

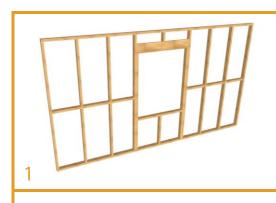
# SOLITEX EXTASANA® Application & Fixing Guide – Timber Frame



Weather Resistive Barrier for Weathertight Façade Systems

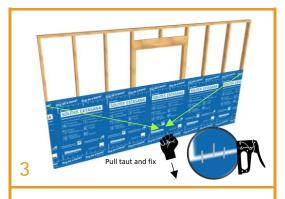


SOLITEX EXTASANA® can be installed according to AS 4200.1-2017 or as per pro clima Installation Method outlined in the details below. For more information on the market leading, comprehensive and transparent pro clima System Warranty please visit <u>www.proclima.com.au/warranties</u>.



Preparing Timber Framing

Ensure all studs are aligned and free from splinters. Mark where top edge of membrane will go to achieve suitable overlap onto slab edge or flashing.

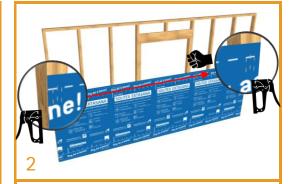


Triangulate and Fasten Pull the membrane down and taut at the center and fix with 2 - 3 staples at the bottom edge.



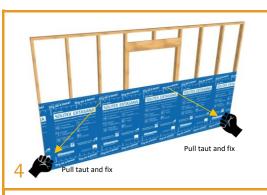
Fix Top Edge SOLITEX EXTASANA® Fix the membrane at each stud along the top edge ensuring the staples are within 150 mm from the edge.

...and the insulation is perfect!

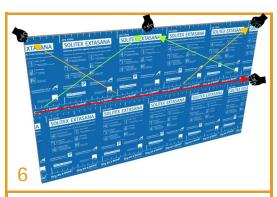


#### Initial Fixing Point

Apply 5 - 6 staples in the top corner before unrolling the membrane over the studs. Pull taut and fix opposite top corner with 5 - 6 staples.



Fix Bottom Corners Pull taut and fix each bottom corner with 2 – 3 staples.



Successive Layers of SOLITEX EXTASANA® Apply successive layers of SOLITEX EXTASANA® using the upside-down sequence compared to the bottom layer.

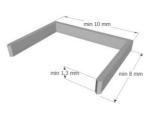


#### IMPORTANT

Membrane should be pulled taut to ensure TESCON® EXTORA tape can be easily installed and adequate pressure applied using the PRESSFIX tool.

Check framing for any protrusions like nails, metal strapping, single edges of framing. These can wear through the membrane.

Be careful using angle grinders around the SOLITEX EXTASANA® membrane. The sparks can create holes.



STAPLES Staples must be galvanized or stainless-steel staples. At least 10 mm wide and at least 1.3 mm thick.

#### eather Resistive Barrier

#### SYSTEM

#### Weather Resistive Barrier

Wall



#### IMPORTANT

The PRESSFIX tool MUST be used to apply pressure to TESCON EXTORA® and TESCON EXTOSEAL® after application to ensure the glue is activated and can reach maximum hold strength.



TESCON EXTORA APPLICATIO



WINDOW CUTTING / DRESSING



PRESSFIX is a malleable plastic tool for applying pressure to pro clima Adhesive TESCON® Tapes to ensure long term durable bonding.



**Overlapping SOLITEX EXTASANA®** 

The membrane shall be overlapped 150 mm. The white line represents the 150 mm overlap line and can be used as guidance to align successive layers.



Window Reveal Dressing

Cut the membrane at window reveals with 45° angle cuts forming 4 flaps to be dressed into the reveal.

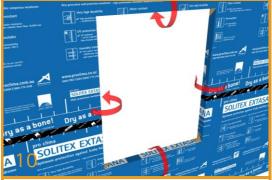


Fixing the Reveals

The flaps should be fixed into the window reveal using staples at the rear edge of the window reveal spaced evenly at 150 mm centers.



