



SOLITEX EXTASANA®

Application & Fixing Guide Light Steel Frame

SOLITEX
EXTASANA®



Weather Resistive Barrier (WRB) for Façade Systems

Highly durable Weather Resistive Barrier (WRB)
system for weathertight façades and condensation
protection





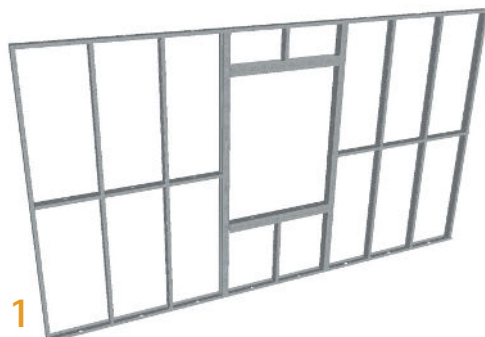
SOLITEX EXTASANA® can be installed according to AS 4200.1-2017 or as per pro clima Installation Method outlined in the details below. For more information on the market leading, comprehensive and transparent pro clima System Warranty please visit www.proclima.co.nz/warranties.

IMPORTANT

DUPLEX double-sided tape is not intended to provide long-term fixing but is an installation aid to hold the membrane in place until the façade mounting system is in place.

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

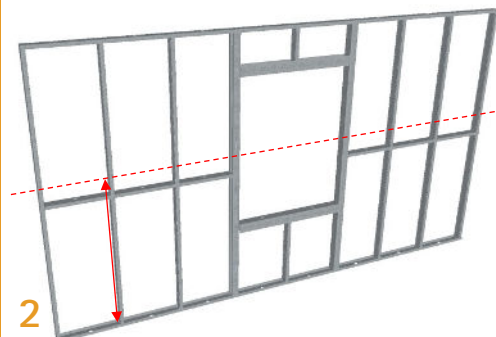
1



Preparing Light Steel Framing

Clean all sharp edges and burrs from the steel framing to ensure the membrane will not be damaged during installation or in service.

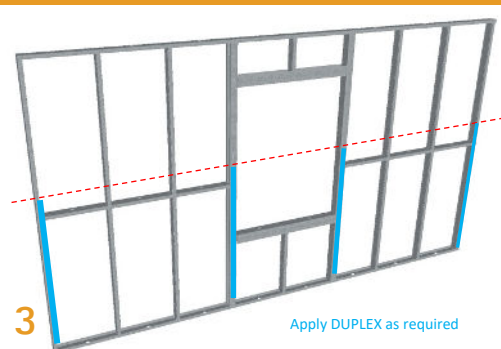
2



Measuring and Marking

Measure and mark where the top edge of the membrane will be located. This will vary depending on the bottom edge flashing details.

3

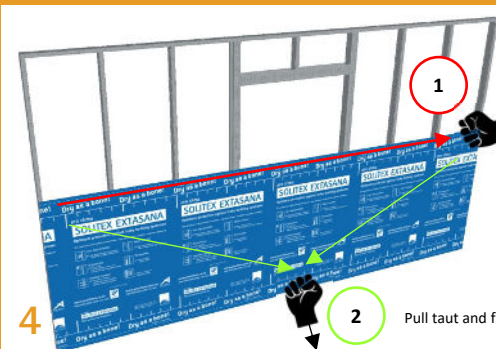


Apply DUPLEX as required

Fixing Using pro clima DUPLEX

Apply DUPLEX double-sided tape to studs at suitable intervals to temporarily hold the membrane. Apply pressure with PRESSFIX, then remove release paper.

4

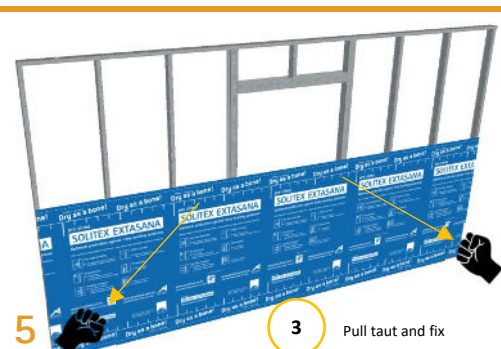


Pull taut and fix

Aligning SOLITEX EXTASANA®

(1) Pull the membrane taut along the top edge adhering to DUPLEX as you go. (2) Adhere the bottom edge at the center while applying tension.

5

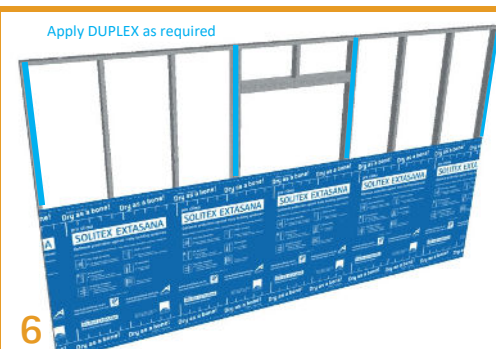


Pull taut and fix

Setting in SOLITEX EXTASANA®

(3) Pull taut and adhere the bottom corner to pro clima DUPLEX. Apply moderate pressure with the PRESSFIX tool to ensure bonding to DUPLEX.

6



Apply DUPLEX as required

Successive Layers of SOLITEX EXTASANA®

Apply pro clima DUPLEX at suitable intervals to accommodate the next layer of SOLITEX EXTASANA®.

