

SOLITEX® ADHERO FC & SOLITEX EXTASANA ADHERO®

Roof Application Guide



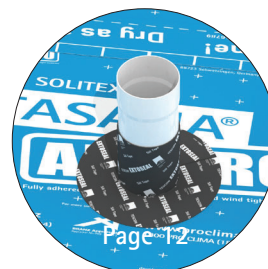
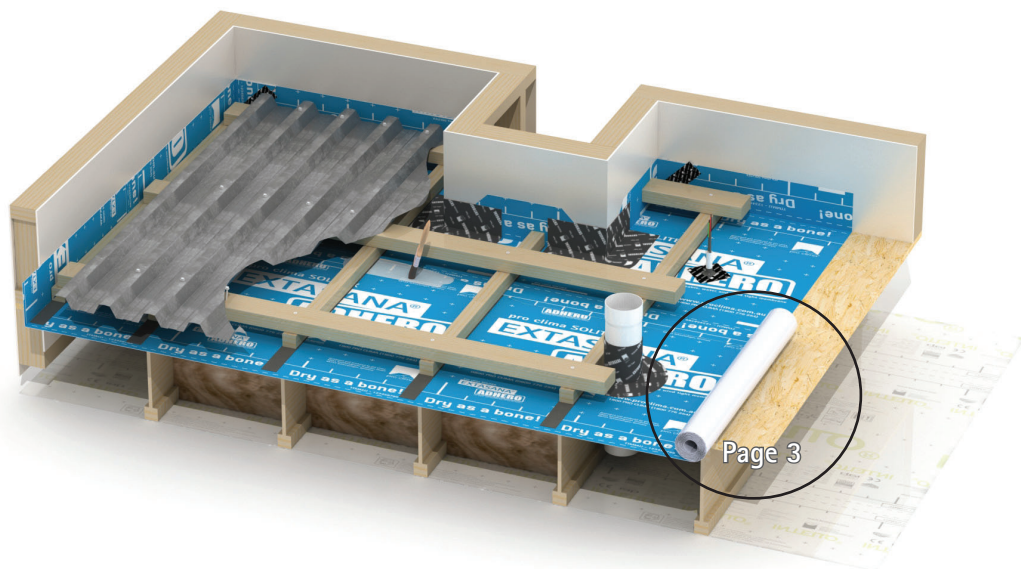
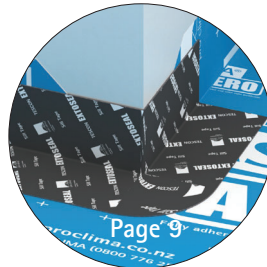
Adhesive Weather Resistive Barrier system for roofs



IMPORTANT

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

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



pro clima Adhesive Weather Resistant Barriers With Above Sheathing Ventilation – below 5° pitch
pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a ventilated cavity between the weather resistant barrier and the roof sheet 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 minimum 40 mm high, combined with eave ventilation equivalent to $20,000 \text{ mm}^2/\text{m}$ of eave length and $20,000 \text{ mm}^2/\text{m}$ 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



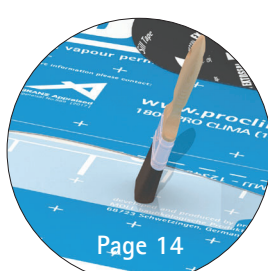
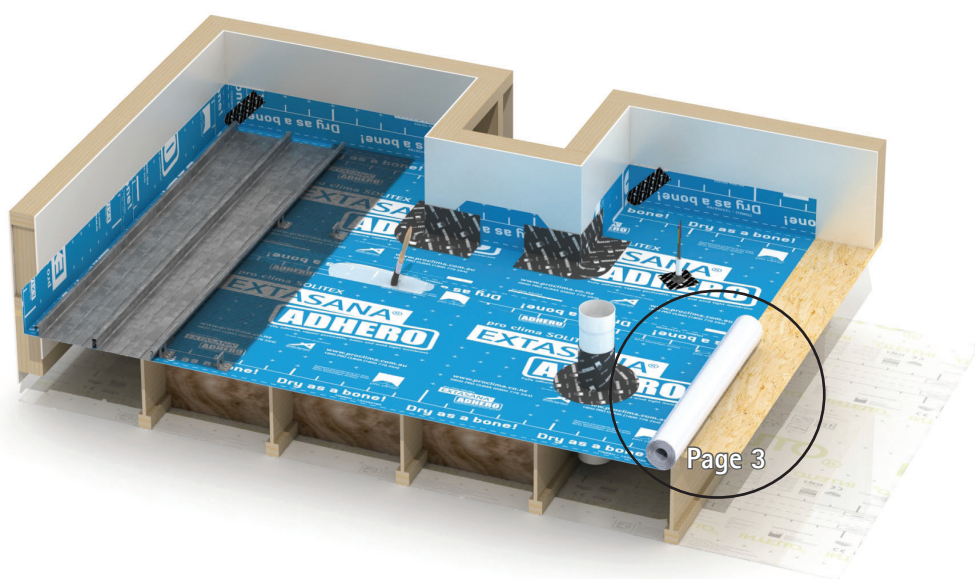
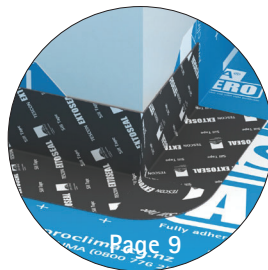
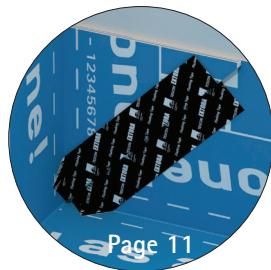
IMPORTANT