Connections Using TESCON EXTORA® Flashing Tape Apply at minimum TESCON EXTORA® 60 mm to the horizontal joints with 30 mm onto each side of the joint. Apply pressure with PRESSFIX tool.



#### Folding the Reveals

Fold the SOLITEX EXTASANA<sup>®</sup> flaps back into the reveals cutting the flaps flush with the back edge of the framing.



Sill Flashing – TESCON EXTOSEAL® Exposed framing at corners of the sill should be covered with TESCON EXTOSEAL® Sill Tape to prevent any leaks around windows entering the framing.

#### SOLITEX EXTASANA® - Application & Fixing Guide - Timber

Veather Resistive Barrier



#### IMPORTANT

TESCON EXTOSEAL® is required to be stretched at the window corners. Overstretching TESCON EXTOSEAL® can lead to thinning and tearing.





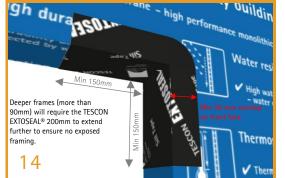
Applying TESCON EXTOSEAL® Sill Tape TESCON EXTOSEAL® Sill Tape should extend minimum 150 mm up the jambs. The corners of the TESCON EXTOSEAL® are stretched & adhered into place.



Seal Staples Using TESCON® EXTORA Staple holes around the window should be minimized. If any staples exist they should be covered with TESCON EXTOSEAL® or TESCON® EXTORA.



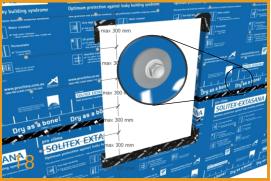
Lightweight Cladding – TESCON® NAIDECK option Use TESCON® NAIDECK for additional security for early weathertightness prior to cladding.



Window Corner Seal With TESCON EXTOSEAL® TESCON EXTOSEAL® should extend at least 150 mm in each direction. For wider frames, use 200 mm wide TESCON EXTOSEAL® and extend 200 mm.



Lightweight Cladding – Fix Battens Vertically Use screw fixing of battens for best results as it provides compression of the vertical battens onto the SOLITEX EXTASANA® for weathertight secure fixing.



Brick Veneer – SOLITEX EXTASANA® fixing Galvanised hex screws & washers (see 62) or cap fasteners (see 63) at 300 mm centers temporarily hold SOLITEX EXTASANA® prior to brickwork.

#### SYSTEM

#### Weather Resistive Barrier

Wall

### IMPORTANT

SOLITEX EXTASANA® installed with rounded corners will make it difficult or impossible to install battens. Rounded corners may result in batten installation damaging SOLITEX EXTASANA® and potential loss of weathertightness.



#### Internal Corners Special attention to ensure that curved corners DO NOT occur.



## Corner Connections

Connecting SOLITEX EXTASANA® in the corner can prevent the risk of short corners. Cut flush with the stud.



#### Apply Membrane to Faces Each face of the building should be treated with a new piece of SOLITEX EXTASANA® and can be connected in the corner to prevent curved corners.



#### Setting the Corner

pro clima PRESSFIX tool should be used to ensure the membrane is pushed hard into the corner (adhered to DUPLEX and pressure applied with PRESSFIX).



#### Abutting Membrane at Corners The second piece should be cut long enough to extend > 50 mm around the corner. A strip of pro clima DUPLEX can be used to hold the flap in place.



#### Taping the Corner

TESCON EXTORA® 60 mm should never be applied directly in the corner. The connection should be on a flat section of the wall just away from the corner.

Veather Resistive Barrier



#### IMPORTANT

ROFLEX grommets come in various sizes (20 mm – 320 mm) and it is important the correct size for the pipe is selected and installed to ensure a weathertight seal.



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



#### Cutting for Penetrations

Four slits are made in horizontal and vertical axis only large enough to fit the diameter of the pipe.



#### Fitting ROFLEX

Place ROFLEX over the pipe in a diamond orientation. It should be a tight fit over the pipe. The pipe should be smooth and clean.



TESCON EXTORA® Application Apply TESCON EXTORA® around the whole grommet working anti-clockwise to ensure the top layers overlap the lower layers.