SYSTEM

Weather Resistive

Wall

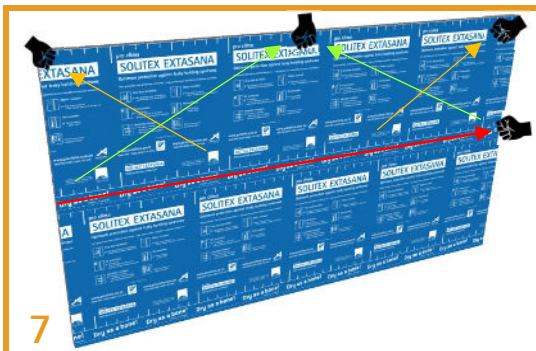


IMPORTANT

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

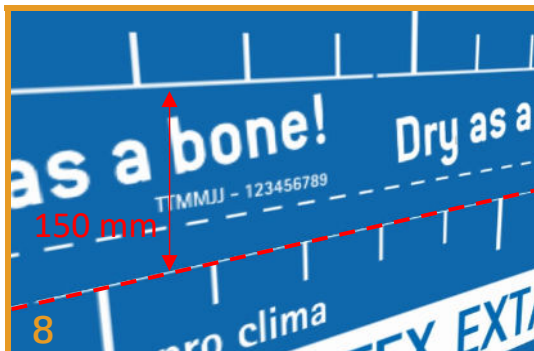


PRESSFIX is a malleable plastic tool for applying pressure to pro clima Adhesive TESCON® Tapes to ensure long term durable bonding.



Successive Layers of SOLITEX EXTASANA®

Apply successive layers of SOLITEX EXTASANA® using an upside-down sequence ensuring the adequate force is applied to adhere the membrane with slight tension.



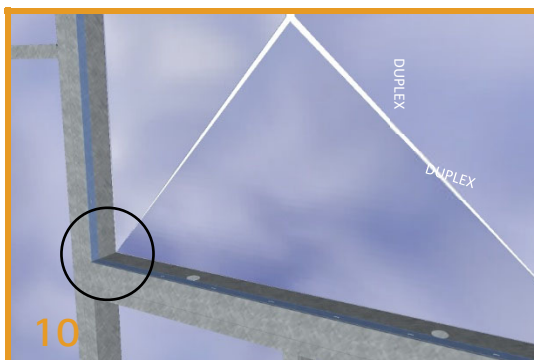
Overlapping SOLITEX EXTASANA®

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.



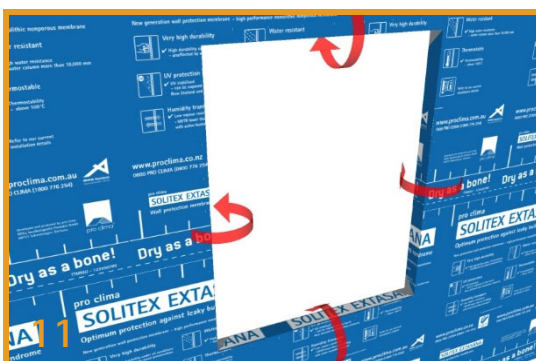
Window Reveal Dressing

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



Prepping the Reveals

The flaps should be fixed into the window reveal using pro clima DUPLEX placed at the rear edge of the window reveal.



Folding the Reveals

Fold the SOLITEX EXTASANA® flaps back into the reveals cutting the flaps flush with the back edge of the metal framing.



Connections Using TESCON EXTORA® Flashing tape

Apply at minimum TESCON EXTORA® 60 mm to the horizontal joints and apply pressure with the PRESSFIX tool.



IMPORTANT

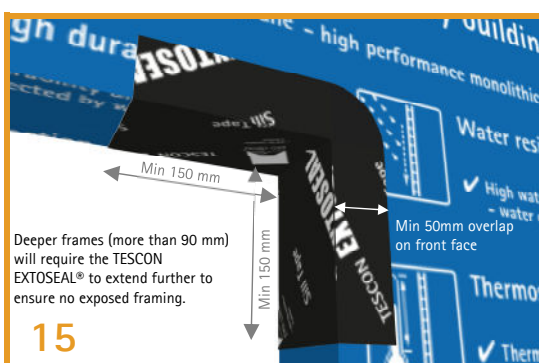
TESCON EXTOSEAL® is required to be stretched at the window corners. Overstretching TESCOX EXTOSEAL® can lead to thinning and tearing.

**Sill Flashing – TESCOX EXTOSEAL®**

Exposed framing at corners of the sill needs to be covered with TESCOX EXTOSEAL® Sill Tape to prevent any leaks around windows entering the framing.

**Applying TESCOX EXTOSEAL® Sill Tape**

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

**Window Corner Seal with TESCOX EXTOSEAL®**

At corners, TESCOX EXTOSEAL® should extend at least 150 mm in each direction. For wider frames the 200 mm wide TESCOX EXTOSEAL® should be used.

**Butterfly**

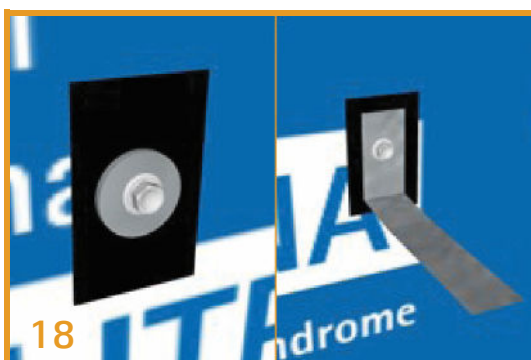
Where TESCOX EXTOSEAL® has been over stretched or damaged, apply a butterfly of TESCOX EXTORA®.



