7 Remove Entire Backing and Apply Pressure

Remove backing and apply pressure to activate the adhesive on the entire membrane by using the PRESSFIX XL tool.



8 Apply TESCON® PRIMER RP

Apply TESCON® PRIMER RP to fully saturate the fleece (~230g/m²). Let it dry before rolling out the next layer of SOLITEX EXTASANA ADHERO®.



9 Roll Out Next Layer

After TESCON® PRIMER RP is dried the next course will be applied to overlap using the 150 mm guide mark. Use same procedure as in step 1 to 7.



10 Use a Broom to Smooth

Using a new and stiff broom press the SOLITEX EXTASANA ADHERO® while removing the main backing section allows for a smoother finish.



11 Adhere Entire Section

Apply pressure using PRESSFIX XL adhering the membrane to the substrate, avoiding air bubbles and folds.



12 Check For Creases

Apply the overlap without creases. Creases can allow water to travel through the crease and compromise the system. If these creases are present, see page 10.



Exterior Corners SOLITEX EXTASANA ADHERO® below 5° Pitch



13

Apply TESCON® PRIMER RP

Apply TESCON® PRIMER RP to stop water capillarity in the fleece. Let it dry before rolling out the next layer of SOLITEX EXTASANA ADHERO®.



14

Let TESCON® PRIMER RP Dry Out

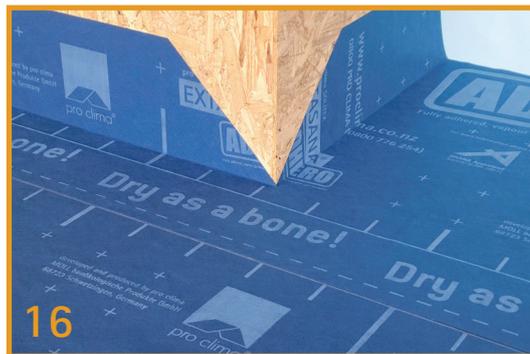
The TESCON® PRIMER RP must be allowed to dry out in the air before it is covered in the lap joint. Let it dry for approx. 15 - 30 min until translucent.



15

Cut 45° Angle To Corner

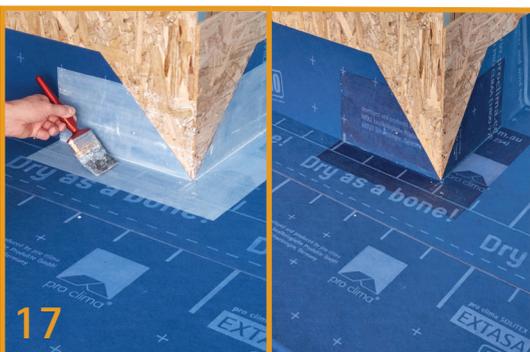
Cut the membrane in a 45° to allow the SOLITEX EXTASANA ADHERO® to be formed around external corners.



16

Overlap Enough On Vertical Surface

The SOLITEX EXTASANA ADHERO® should be extended a minimum of 200mm up the vertical wall. Again, smooth out the membrane using the PRESSFIX XL tool.



17

Apply TESCON® PRIMER RP To The Corner

Use TESCON® PRIMER RP and apply it over the target area and to the substrate behind. Let the TESCON® PRIMER RP dry for approx. 15 - 30 min or until translucent.



18

Seal Corner Using TESCON EXTONSEAL®

TESCON EXTONSEAL® Sill Tape should extend minimum 50 mm on to the roof. The vertical part should extend approx. 150 mm up the vertical wall.

IMPORTANT

Air bubbles and voids should be avoided during application by using the PRESSFIX XL to smooth the SOLITEX EXTASANA ADHERO® into place working progressively along the membrane.

In some cases, if the substrate material heats up in the sun it is possible that the substrate off gases causing small bubbles to appear even when the membrane was installed completely smooth. This does not affect the functionality.



TESCON EXTONSEAL® Flexible flashing tape for use around external corners as part of the SOLITEX EXTASANA ADHERO® low pitch roof system.

SYSTEM

Weather Resistant Barrier

Roof



Exterior Corners SOLITEX EXTASANA ADHERO® below 5° Pitch

IMPORTANT

It is important to avoid accidental tears, punctures or creases in overlaps.