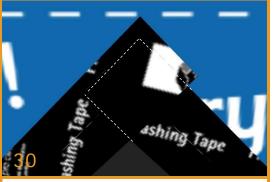


#### Push Pipe Through

The pipe is pushed through and opens up the tabs. Trim the tabs to allow for ROFLEX and TESCON EXTORA<sup>®</sup> application.



TESCON EXTORA® Application Start to apply TESCON EXTORA® at the bottom edge and apply pressure with the PRESSFIX tool.



TESCON EXTORA® Application At the TESCON EXTORA® tape overlaps, ensure the top layer fully covers the end of the TESCON EXTORA® layer below for optimum weathertightness.

#### SYSTEM

Weather Resistive Barrier

Wall



#### IMPORTANT

ORCON® CLASSIC achieves permanent adhesion on all pro clima Weather Resistive Barriers including SOLITEX MENTO® and SOLITEX EXTASANA®.

Joints can be carried out on mineral substrates (such as brickwork or concrete), on unplaned, planed and painted wood, hard plastics and non-rusting metal (e.g. pipes, windows etc.), hard wood-based panels (chipboard, OSB, plywood panels, MDF board).

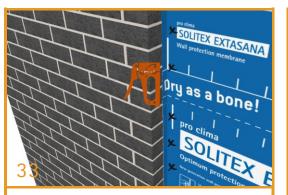


ORCON® CLASSIC is a durable airtight sealing glue suitable for bonding all pro clima Products to any building material; smooth or rough, masonry or timber. It is fast drying and performs even in extreme humidity or damp conditions.



#### Connection to Masonry

Where SOLITEX EXTASANA® meets dissimilar wall types (concrete or masonry) a durable connection must be made.



#### Membrane Overlaps

Membrane overlaps should be at least 150 mm top layer lapping over the bottom layer of SOLITEX EXTASANA®. Staple at 150 mm centers.



#### Make a Durable Connection SOLITEX EXTASANA® shall be fixed with a 5 - 6 staple cluster in top corner and staples at 150 mm centers down the edge and cut with a 30 mm flap.



#### TESCON EXTORA® Overlap TESCON EXTORA® shall be applied and then firm

pressure applied using the PRESSFIX tool.



#### Weatherproof Seal

ORCON<sup>®</sup> CLASSIC is used to seal the 30 mm flap to the masonry structure. DO NOT press the ORCON<sup>®</sup> bead flat, leave a thick bead for long term flexibility.



#### Mechanical Fasten at Edge SOLITEX EXTASANA® must be supported at the edge with a screw fixed vertical batten at the last stud.

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#### IMPORTANT

It is recommended the damp course is sealed to the slab to prevent airflow under the bottom plate in case of undulating slab finishes. This can be achieved using compressible closed cell foam strip or sealants.

On loose, flakey masonry surfaces such as old sandstock bricks or old concrete it may be necessary to apply **TESCON® PRIMER RP** using a brush.



#### **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 prior to application of TESCON EXTORA®.



Soffit Junctions SOLITEX EXTASANA® should be connected into any concrete soffits that the framed wall butts into.



Seal to the Soffit Using ORCON® CLASSIC The SOLITEX EXTASANA® 30 mm overlap should be adhered to the soffit using a bead of ORCON® CLASSIC. (See matrix at step 61 for compatibility).



Seal to Damp Course Using ORCON® CLASSIC When the frame is finished flush with the slab edge, SOLITEX EXTASANA® is adhered to the damp course using ORCON® CLASSIC.



#### Staple Top Edge SOLITEX EXTASANA® SOLITEX EXTASANA® is held in place by stapling 150 mm centers leaving a 30 mm overlap onto the concrete for adhering.



#### Weatherproof Seal

Lay SOLITEX EXTASANA® overlap onto the ORCON® CLASSIC bead in full contact. DO NOT press the bead completely flat, allowing a lasting, flexible seal.



Leave ORCON<sup>®</sup> CLASSIC Bead with Body Thickness ORCON® CLASSIC should not be squashed flat but left with a suitable thickness to allow a flexible joint.