TESCON® NAIDECK
Self-sealing strip for superior weathertightness when using temporary fixings of brick ties will provide an extra level of protection.

**Brick Veneer – SOLITEX EXTASANA® Fixing**

Galvanised hex screws & washers (see steps 61 and 62) at 300 mm centres to temporarily hold SOLITEX EXTASANA® prior to brickwork.

**TESCON® NAIDECK for Fixings and Attachments**

For extra security, TESCOX® NAIDECK can be used to seal any temporary fixings other attachments fixed to the studs through the SOLITEX EXTASANA® WRB layer.

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.



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Internal Corners

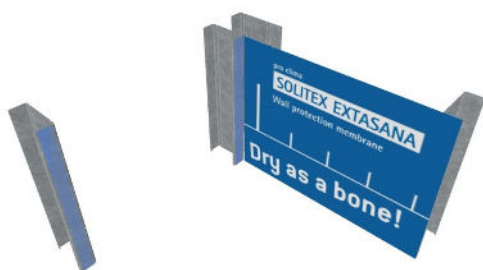
Special attention to ensure that curved corners do not occur.



20

Corner Connections

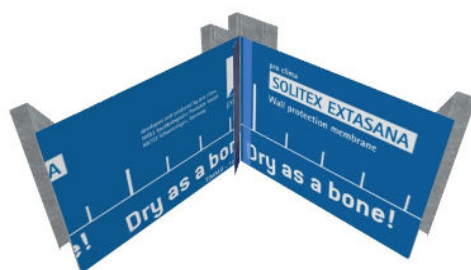
Connecting SOLITEX EXTASANA® in the corner can prevent the risk of short corners. Cut flush with the stud.



21

Apply Membrane to Faces

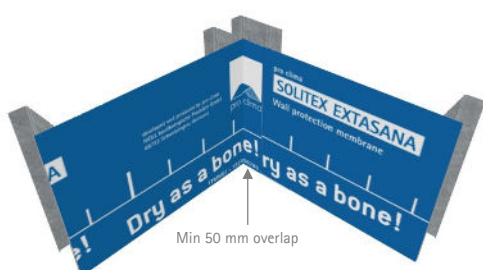
Each face of the building should be treated with a new piece of SOLITEX EXTASANA® and can be connected in the corner to prevent curved corners.



22

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.



23

Setting the Corner

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



24

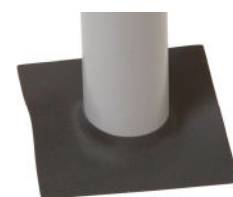
Taping the Corner

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



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.



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Cutting for Penetrations

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



26

Push Pipe Through

The pipe is pushed through and opens the tabs. Trim the tabs to allow for ROFLEX and TESCON EXTORA® application.



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Fitting ROFLEX

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



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TESCON EXTORA® Application

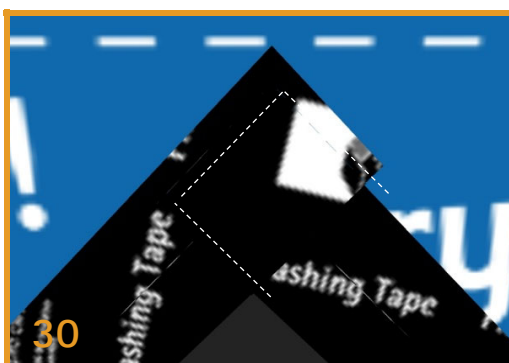
Start to apply TESCON EXTORA® 60 mm width at the bottom edge and apply pressure with the PRESSFIX tool.



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TESCON EXTORA® Application

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



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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 unplanned, planed and painted wood, hard plastics and non-rusted metal (e.g. pipes, windows etc.), hard wood-based panels (chipboard, OSB, plywood panels, MDF board).

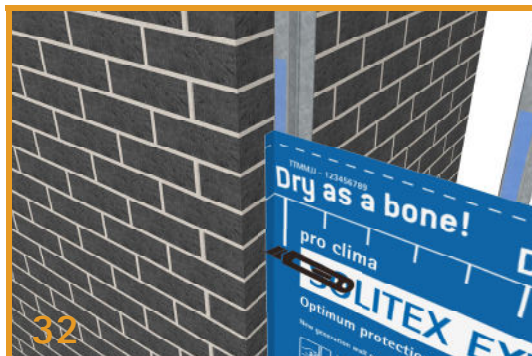


ORCON® CLASSIC is a durable airtight sealing glue suitable for bonding all pro clima Products to any building material; smooth or rough, masonry or timber. It is fast drying and performs even in extreme humidity or damp conditions.



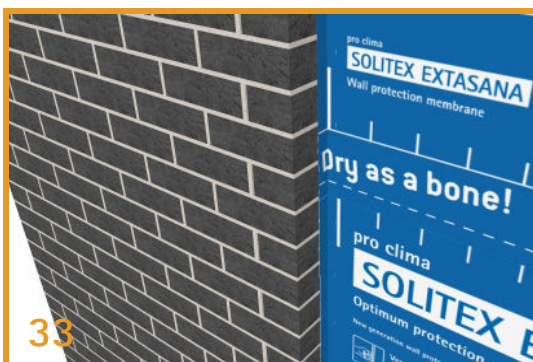
Connection to Masonry

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



Make a Durable Connection

SOLITEX EXTASANA® shall be fixed with DUPLEX as required and cut with a 30 mm flap.