UV exposure time for the whole system can be up to 180 days for Australia and New Zealand.

TESCON PRIMER RP is only required in joint and junctions on roof pitches below 5°.



Figure 33: Flank adhesion joints created by cutting EXTOSEAL 45°

19

Angle Cut For TESCON EXTOSEAL®

When cutting the TESCON EXTOSEAL® ensure a 45° angle cut. When applying the SOLITEX EXTASANA ADHERO® over it prevent small capillary tubes.



20

Angle Cut

The TESCON EXTOSEAL® edge is cut at 45° to ensure no capillary tubes in step 21 – 24.



21

Stretch and Adhere

Stretch and adhere the TESCON EXTOSEAL® tape into place. It is important to pre-stretch the tape before applying it to the substrate.



22

Check Edges for Continuous Contact

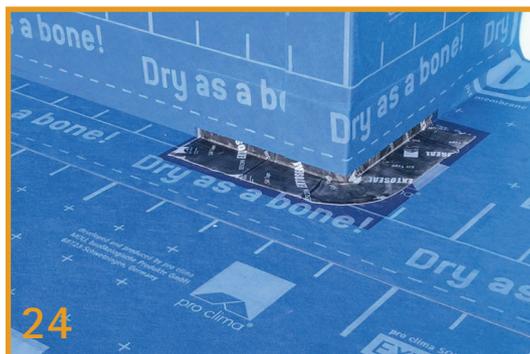
Using PRESSFIX on TESCON EXTOSEAL®, press the edges into place.



23

Make Flank Adhesion Joints

SOLITEX EXTASANA ADHERO® can be applied to the vertical wall or parapet. Using the PRESSFIX press the membrane into the small corner of the tape overlap.



24

Check All Materials are Fully Bonded

Always ensure that all materials are fully bonded, and no capillary tubes are present.

**PRESSFIX**

Malleable plastic tool for applying pressure to pro clima TESCON tapes to ensure long term durable bonding



Interior Corners SOLITEX EXTASANA ADHERO® below 5° Pitch



25

Fold, Position & Crease Membrane

Folding and positioning the membrane in place with minimum 200mm overlap makes the installation process much easier. Use PRESSFIX to crease the folds.



26

Remove Backing and Adhere Edges

Firstly, adhere the roof plane area. On each edge adhere from the bottom up using the PRESSFIX tool. Slowly work to the corner.



27

Fold and Adhere (No cutting!)

Now remove the release paper to adhere the corner fold adhering glue-to-glue. Then use the PRESSFIX tool to press the membrane into the vertical corner.



28

Make Your Work Neat

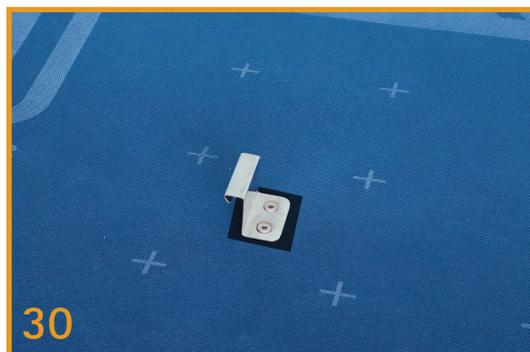
Adhere and secure the flap with a strip of TESCON EXTORA® tape to avoid future damage.



29

Screw Roofing Clips

Standing seam clips or similar need to be screwed on with a full threaded screw to create clamping pressure.



30

Fix Clip with TESCON® NAIDECK

TESCON® NAIDECK has screw sealing properties when the clip is screwed flush and plumb to the surface.

IMPORTANT

When working into corners always start with adhering the roof plane on the horizontal area first.

When adhering each 200mm strip to the vertical plane up the wall or parapet, always PRESSFIX from the edge upwards. Always ensure the PRESSFIX is pushed into the corner at the start of each pressure stroke for best results.

Adhere the folded corner section last.

Always work plane by plane for best results.

SYSTEM

Weather Resistant Barrier

Roof



IMPORTANT

It is important to avoid accidental tears, punctures or creases in overlaps.

UV exposure time for the whole system can be up to 180 days for Australia and New Zealand.