...and the insulation is perfect!

#### Weather Resistive Barr

Wall



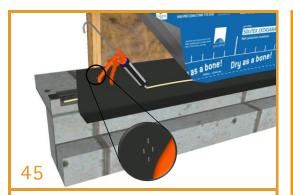


#### Brick Veneer

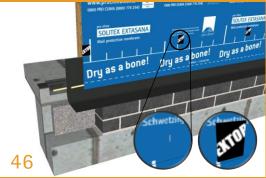
Install SOLITEX EXTASANA® onto brick veneer framing with a 50 mm overlap onto the slab edge or footings.



Apply ORCON® CLASSIC Bead to the Damp Course A bead of ORCON® CLASSIC is applied to the damp course to seal the connection between the flashing and the damp course.



Fix SOLITEX EXTASANA® to Flashing with ORCON® The flashing must be stapled to each stud with 4 staples. SOLITEX EXTASANA® shall be fixed to the flashing using a bead of ORCON® CLASSIC adhesive.



Patch Staples Using TESCON EXTORA® All staple holes should be patched using TESCON EXTORA®.



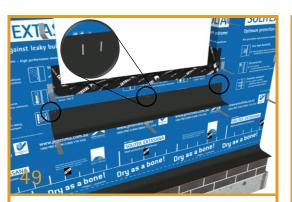
Termite Protection Termite protection barriers may be used as a continuous layer as the damp course and connection made using ORCON® CLASSIC.



Drain Flashing to External Brick Face The flashing needs to be placed appropriately to drain the water to the external brick face as per the architectural design.

Veather Resistive Barrier





#### Staple Sill Flashing to Studs

Sill flashing needs to be fixed at correct height as per the architectural details using minimum 2 staples per stud.



#### Set the Flashing as per Sill Details Be sure to set the flashing at the correct height to drain to the sill weep holes.

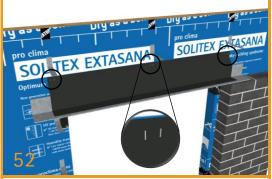
drain to the sill weep holes. TESCON EXTORA® cannot be removed once adhered.



Seal Flashing Using TESCON EXTORA® A continuous piece of TESCON EXTORA® 60 mm tape shall be applied to the top edge of the flashing with suitable pressure applied using the PRESSFIX tool.



#### Seal Flashing Using TESCON EXTORA® A continuous piece of TESCON EXTORA® 60 mm tape shall be applied to the top edge of the flashing with suitable pressure applied using the PRESSFIX tool.



#### Fix the Header Flashing

Header flashing needs to be fixed at correct height as per the architectural details using minimum 2 staples per stud.



Brick is Finished as per Standard The flashing can be treated by the brick layers as any other flashing would with appropriate weep holes for drainage and ventilation.

#### IMPORTANT

Flashing materials should always be mechanically fastened prior to taping the top edge of the flashing. This ensures that any stress during the construction process will not damage the TESCON EXTORA® seal to the top edge of the flashing.

TESCON EXTORA® should be applied to cover all staple holes.