Unplanned

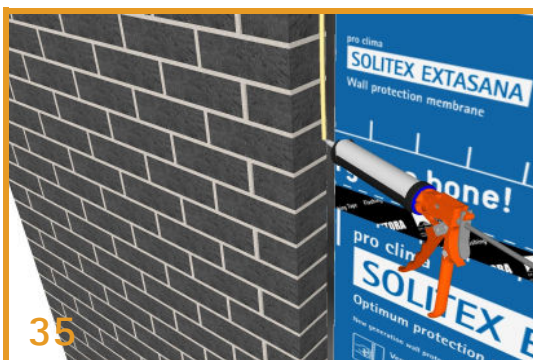
Membrane Overlaps

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



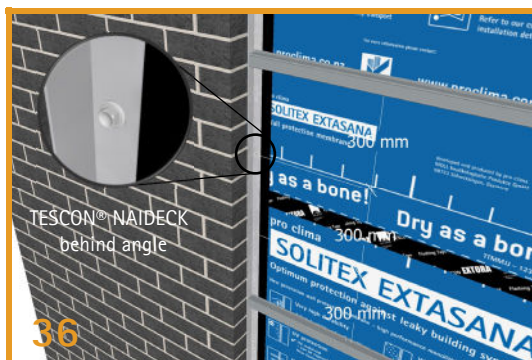
TESCON EXTORA® Overlap

TESCON EXTORA® shall be applied and then firm pressure applied using the PRESSFIX tool.



Weatherproof Seal

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



Mechanical Fasten at Edge

SOLITEX EXTASANA® must be supported at the edge. A galvanised metal angle fixed at maximum 300 mm spacing with either hex screws and/or rail fixings.

SYSTEM

Weather Resistive Barrier

Wall



IMPORTANT

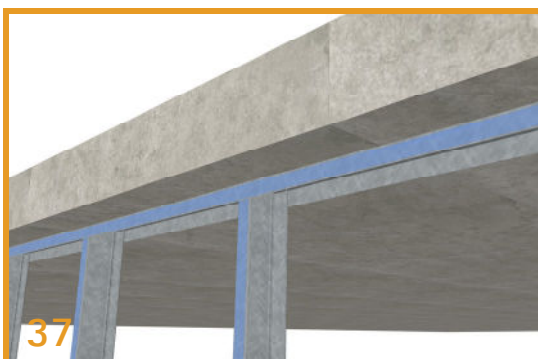
It is recommended the damp course is sealed to the slab to prevent airflow under the bottom plate in case of undulating slab finishes. This can be achieved using compressible closed cell foam strip or sealants.

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



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. Cover the light steel frame with DUPLEX.



Fixing SOLITEX EXTASANA®

SOLITEX EXTASANA® is held in place using pro clima DUPLEX leaving a 30 mm overlap onto the concrete for adhering.



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 60 for compatibility).



Weatherproof Seal

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



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Seal to DPC Using ORCON® CLASSIC

When the frame is finished flush with the slab edge, SOLITEX EXTASANA® is adhered to the DPC using ORCON® CLASSIC.



42

Leave ORCON® CLASSIC Bead with Body Thickness

ORCON® CLASSIC should not be squashed flat but left with a suitable thickness to allow a flexible joint.

SYSTEM

Weather Resistive Barrier

Wall



IMPORTANT

Temporary fixing requirements are to ensure the SOLITEX EXTASANA® is not pulled from the wall by wind loads. The risk of this occurring is at the determination of the builder and the duration between wrapping and brickwork. Brick ties with hex screws are deemed suitable for holding the membrane in place permanently. TESCON® NAIDECK will provide an extra level of protection from leaks.



TESCON® NAIDECK Self-sealing strip for superior weathertightness when using temporary fixings of brick ties will provide an extra level of protection.

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**Brick Veneer**

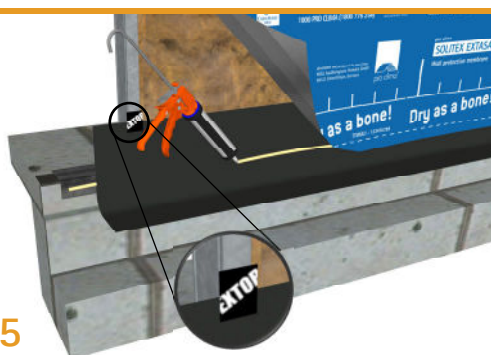
Install SOLITEX EXTASANA® onto brick veneer framing with a 50 mm overlap onto the slab edge or footings.

44

**Apply ORCON® CLASSIC Bead to the Damp Course**

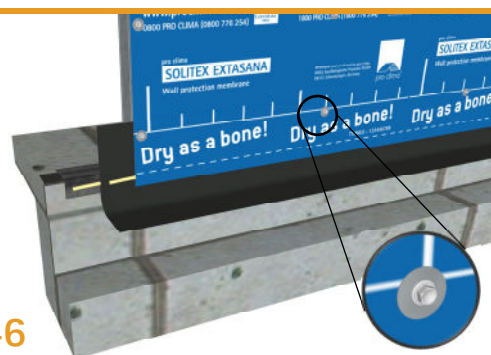
A bead of ORCON® CLASSIC is applied to the damp course to seal the connection between the flashing and the damp course.