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 moisture balance of the roof assembly is also affected by factors such as roofing colour, pitch, orientation and exposure. The impact of these factors can be assessed by a WUFI® professional.

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



pro clima Adhesive Weather Resistive Barriers With Standing Seam over 3D Separation Mesh – below 5°
 pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a standing seam metal cladding should have a 3D separation mesh installed. The 3D separation mesh provides a separation layer 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.

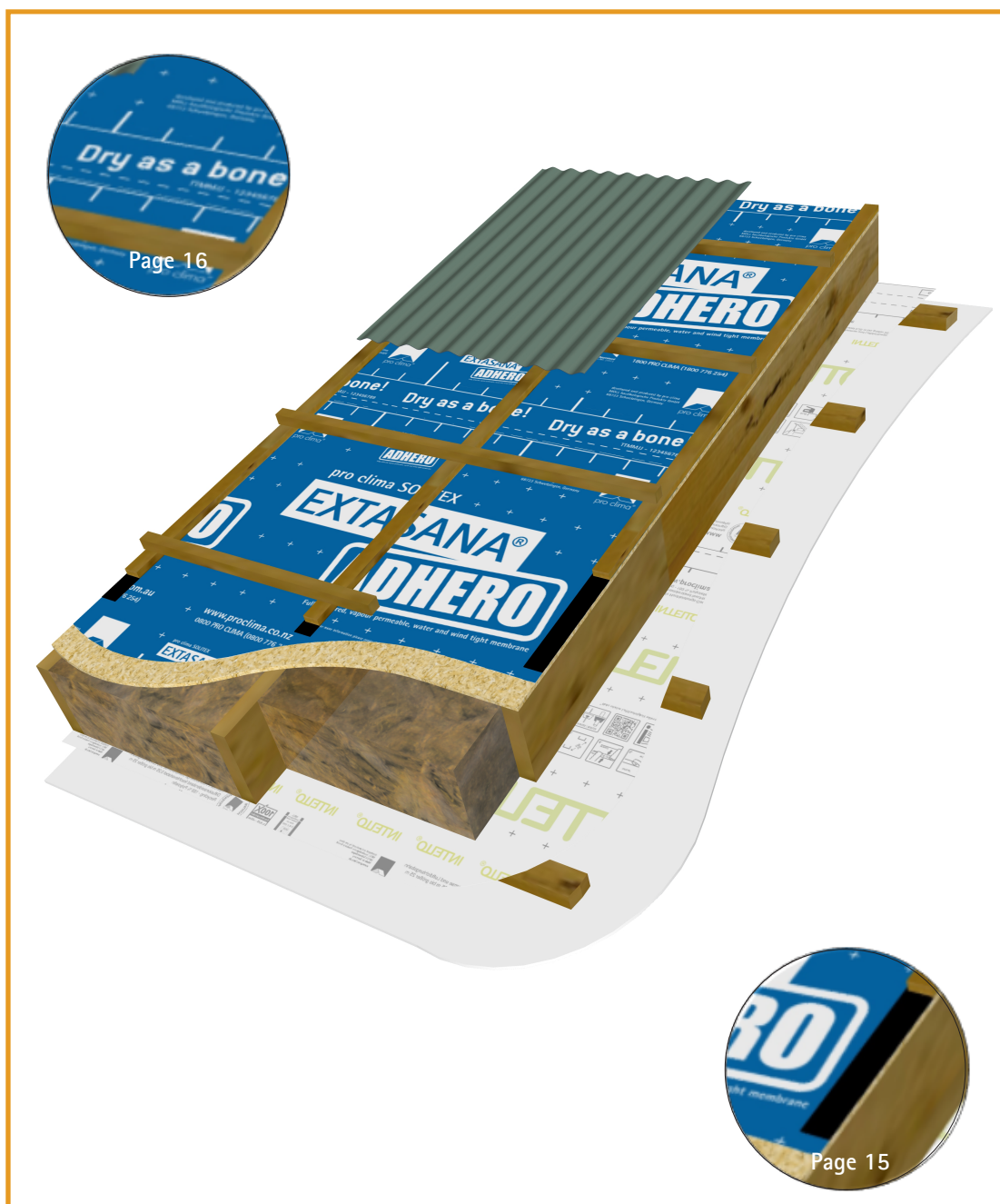
It is recommended that hygrothermal calculations are performed by a WUFI® professional to assess the risks of moisture damage. This system may be used on low pitch CLT and SIPs panels as shown above.