#### SYSTEM

#### Weather Resistive Barrier

Wall



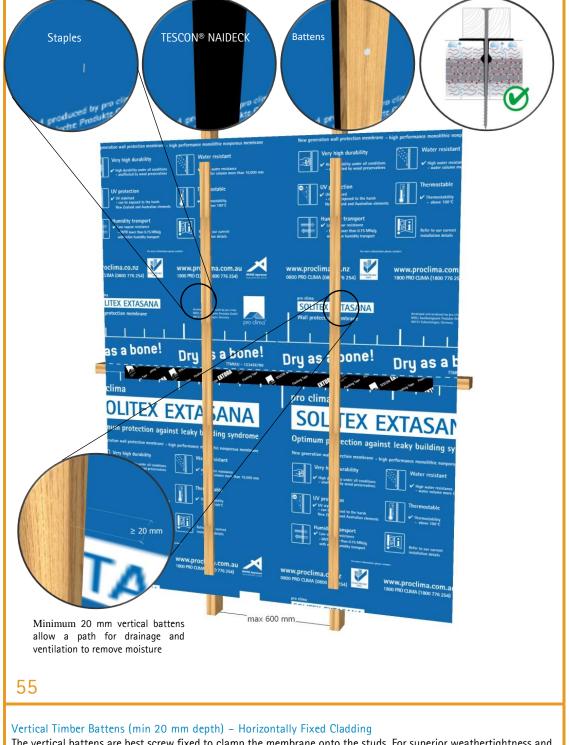
#### IMPORTANT

TESCON® NAIDECK is a butyl self-sealing strip. Sealing material is pulled into the hole created when a screw is fitted. This is particularly beneficial for sealing timber battens and screw penetrations in windy regions with high rainfall

Note: TESCON® NAIDECK can also be applied to the batten and then fixed over the studs.



TESCON® NAIDECK selfsealing strip for superior weathertightness when using timber battens over the studs.



The vertical battens are best screw fixed to clamp the membrane onto the studs. For superior weathertightness and protection during construction TESCON® NAIDECK can be used behind the battens to seal staple and screw/nail penetrations. At maximum 600 mm these battens are suitable to hold SOLITEX EXTASANA® up to serviceability pressures of 2 kPa.

#### LITEX EXTASANA® - Application & Fixing Guide - Timber Frame

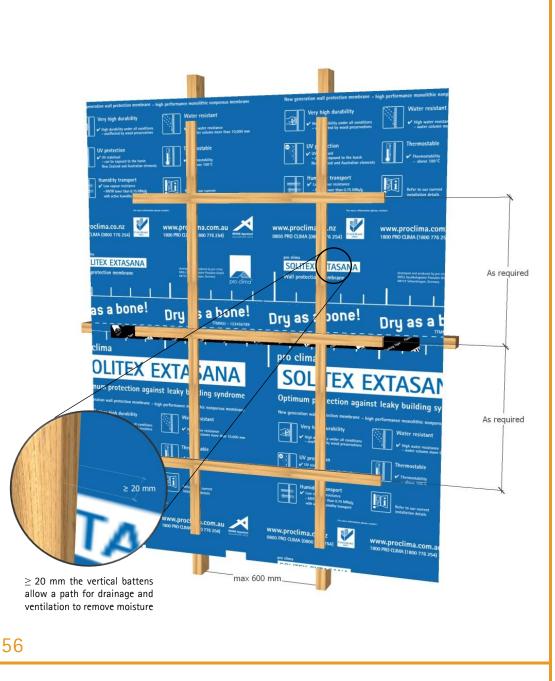
#### ther Resistive Barrier



#### IMPORTANT

This is the pro clima recommended system for vertically oriented cladding types.

The spacing and size of the horizontal battens should be installed as per the cladding manufacturers specifications.



#### Vertical Timber & Horizontal Timber Battens - Vertically Fixed Cladding

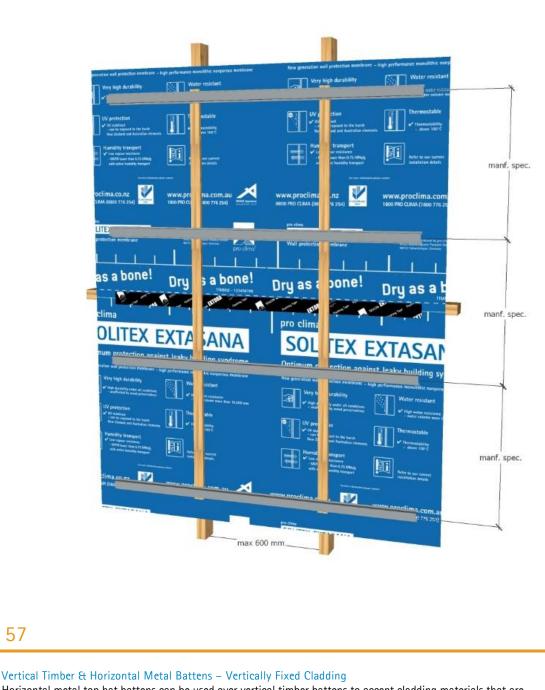
Additional horizontal battens can be added over the vertical battens to accept cladding materials that are fixed in a vertical orientation. Pro Clima Australia Pty Ltd recommends that the vertical timber battens ( $\geq$  20 mm) are always used as this provides a path for drainage and ventilation for moisture removal. Installed vertically over the studs, timber battens spaced at maximum 600 mm are suitable to hold SOLITEX EXTASANA® up to the serviceability pressures of 2 kPa.