45

**Fix SOLITEX EXTASANA® to Flashing with ORCON®**

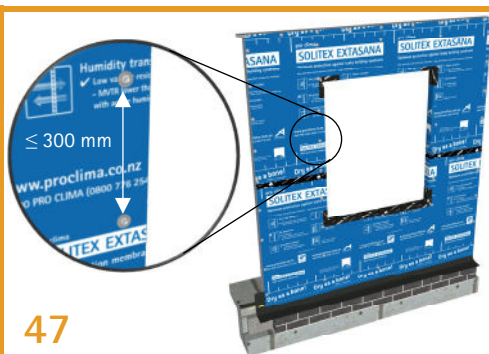
The flashing must be taped to each stud with TESCON EXTORA®. SOLITEX EXTASANA® shall be fixed to the flashing using a bead of ORCON® CLASSIC adhesive.

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**Mechanically Fix Flashing**

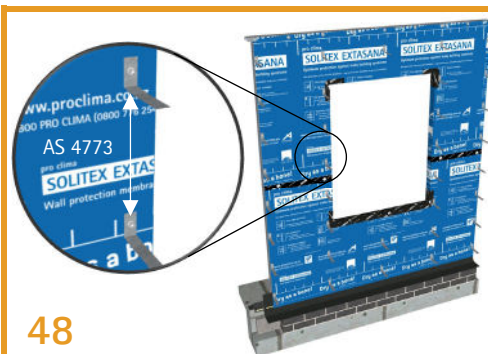
Galvanised hex screws & washers (see 61 & 62) at every stud to mechanically fix the bottom edge of SOLITEX EXTASANA® and the flashing.

47

**Temporary Fixing with Washers and Hex Screws**

If delays between wrapping and brickwork are expected, use galvanised hex screws & washers (see 61 & 62) at 300 mm centres across the entire wall.

48

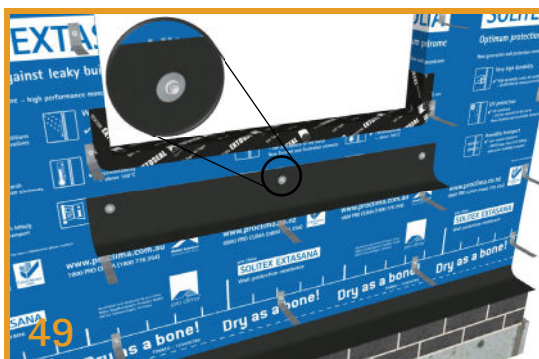
**Permeant Fixing Using Face-Fixed Brick Ties**

Permanent fixing of the membrane can be achieved using just the brick ties with hex screws if fixed immediately after wrap is installed.

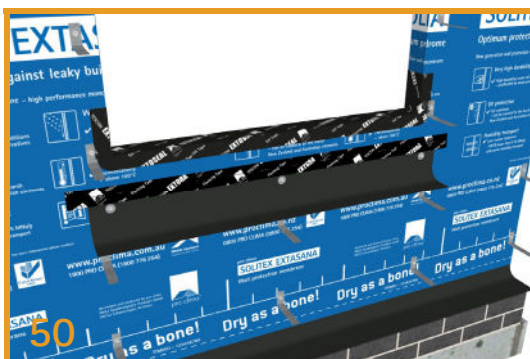


IMPORTANT

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.

**Mechanically Fasten Sill Flashing to Studs**

Sill flashing needs to be fixed at the correct height as per the architectural details using one tec-screw and washer per stud 30 mm from top edge of flashing.

**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.

**Set the Flashing as per Sill Details**

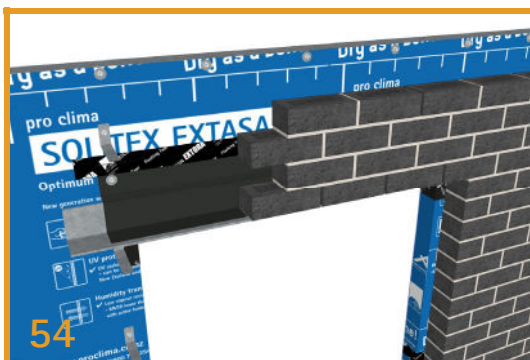
Be sure to set the flashing at the correct height to drain to the sill weep holes. TESCON EXTORA® cannot be removed once adhered.

**Fix the Header Flashing**

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

**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 to Slab Edge with TESCON EXTORA®**

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



55

Vertical Rails 600 mm

Installed vertically to the stud wall, top hats spaced at a maximum of 600 mm are suitable to hold SOLITEX EXTASANA® with no additional fixings.