IMPORTANT

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

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



pro clima Adhesive Weather Resistive Barriers with Above Sheathing Ventilation $\geq 5^\circ$

pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a ventilated cavity between the weather resistive barrier and the roof sheet 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 20 mm high, combined with eave ventilation equivalent to 20,000 mm²/m of eave length and 5,000 mm²/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

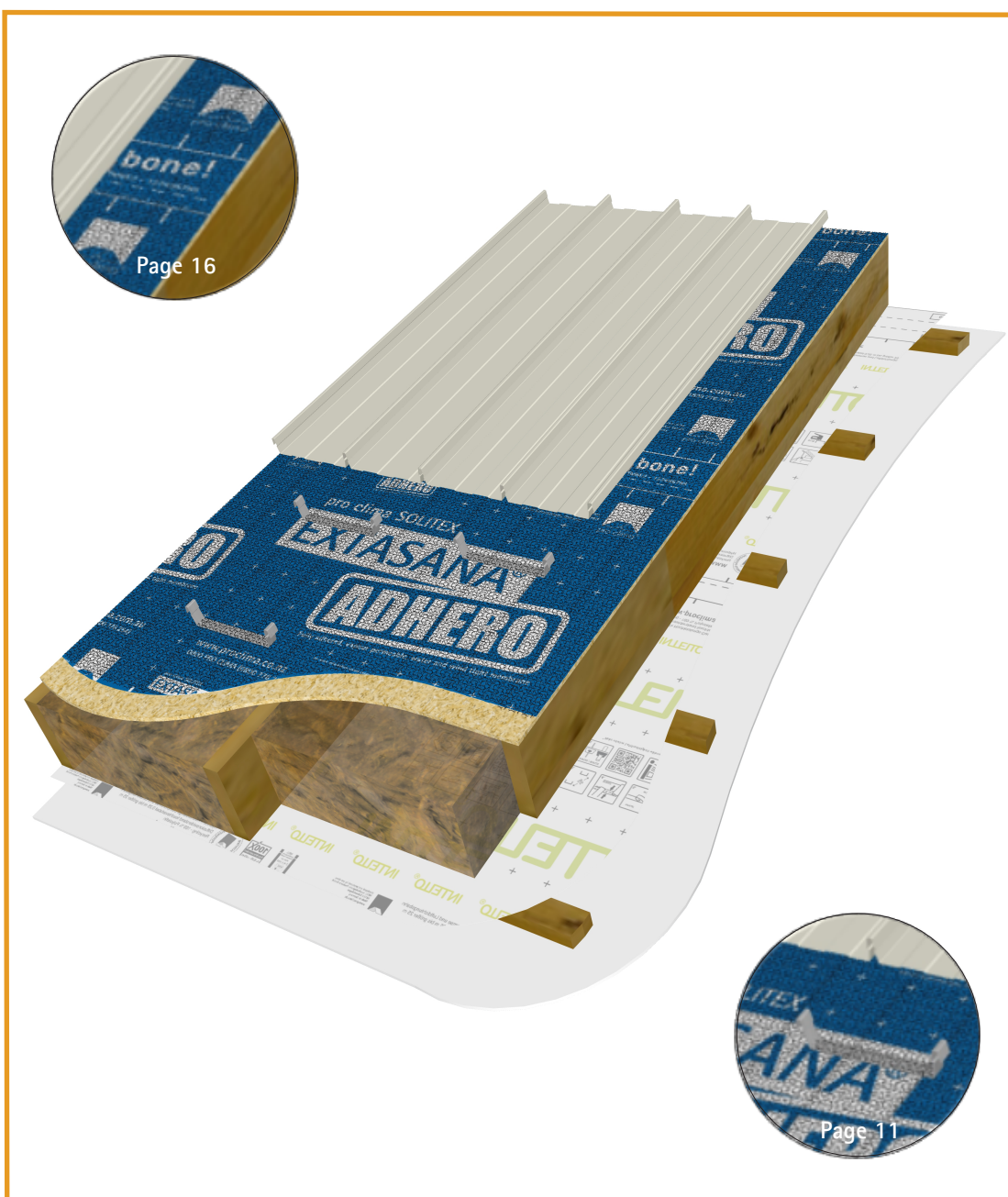
Drained With 3D Separation Mesh: Pitch $\geq 5^\circ$

IMPORTANT

For 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 moisture balance of the roof assembly is also affected by factors such as roofing colour, pitch, orientation and exposure. The impact of these factors can be assessed by a WUFI® professional.