#### **SYSTEM**



#### **IMPORTANT**

The vertical timber battens provide a solid substrate to fix metal battens in any configuration as required by cladding manufacturers.



Horizontal metal top hat battens can be used over vertical timber battens to accept cladding materials that are specifically required to be fixed to horizontal metal battens. Pro Clima Australia Pty Ltd recommends that vertical timber battens ( $\geq$  20 mm) are always used as this provides a path for drainage and ventilation for moisture removal.

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#### IMPORTANT

Battens should be fixed as per the cladding manufacturers specifications.

Any exposed staple holes in SOLITEX EXTASANA® should be patched using TESCON® EXTORA.

max 300 mm V lima.co. www.proclima.co.nz proclima.co w.proclima.com.au LITEX EXTA IA SOLITEX EXTASANA max 300 mm as a bo e! Dru as a bone Dry as a bone! asat Ч ENTORA max 300 mm ma pro clima OLITE E SOL m protect against leaky building syndro um protection against ouilding s max 300 mm max 300 mm max 600 mm max 600 mm\_ max 600 mm. 58 Vertical Rails 600 mm Installed vertically to the stud wall, top hats spaced at maximum 600 mm are suitable to hold SOLITEX EXTASANA®. Proprietary cap fasteners, minimum 32 mm diameter, can be used to temporarily fix the membrane along the studs at 300 mm spacing.

#### **SYSTEM**



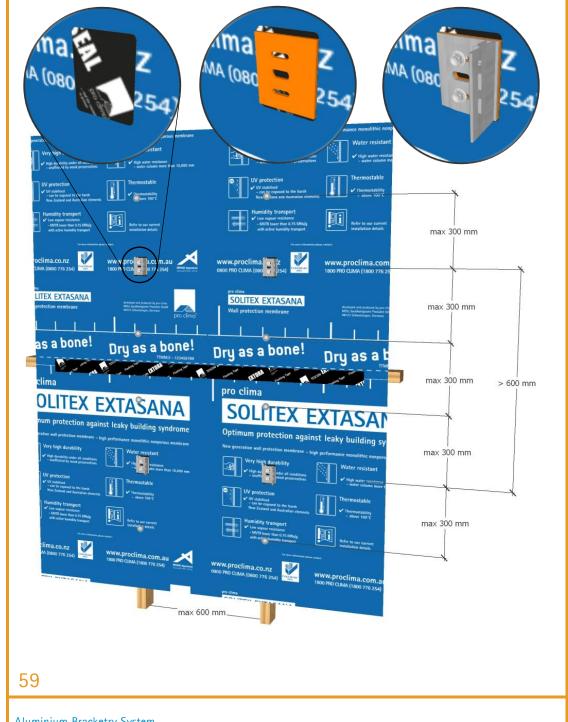
#### **IMPORTANT**

TESCON® EXTOSEAL is a butyl sealing product. Small patches cut to fit under the mounting brackets is recommended. The butyl sealing material is pulled into the hole created when a screw is fitted. This is particularly important with oval holes where the EPDM washers on the hex screws cannot seal effectively.



**TESCON EXTOSEAL®** Flexible flashing tape for use around window and door openings. Small patches can be used to seal mounting clips.





#### Aluminium Bracketry System

Brackets are evenly spaced onto the stud wall. When spaced > 600 mm additional fixings at max 300 mm centers on max 600 mm center studs are required to hold SOLITEX EXTASANA®. Galvanised hex screws needle point with EPDM washer (12 gauge) & 25 mm long shall be used to fix M8 large galvanised flat washers 32 mm diameter to hold SOLITEX EXTASANA® as shown.