IMPORTANT

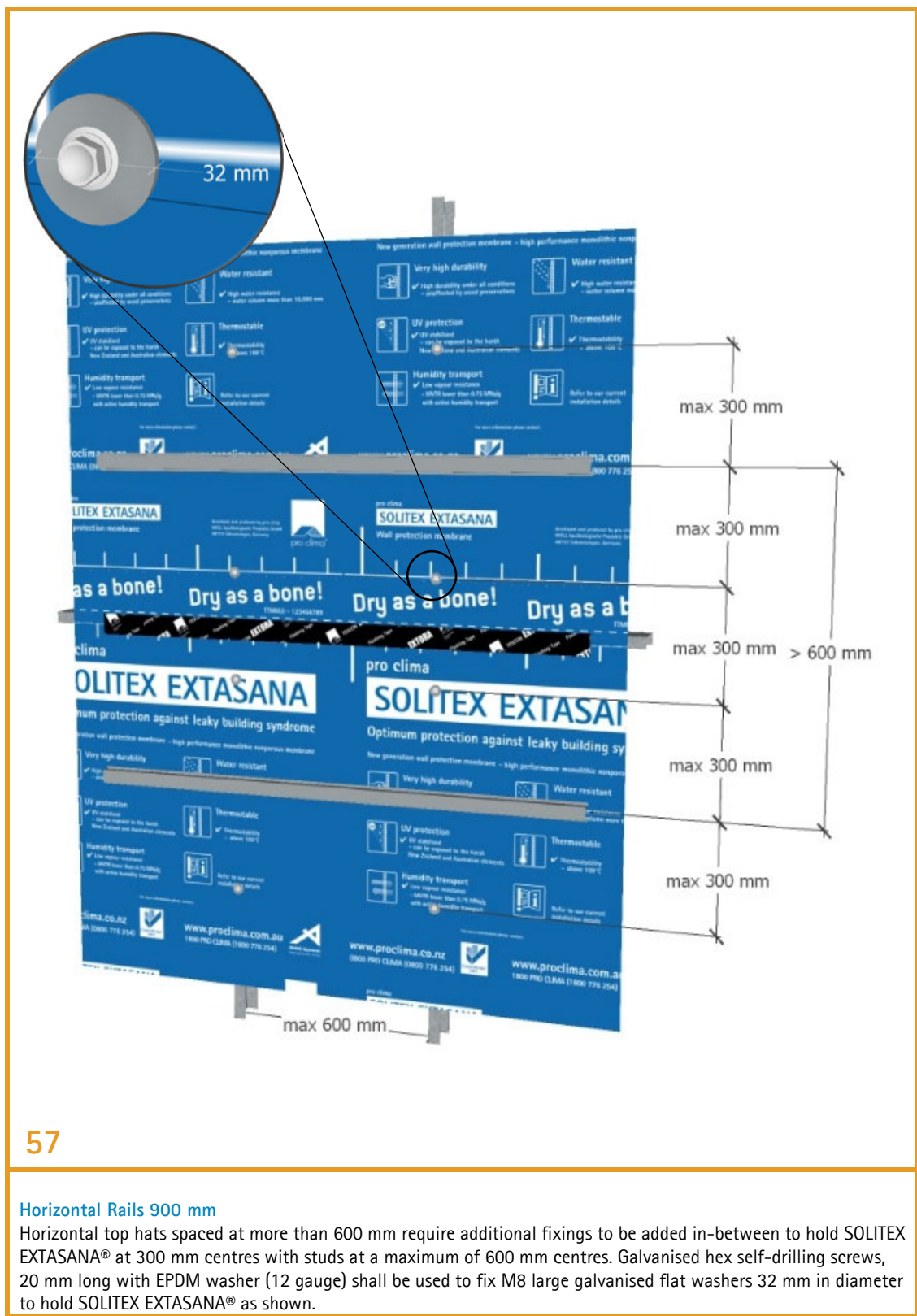
Rails provide continuous support for the membrane under leeward wind pressure. The studs provide support for the membrane under windward pressure. The maximum spans in both directions are 600 mm. Cladding rails at spans larger than 600 mm will require additional point fixings.