TESCON PRIMER RP is only required in joint and junctions on roof pitches below 5°.

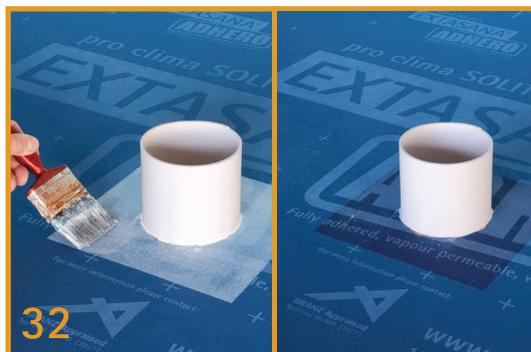
Pipe Penetrations in SOLITEX EXTASANA ADHERO® below 5° Pitch



31

Pipe Penetrations

It is best to lay the SOLITEX EXTASANA ADHERO® prior to the piping. The SOLITEX EXTASANA ADHERO® should be cut flush around the pipe.



32

Apply TESCON® PRIMER RP Around Pipe

Apply TESCON® PRIMER RP around the pipe at least 70mm wide. Let the TESCON® PRIMER RP dry for approx. 15 - 30 min or until translucent.



33

Adhere TESCON EXTOSEAL® To The Pipe

Adhere at least 50mm high gradually around the pipe.



34

Adhere TESCON EXTOSEAL® to Membrane

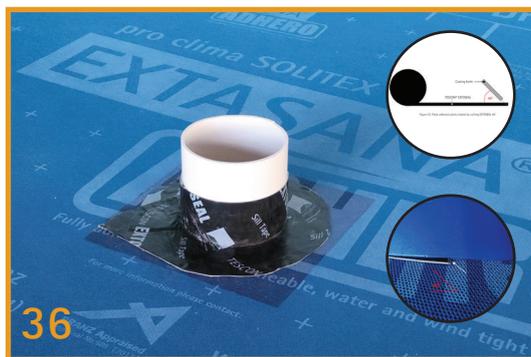
Pre-stretch TESCON EXTOSEAL®, gradually work around the pipe adhering to the primed surface making sure at least 50 mm adhesion is achieved on the membrane.



35

Apply Pressure Using PRESSFIX Tool

Apply pressure to activate the adhesive for a durable connection to the SOLITEX EXTASANA ADHERO®.



36

Angle Cut For TESCON EXTOSEAL®

When cutting the TESCON EXTOSEAL® ensure a 45° angle cut. When adhering the lap it prevents small capillary tubes (See step 19).



Cable Penetrations in SOLITEX EXTASANA ADHERO® below 5° Pitch



37

Drill Hole And Insert Conduit For Cable

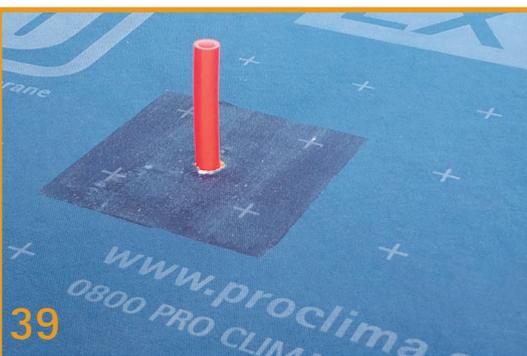
The hole where the pipe/conduit is penetrating the SOLITEX EXTASANA ADHERO® membrane should be a snug fit.



38

Apply TESCON® PRIMER RP to Adhesion Surface

Ensure to apply TESCON® PRIMER RP to the area around the pipe equivalent to the size of the ROFLEX 20.



39

Allow TESCON® PRIMER RP to Dry

Allow TESCON® PRIMER RP to dry for 15 - 30 mins or until translucent. This indicates it is dry.



40

Adhere ROFLEX 20 and Apply Pressure

Adhere the ROFLEX 20 grommet over the primed surface and apply pressure with the PRESSFIX tool.



41

Seal The Cable

Fill the space around the cable with ORCON® CLASSIC. Ensure that the sealant fills in every gap of the opening. ORCON® CLASSIC must be applied to dry surfaces.