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pro clima Adhesive Weather Resistive Barriers With Standing Seam over 3D Separation Mesh $\geq 5^\circ$

pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a standing seam metal cladding should have a 3D separation mesh installed. The 3D separation mesh provides a separation layer 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.

It is recommended that hygrothermal calculations are performed by a WUFI® professional to assess the risks of moisture damage. No primer is required in joints and junctions on roof pitches of 5° or more. TESCON® NAIDECK is not required on roof pitches 10° or more.



IMPORTANT

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

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

**Uninsulated structure shown*

pro clima Adhesive Weather Resistant Barriers on Cross Laminated Timber $\geq 5^\circ$

pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a ventilated cavity between the weather resistant barrier and the roof sheet 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 20 mm high, combined with eave ventilation equivalent to 20,000 mm²/m of eave length and 5,000 mm²/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

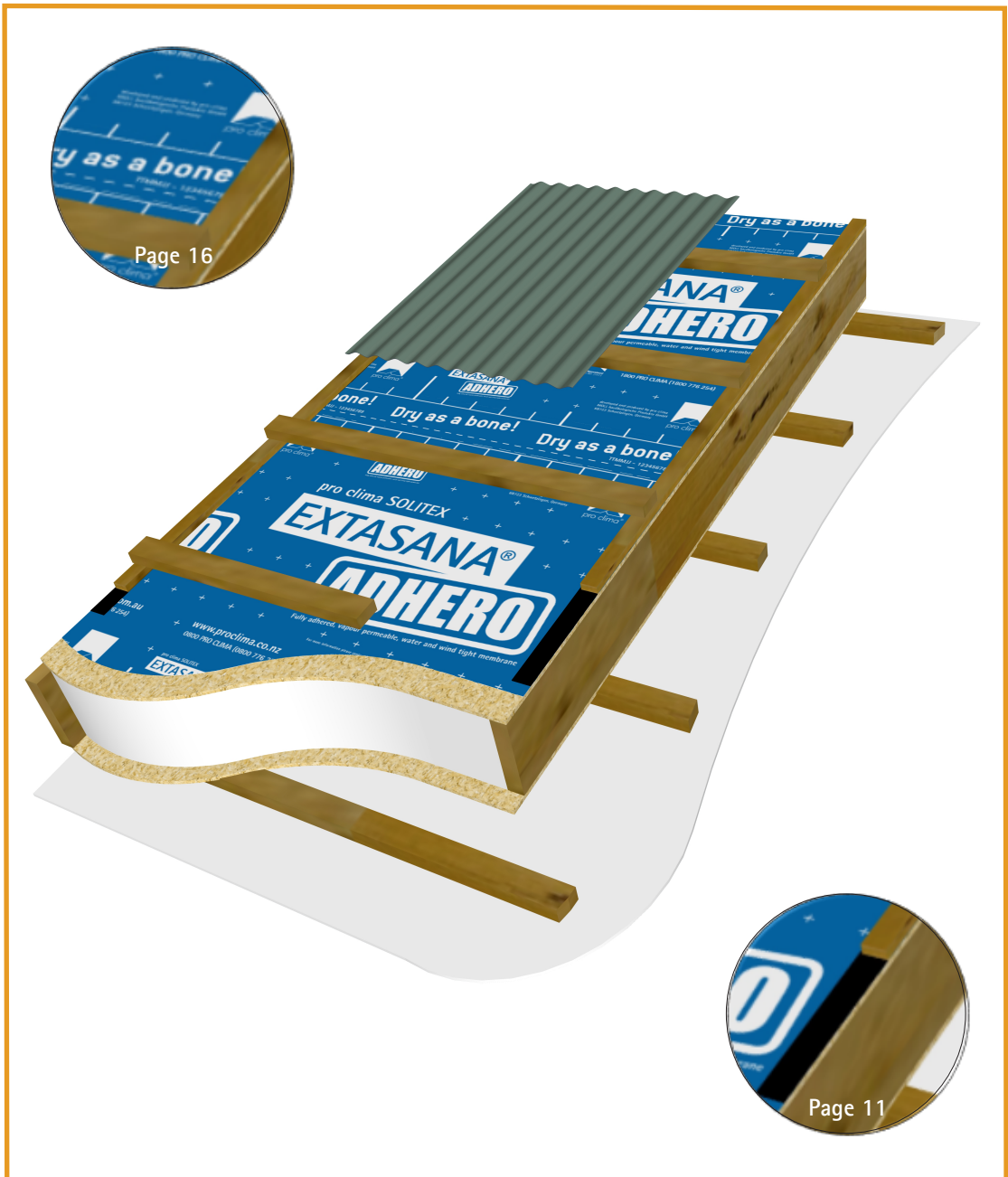
Weather Resistive Barrier

Roof

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 the roof pitch is below 10° .