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Horizontal Rails 600 mm

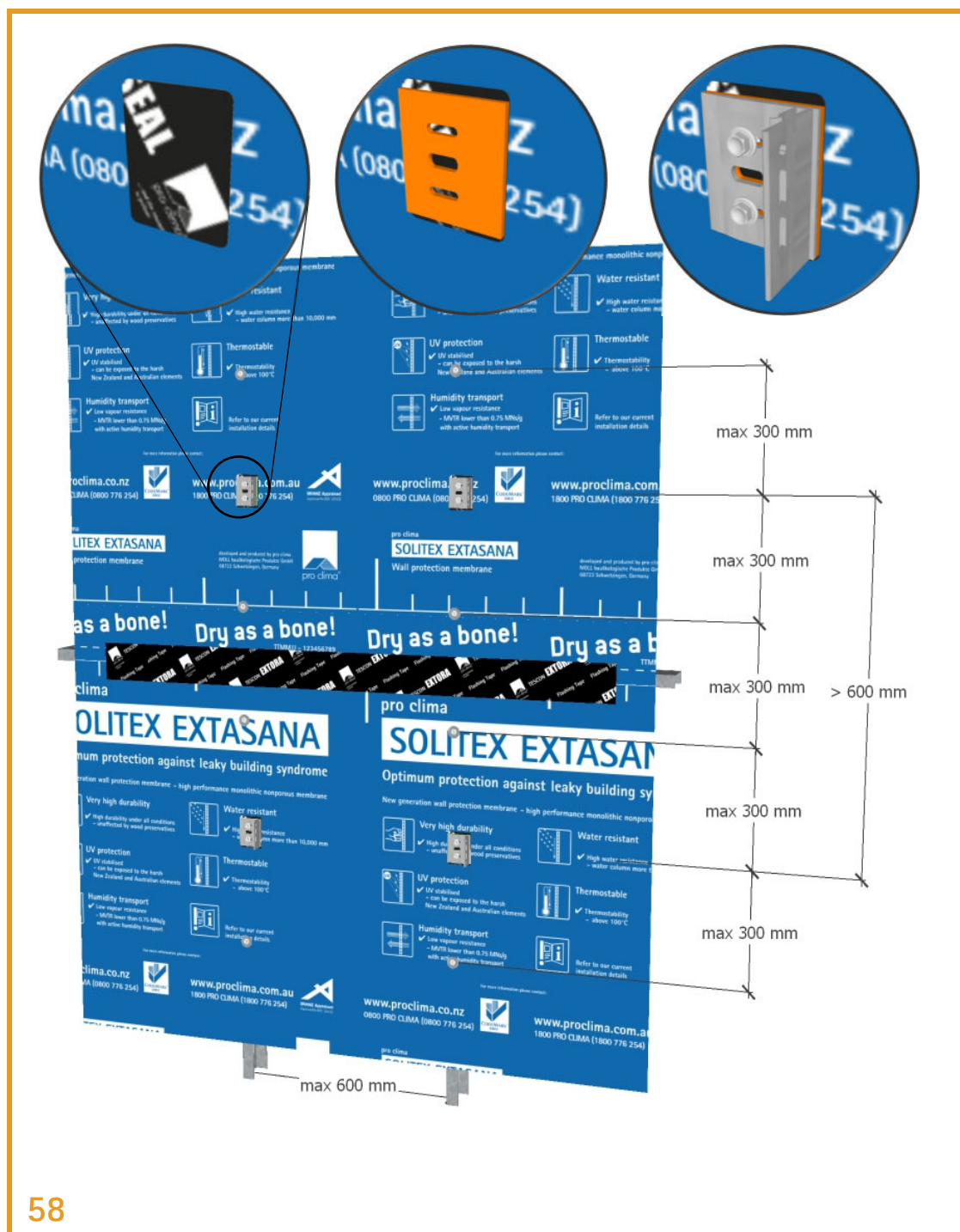
Installed horizontally over the studs, top hats spaced at a maximum of 600 mm are suitable to hold SOLITEX EXTASANA® with no additional fixings.





IMPORTANT

TESCON® NAIDECK or TESCON EXTONSEAL® are butyl sealing products. These small patches under the mounting brackets are 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.



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Aluminium Bracketry System

Brackets are evenly spaced onto the stud wall. When spaced > 600 mm additional fixings at max 300 mm centres on max 600 mm center studs are required to hold SOLITEX EXTASANA®. Galvanised hex self-drilling screws, 20 mm long with EPDM washer (12 gauge) shall be used to fix M8 large galvanised flat washers 32 mm in diameter to hold SOLITEX EXTASANA® as shown.