42

Sealed Conduit

The ROFLEX 20 provides superior water holdout. KAFLEX or taping should NOT be required.

IMPORTANT

The ROFLEX 20 grommet and conduit is the recommended option such that round and flat twin and tri core cable can be run without risk of water leaks.

TESCON PRIMER RP is only required in joint and junctions on roof pitches below 5 degrees.



ORCON® CLASSIC

Durable airtight sealing glue used to seal cables into the cable conduit.



ROFLEX 20

Sealing grommet made of strong and highly flexible EPDM for rapid and permanent weathertight feedthroughs for 15 - 30mm pipes. Up to 180 days UV exposure.

SYSTEM

Weather Resistive Barrier

Roof



IMPORTANT

It is important to avoid accidental tears, punctures or creases in overlaps.

UV exposure time for the whole system can be up to 180 days for Australia and New Zealand.

TESCON PRIMER RP is only required in joint and junctions on roof pitches below 5°.



TESCON® PRIMER RP
Applied to the patching area to prepare for optimum adhesion and bind up the fleece prior to application of TESCON EXTORA®.

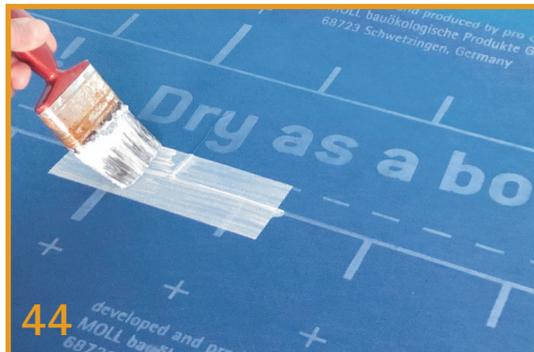


TESCON EXTORA®
Pressure-sensitive adhesive tape for patching imperfections in SOLITEX EXTASANA ADHERO® system.

Patching SOLITEX EXTASANA ADHERO® below 5° Pitch



43 Treatment of Creases
Crease occurrence in the process of applying the SOLITEX EXTASANA ADHERO® is common and needs to be repaired.



44 Apply TESCON® PRIMER RP Over the Crease
Use TESCON® PRIMER RP to prepare the surface for the next step.



45 Allow TESCON® PRIMER RP to Dry
Let the TESCON® PRIMER RP dry for 15 - 30 min or until translucent. Covering too early will delay the drying procedure and will hinder the next step.



46 Overlay With TESCON EXTORA®
Lay the TESCON EXTORA® tape over the crease. Take care to not stretch the tape. It must follow the contour of the crease.



47 Apply Pressure Over the Patch
Use PRESSFIX tool to work the tape into the crease and the overlap of the membranes.



48 Visually Inspect the Patch
Once the TESCON EXTORA® patch is applied and properly pressed you should be able to clearly see all the embossed contours of the crease and joints.



IMPORTANT

TESCON® NAIDECK is a butyl tape that seals the fixing by entraining into the thread on the screw. It also works with nails, however screws are recommended as the thread will pull the batten firmly down onto the TESCON® NAIDECK and the SOLITEX EXTASANA ADHERO® surface.



TESCON® NAIDECK
Double-sided self-sealing strip, designed to seal penetrations of purlins, battens or studs.

Fixing Counter Battens to SOLITEX EXTASANA ADHERO®



49

Apply TESCON® NAIDECK to Battens

The TESCON® NAIDECK should be applied to the batten before it is placed in position.



50

Screw Through the Substrate into the Rafters

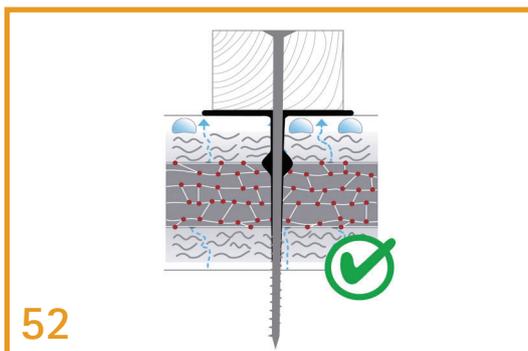
Screw through TESCON® NAIDECK using a screw long enough to penetrate all the way through into the structural timber.