**pro clima Adhesive Weather Resistive Barriers on SIPS $\geq 5^\circ$**

pro clima SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC used in combination with a ventilated cavity between the weather resistive barrier and the roof sheet 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 20 mm high, combined with eave ventilation equivalent to 20,000 mm²/m of eave length and 5,000 mm²/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.



Applying SOLITEX EXTASANA ADHERO® to a Rigid Roof Substrate



1

Ensure the Rigid Substrate is Dry and Clean

Ensure the substrate is dry and clean from dust and debris.



2

Check For Sharp Protrusions and Edges

Ensure there are no nails, screws or splinters that may damage the membrane.

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°, TESCON® PRIMER RP is not required at the joints and junctions.



SOLITEX EXTASANA ADHERO®

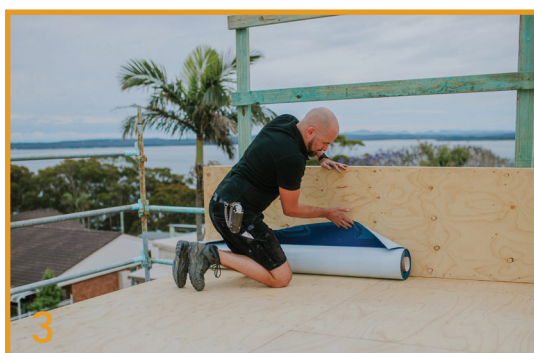
Class 3 Adhesive Weather Resistive Barrier drains condensate and protects roof systems from water damage.



SOLITEX® ADHERO FC

The images in this guide showcase the use of SOLITEX EXTASANA ADHERO® Adhesive Weather Resistive Barrier.

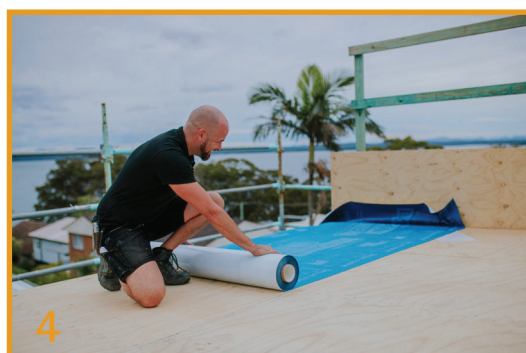
The same application process is used when installing the SOLITEX® ADHERO FC Class 4 Vapour Permeable Adhesive Weather Resistive Barrier.



3

Rolling Out the SOLITEX EXTASANA ADHERO®

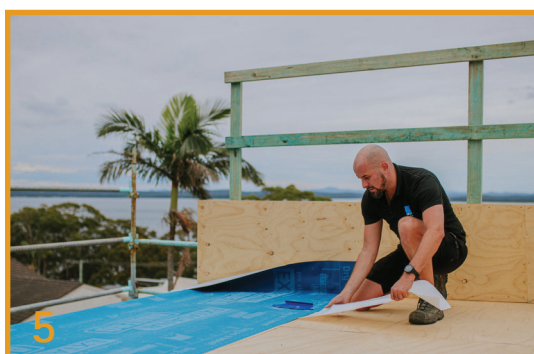
Start with sufficient product to extend vertically up the parapet or wall by 200 mm.



4

Roll Out the Membrane

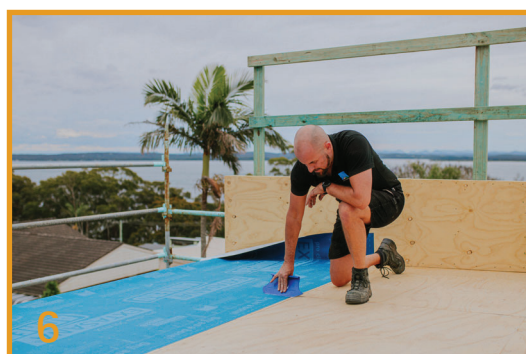
Use a chalk line to align the first course of membrane.



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 using the PRESSFIX XL tool. This ensures maximum adhesion and durability.

SYSTEM

Weather Resistive Barrier

Roof



Overlaps 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 is required. Approximate use is 1 bottle of TESCON® PRIMER RP for 1 roll of membrane.



PRESSFIX XL

A large malleable plastic tool for applying pressure to pro clima adhesive weather resistive barriers to ensure long-term durable bonding.



TESCON® PRIMER RP

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



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.



Apply TESCON® PRIMER RP

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



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.



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.



Adhere Entire Section

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



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 14.



External Corners 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 membrane.



14

Let TESCON® PRIMER RP Dry Out

The TESCON® PRIMER RP must dry out for approx. 15 – 30 min until translucent.