Veather Resistive Barrier





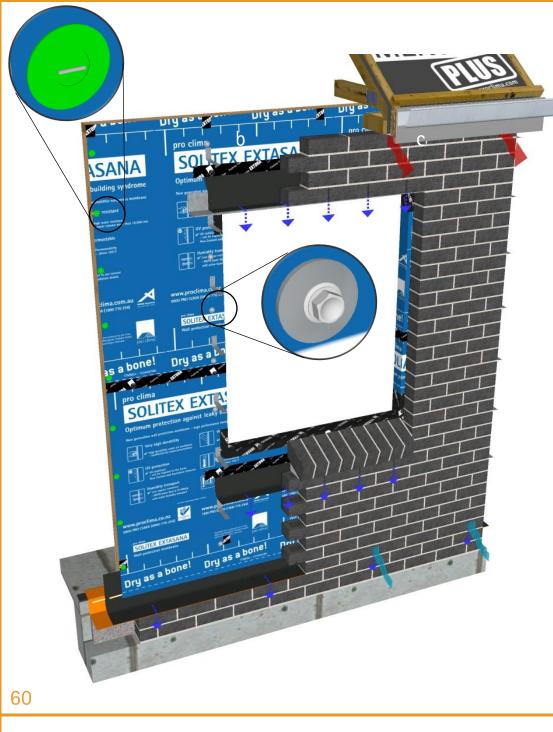
#### IMPORTANT

TESCON® NAIDECK is a butyl sealing product. Small patches cut to fit under the face fixed brick ties will provide best practice water proofing.

The butyl sealing material is pulled into the hole created when a screw or nail is fixed.



TESCON® NAIDECK selfsealing strip for superior weathertightness when using brick ties.



#### Brick Veneer

SOLITEX EXTASANA® installation needs to be finished as a continuous weathertight system. Galvanised hex screws Et washers (see 62) or cap fasteners (see 63) at 300 mm centers for temporary fixing of SOLITEX EXTASANA® prior to brickwork. All staple holes and penetrations need to be sealed prior to the brickwork being completed. The brick ties must be face fixed brick ties fixed to the front of each stud. For superior weathertightness TESCON® NAIDECK can be used behind the brick ties to seal nail or screw penetrations.

#### Weather Resistive Barrie

Wall



#### ADHESION TEST

If TESCON<sup>®</sup> tapes do not stick properly because the surface is:

- dirty -> clean the surface
- uneven -> use TESCON<sup>®</sup> PRIMER RP & ORCON<sup>®</sup> CLASSIC sealant instead.

If TESCON<sup>®</sup> tapes will not stick to a clean surface then TESCON<sup>®</sup> PRIMER RP <u>must</u> be used.

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Timber, OSB, Plywood	dirty	у 🖌 🖌							~				
	clean	✓	✓	✓	✓	✓						$\checkmark$	
Plaster board	clean	✓	✓	✓		✓						$\checkmark$	
Paint primers	-	✓	✓	$\checkmark$		$\checkmark$	✓				✓	$\checkmark$	
AEROSANA® VISCONN	dry/clean	✓	✓	$\checkmark$		$\checkmark$	✓	$\checkmark$	✓	✓	✓	$\checkmark$	
<b>PIR</b> Polysiocanurate	on foil	✓	✓	$\checkmark$		$\checkmark$		$\checkmark$	√	✓		$\checkmark$	
	on PIR												
XPS Extruded Polystyrene	clean	✓	✓	✓		✓		✓	√	✓		$\checkmark$	
EPS Expanded Polystyrene	clean	✓	✓	✓		✓		✓	✓	✓		$\checkmark$	
Expanding foams	dry												
Cement/Gypsum plaster	smooth	✓	✓	$\checkmark$		$\checkmark$	✓	✓	✓	✓	✓	$\checkmark$	
	rough					✓						$\checkmark$	
	friable											✓	
Acrylic plaster	smooth	~	✓	$\checkmark$		$\checkmark$							
	rough					✓						$\checkmark$	
Steel	galvanized	✓	✓	✓		✓					✓		
	bright	✓	✓	✓		✓					✓		
	painted	✓	✓	$\checkmark$		$\checkmark$					✓		
Aluminium	clean	✓	✓	$\checkmark$		$\checkmark$					✓		
Brickwork	rough			$\checkmark$									
	friable											$\checkmark$	
Concrete	smooth	✓	✓	✓		✓	✓	$\checkmark$	√	$\checkmark$		$\checkmark$	
	rough					$\checkmark$						$\checkmark$	
Fibre cement	clean	✓	✓	$\checkmark$	✓	$\checkmark$	✓	$\checkmark$	✓	✓	✓	$\checkmark$	
	friable											$\checkmark$	
Window Frames	aluminium	✓	$\checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark $										
	PVC	✓	✓	✓		✓	✓				✓		
	timber	~	✓	✓		✓	✓				✓		
Cables	flat	✓	✓	✓		✓			✓				
	round	~	-	✓		✓		✓					
Pipes / ductings		~		√ -	-	✓	-			~	-	_	