51

Fix With Adequate Torque

Screws allow the batten to pull in tight to the substrate creating a compression seal with the TESCON® NAIDECK.



52

TESCON® NAIDECK is Entrained into the Thread

TESCON® NAIDECK will entrain into the thread creating a weathertight seal.

SYSTEM

Weather Resistive Barrier

Roof

IMPORTANT

INTELLO® PLUS is recommended in all roofing systems for optimum health and durability outcomes when SOLITEX EXTASANA ADHERO is used on framed roofing systems with insulation placed within the structural framing.

This restricts the upward movement of water vapour protecting the rigid substrates from mould and rotting.

Overlapping SOLITEX EXTASANA ADHERO® ≥5° Pitch



53

Place and Adhere Course by Course

SOLITEX EXTASANA ADHERO may be rolled out course by course on roofs above 5° pitch.



54

Overlap, Remove Backing and Adhere

Overlapping joints by 150mm, remove backing and adhering in same method as for low pitch roofs. No primer in joints is necessary for roof >5° pitch.

Using INTELLO PLUS® with SOLITEX EXTASANA ADHERO®



55

Apply INTELLO® PLUS

INTELLO® PLUS Intelligent Air Barrier should be installed to the underside of the fibrous insulated roof structure in accordance with pro clima's instructions.



56

Fix INTELLO® PLUS with Service Cavity

Ensure all laps, connections and penetrations are taped and sealed.



INTELLO® PLUS is an Intelligent Air Barrier (IAB) to be used for controlling water vapour diffusion from the living space below and protect the rigid board substrate from long term deterioration.

Recommendations and requirements

- It is recommended that the SOLITEX EXTASANA ADHERO® system is installed with INTELLO® PLUS on the underside of the fibrous insulated rafters in accordance with pro clima's instructions.
- The risk of moisture related damage in rigid boards is related to climate, indoor conditions, roof colour and the presence or absence of a ventilated cavity. The risk of moisture related damage should be assessed by a trained WUFI professional: www.wufi.com.au/wufi-professionals/ or www.wufi.co.nz/wufi-professionals/
- TESCON® NAIDECK is recommended on all battens and fixings for roofs below 10° pitch.
- Specific Engineered Design (S.E.D) is required to ensure fixing of battens and counter battens is suitable for the roof's design and wind region.
- Timber boards and timber structure should be below 18% moisture content by mass prior to installing membranes.
- Roof sheeting must be installed according to SA HB 39:2015 Code of Common Practice for Steel Roofing in Australia or the MRM Code of Practice in New Zealand, including suitable vermin proofing.
- The SOLITEX EXTASANA ADHERO® is only intended to drain condensate during the service life.
- Weathertightness cannot be guaranteed in the event of roofing failures or inadequate detailing in accordance with relevant metal roofing guidelines and building code requirements.
- In Australia, this roof system is limited to a minimum pitch of 2° to facilitate safe drainage of condensate in accordance with AS 4200.2
- In New Zealand, this roof system is limited to a minimum pitch of 3° to facilitate safe drainage of condensate in accordance with NZBC E2.
- SOLITEX EXTASANA ADHERO®, TESCON® NAIDECK, TESCON® EXTORA, TESCON® PRIMER RP, and TESCON® EXTONSEAL form a continuous system. Any damage or tears must be patched or repaired.
- Any staples, damage, penetrations or mechanical fixings used during installation may hinder the use of SOLITEX EXTASANA ADHERO® as temporary weather protection. TESCON® EXTORA patches can be used for patching imperfections to maintain its performance as temporary weather protection.
- All SOLITEX® membranes and TESCON® tapes in this system have 180-day UV exposure limit.
- The SOLITEX EXTASANA ADHERO® must be installed in a system that allows a drainage pathway for condensate.

Certification

Declare.



Your local support

NEW ZEALAND
0800 PRO CLIMA (776 254)
Technical: support@proclima.co.nz
General: welcome@proclima.co.nz
www.proclima.co.nz





The facts presented refer to the state of current research and practical experience. We reserve the right to make changes to the recommended designs and processing as well as the further development and the associated quality change of individual products. We are happy to inform you about the current state of technical knowledge should you contact us directly.

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