IMPORTANT

Air bubbles and voids should be avoided during application using the PRESSFIX XL tool to smooth the membrane into place progressively.

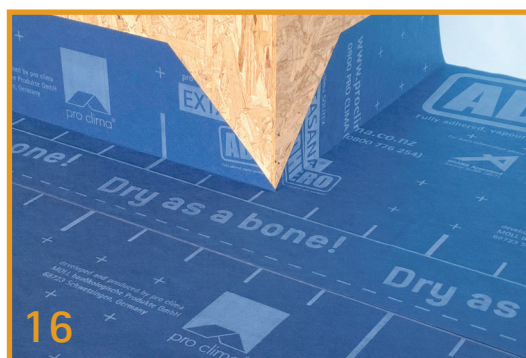
In some cases, if the substrate material heats up in the sun it is possible that the substrate off gases causing small bubbles to appear even when the membrane was installed completely smooth. This does not affect the functionality.



15

Cut 45° Angle To Corner

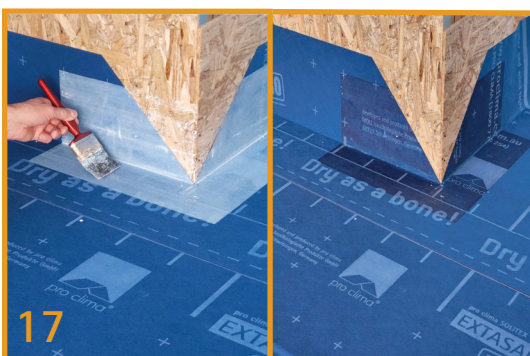
Cut the membrane at a 45° angle to allow conforming around external corners.



16

Overlap Enough On Vertical Surface

The membrane should be extended a minimum of 200 mm 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 over the target area and to the substrate behind. Let dry for approx. 15 – 30 min or until translucent.



18

Seal Corner Using TESCON EXTOSSEAL®

TESCON EXTOSSEAL® Sill Tape should extend minimum 50 mm out and 150 mm up the vertical section.



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



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°.



PRESSFIX

Malleable plastic tool for applying pressure to pro clima TESCO® tapes to ensure long-term durable bonding.

External Corners below 5° Pitch

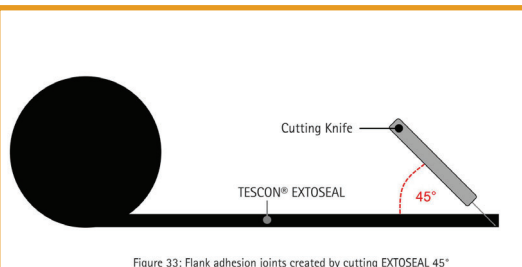
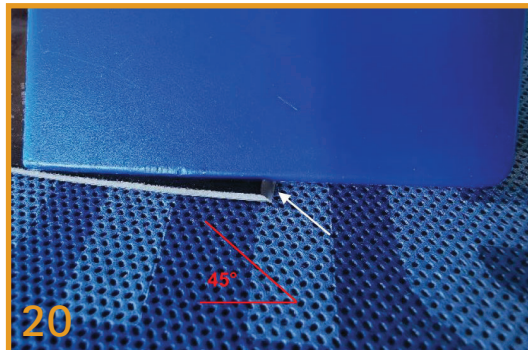


Figure 33: Flank adhesion joints created by cutting EXTOSSEAL 45°

19

Angle Cut For TESCO® EXTOSSEAL®

Cut TESCO® EXTOSSEAL® at a 45° angle. This prevents capillary tubes over the fleece of the adhesive membrane.



20

Angle Cut

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



21

Stretch and Adhere

Stretch and adhere the TESCO® EXTOSSEAL® 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 TESCO® EXTOSSEAL®, press the edges into place.



23

Overlap tapes with SOLITEX EXTASANA ADHERO®

The adhesive membrane can be applied to the vertical wall or parapet. Using the PRESSFIX press the membrane into the 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.



Internal Corners below 5° Pitch



25

Fold, Position & Crease Membrane

Folding and positioning the membrane in place with minimum 200mm overlap makes the installation process easier.



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!)

Remove the release paper to adhere the corner achieving glue-to-glue connection. Use the PRESSFIX tool to press into the vertical corner.



28

Make Your Work Neat

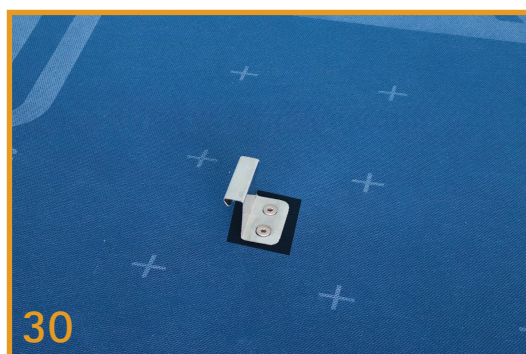
Adhere and secure the flap with a strip of TESCON EXTORA® tape to avoid future damage.