#### Notes:

• Surface should always be dry.

• TESCON® PRIMER RP is always recommended for mineralic surfaces.

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#### pro clima SOLITEX EXTASANA® Product Matrix

SOLITEX EXTASANA® is compatible with all pro clima adhesive tapes and sealants. Optimum weatherproofing is achieved when wind tight connections are made between SOLITEX EXTASANA® and other building materials and components. The table above provides guidance on the use of pro clima adhesive products when used to connect SOLITEX EXTASANA® with other common building materials.

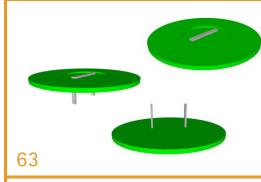
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Veather Resistive Barrier





Point Fasteners & washers for Load Spreading Galvanised hex screws 12-gauge 25 mm, needle point with EPDM washer to ensure fixings do not allow a water leakage path. M8 large galvanised flat washers 8 mm x 32 mm x 1.8 mm provide load spreading to increase fixing pressure rating.



Washers for Load Spreading Proprietary cap fasteners

#### Recommendations and requirements

- The recommendations in this guide use staples as a temporary fixing method to hold SOLITEX EXTASANA® as it is being applied to timber framing. Staple holes should be hidden in overlap joints where possible and stapling limited.
- SOLITEX EXTASANA®, TESCON EXTORA® and TESCON EXTOSEAL® form a continuous system. Any damage
  or tears should be patched with TESCON EXTORA®.
- When conditions on site are expected to be windy, it is recommended that additional fixings are included at regular intervals in accordance with the fixing recommendations to ensure wind does not pull SOLITEX EXTASANA® from the wall prior to the cladding mounting systems being installed.
- It is recommended that the cladding mounting systems are installed as soon as possible after installing the membrane and close attention is paid to wind forecasts.
- pro clima KAFLEX can be used for cable penetrations when necessary.
- Although SOLITEX EXTASANA<sup>®</sup> provides a level of weather protection prior to cladding, it is not intended
  as an early close in system. It is designed to work in conjunction with the cladding systems to provide
  weathertightness.
- It is your responsibility to check the suitability of the subsurface when applying ORCON® CLASSIC; adhesion tests are recommended in certain cases. TESCON® PRIMER RP is a primer that penetrates the sub-surface of porous substrates locking up loose particles and creating a highly adhesive substrate for all pro clima adhesive tapes and compounds to be applied.





ORCON® CLASSIC is a durable sealing glue suitable for bonding all pro clima Products to any building material.



#### Your local support

1800 PRO CLIMA (776 254) Technical: support@proclima.com.au General: welcome@proclima.com.au www.proclima.com.au



<u>)</u>



TESCON EXTORA® Pressure sensitive adhesive tape for overlaps and end laps in SOLITEX EXTASANA® system.



TESCON EXTOSEAL® Flexible flashing tape for use around window and door openings as part of the SOLITEX EXTASANA® system.



TESCON® NAIDECK selfsealing strip for superior weathertightness when using timber battens over the studs.