SYSTEM

Weather Resistive Barrier

Wall



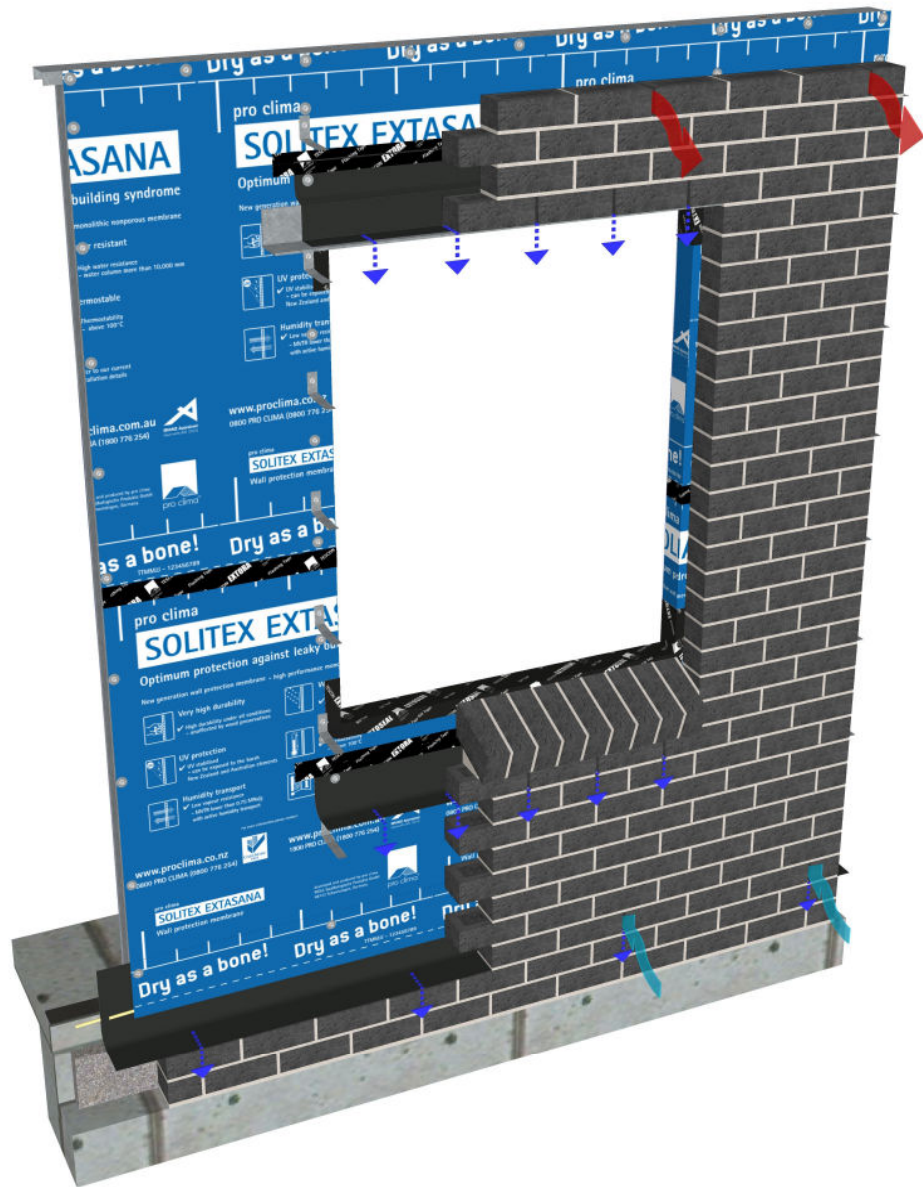
IMPORTANT

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

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



TESCON® NAIDECK
Self-sealing strip for superior weathertightness when using brick ties.



59

Brick Veneer

SOLITEX EXTASANA® installation needs to be finished as a continuous weathertight system. Galvanised hex screws & washers (see 62) or cap fasteners (see 63) at 300 mm centres 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 TESCO® NAIDECK can be used behind the brick ties to seal nail or screw penetrations.



ADHESION TEST

If TESCON® tapes do not stick properly because the surface is:

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

If TESCON® tapes will not stick to a clean surface then TESCON® PRIMER RP *must* be used.

		TESCON EXTORA®	TESCON EXTORA® PROFIL	TESCON EXTOSEAL®	ORCON® NAIDECK	CONTEGA® CLASSIC	KAFLEX® mono/dup	ROFLEX	DUPLEX	TESCON® PRIMER RP
Timber, OSB, Plywood	dirty		✓							✓
	clean	✓	✓	✓	✓					✓
Plaster board	clean	✓	✓	✓	✓					✓
Paint primers		✓	✓	✓	✓	✓			✓	✓
AEROSANA® VISCONN	dry / clean	✓	✓	✓	✓	✓	✓	✓	✓	✓
PIR Polysiocanurate	on foil	✓	✓	✓	✓	✓	✓			✓
	on PIR									
XPS Extruded Polystyrene	clean	✓	✓	✓	✓	✓	✓			✓
EPS Expanded Polystyrene	clean	✓	✓	✓	✓	✓	✓			✓
Expanding foams	dry									
Cement/Gypsum plaster	smooth	✓	✓	✓	✓	✓	✓	✓	✓	✓
	rough				✓					✓
	friable									✓
Acrylic plaster	smooth	✓	✓	✓	✓	✓	✓	✓	✓	✓
	rough				✓					✓
Steel	galvanized	✓	✓	✓	✓			✓		
	bright	✓	✓	✓	✓			✓		
	painted	✓	✓	✓	✓			✓		
Aluminium	clean	✓	✓	✓	✓			✓		
Brickwork	rough				✓					✓
	friable									✓
Concrete	smooth	✓	✓	✓	✓	✓	✓	✓		✓
	rough				✓					✓
Fibre cement	clean	✓	✓	✓	✓	✓	✓	✓	✓	✓
	friable									✓
Window Frames	aluminium	✓	✓	✓	✓	✓			✓	
	PVC	✓	✓	✓	✓	✓			✓	
	timber	✓	✓	✓	✓	✓			✓	
Cables	flat	✓	✓	✓	✓					
	round	✓	✓	✓	✓	✓				
Pipes / ductings		✓	✓	✓	✓		✓			

Notes:

- Surface should always be dry.
- TESCON® PRIMER RP is always recommended for porous or friable surfaces prior to application of TESCON® Tapes.

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pro clima Adhesive 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.



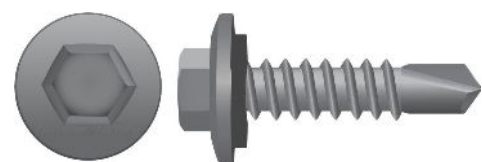
TESCON EXTORA®
Pressure-sensitive adhesive tape for overlaps and end laps in SOLITEX EXTASANA® system.



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



DUPLEX
Double-sided acrylic tape for temporary fixing of SOLITEX EXTASANA® to steel studs.



61

Point Fasteners

Galvanised hex self-drilling screws with EPDM washer 12-gauge 20 mm to ensure fixings do not allow a water leakage path.



62

Washers for Load Spreading

M8 large galvanised flat washers 8 mm x 32 mm x 1.8 mm provide load spreading to increase fixing pressure rating.

Aluminium Bracketry System

Brackets are evenly spaced onto the stud wall. When spaced > 600 mm additional fixings at max 300 mm centres on max 600 mm centre studs are required to hold SOLITEX EXTASANA®. Galvanised hex self-drilling screws, 20 mm long with EPDM washer (12 gauge) shall be used to fix M8 large galvanised flat washers 32 mm in diameter to hold SOLITEX EXTASANA® as shown.

Recommendations and requirements

- The recommendations in this guide use pro clima DUPLEX as a temporary fixing method to hold SOLITEX EXTASANA® as it is being applied to steel framing.
- SOLITEX EXTASANA®, TESCOX EXTORA® and TESCOX EXTOSSEAL® form a continuous system. Any damage or tears should be patched with TESCOX 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 in this guide to ensure the 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® provides a level of weather protection prior to cladding, it is not intended as an early close-in system and is designed to work in combination 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. TESCOX® 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.

Certification



Your local support

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