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 to the surface.

IMPORTANT

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

When adhering each 200 mm 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.

SYSTEM

Weather Resistive Barrier

Roof



Pipe Penetrations 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.

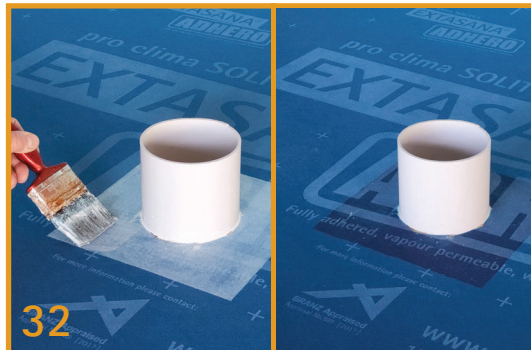
TESCON® PRIMER RP is only required in joint and junctions on roof pitches below 5°.



31

Flush cut

Cut the membrane flush around the pipe.



32

Apply TESCO® PRIMER RP Around Pipe

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



33

Adhere TESCON EXTONSEAL® To The Pipe

Adhere at least 50 mm high, gradually around the pipe.



34

Adhere TESCON EXTONSEAL® to Membrane

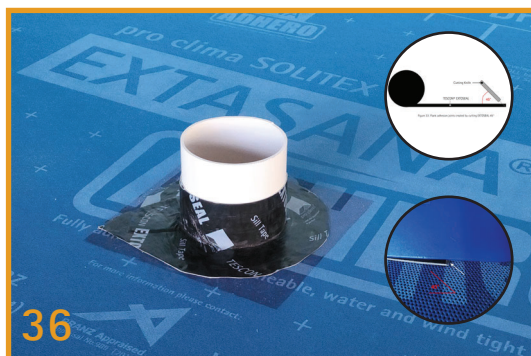
Pre-stretch TESCON EXTONSEAL®, gradually work around the pipe, achieving a minimum of 50 mm adhesion to the primed surface



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 EXTONSEAL®

Cut TESCON EXTONSEAL® at a 45° angle. This prevents capillary tubes over the fleece of the adhesive membrane.



Cable and Conduit Penetrations below 5° Pitch

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.

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



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



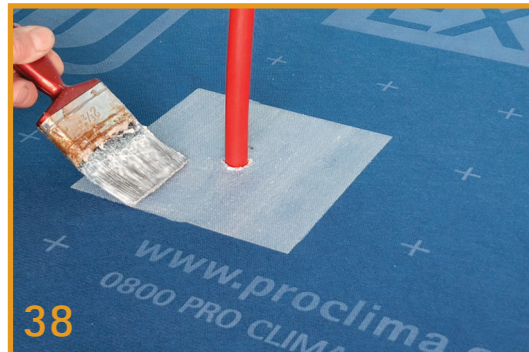
ROFLEX 20
Sealing grommet made of strong and highly flexible EPDM for rapid and permanent weathertight feedthroughs for 15 – 30 mm pipes. Up to 180 days UV exposure.



37

Drill Hole And Insert Conduit For Cable

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



38

Apply TESCO® PRIMER RP

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



39

Allow TESCO® PRIMER RP to Dry

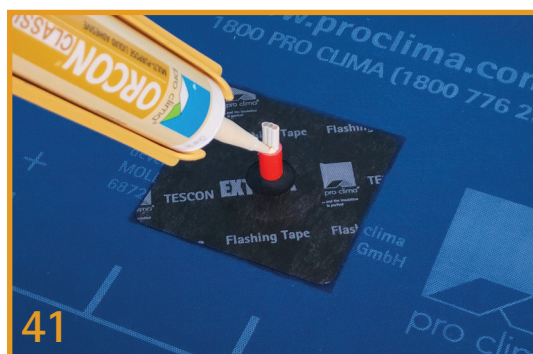
Allow TESCO® PRIMER RP to dry for 15 – 30 mins or until translucent.



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 within with ORCON® CLASSIC - filling 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.

SYSTEM

Weather Resistive Barrier

Roof



Patching 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°.



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



Treatment of Creases

Creases are common and need to be attended to.



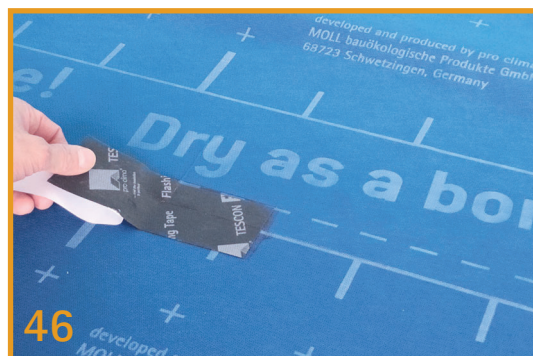
Apply TESCOX® PRIMER RP Over the Crease

Use TESCOX® PRIMER RP to prepare the surface for the next step.



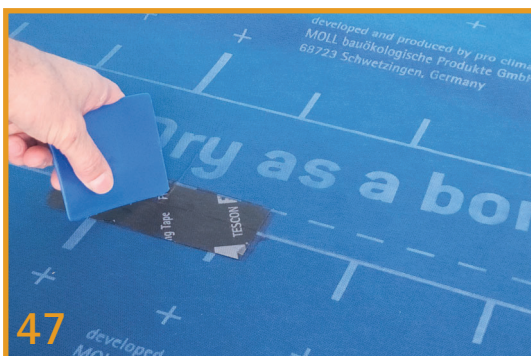
Allow TESCOX® PRIMER RP to Dry

Let the TESCOX® PRIMER RP dry for 15 - 30 min or until translucent.



Overlay With TESCOX EXTORA®

Apply the TESCOX EXTORA® tape over the crease. Take care to not stretch the tape. It must follow the contour of the crease.



Apply Pressure

Use PRESSFIX tool to work the tape into the crease and the overlap of the membranes.



Visually Inspect

Once the TESCOX EXTORA® patch is applied and pressed, the contours of the crease and joints should be clearly seen through.



Fixing Counter Battens



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.

IMPORTANT

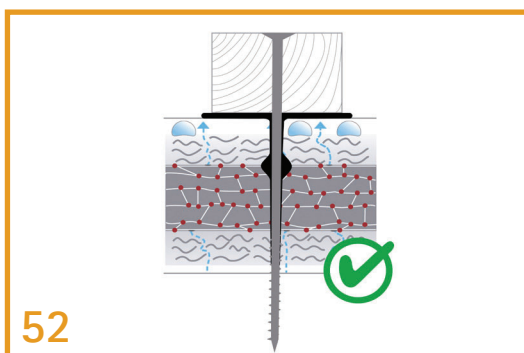
TESCON® NAIDECK is a butyl tape that seals the fixing by entraining into the thread on the screw. It also works with nails, however screws are recommended as the thread will pull the batten firmly down onto the TESCON® NAIDECK and the membrane surface.



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.



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

IMPORTANT

INTELLO® PLUS is recommended for optimum health and durability outcomes on framed roofing systems with insulation placed within the structural framing.

This restricts the upward movement of water vapour, protecting the rigid substrates from moisture accumulation and mould.

Overlaps ≥5° Pitch

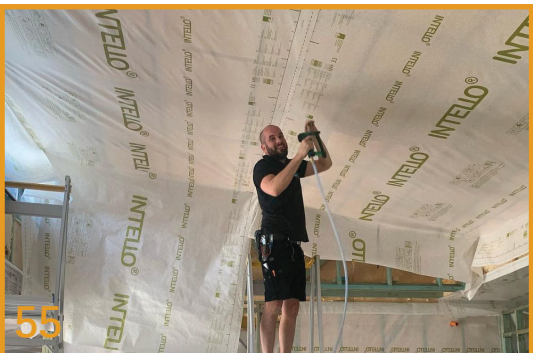


Place and Adhere Course by Course
The membrane may be rolled out course by course on roofs above 5° pitch.



Overlap, Remove Backing and Adhere
Overlapping joints by 150 mm, remove backing and adhering in same method as for low pitch roofs.

Using INTELLO® PLUS



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



Fix INTELLO® PLUS with Service Cavity
Ensure all laps, connections and penetrations are taped and sealed.



INTELLO® PLUS

Intelligent Air Barrier to be used for controlling water vapour diffusion from the living space below and to protect the rigid board substrate from long-term deterioration.

Recommendations and requirements

- It is recommended that SOLITEX EXTASANA ADHERO® or SOLITEX® ADHERO FC are 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.
- Ensure fastening 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.
- Timber board joints shall have either tongue-and-grove or be supported by solid blocking parallel to the board if butt jointed. This avoids excessive deflection at longitudinal joints under load to protect the membrane from mechanical damage.
- 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.
- For the standing seam roof system, the adhesive weather resistive barriers are 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® or SOLITEX® ADHERO FC, TESCON® NAIDECK, TESCON EXTORA®, TESCON® PRIMER RP, and TESCON EXTOSEAL® 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® or SOLITEX® ADHERO FC 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 adhesive weather resistive barriers must be installed in a system that allows a drainage pathway for condensate.



TESCON EXTORA®

TESCON EXTOSEAL®

KAFLEX ROFLEX

INTELLO®
INTELLO® PLUSSOLITEX EXTASANA ADHERO®
SOLITEX® ADHERO FC

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