

Building Science Summit New Zealand

Jesse Clarke

It's all a Façade



Pro Clima

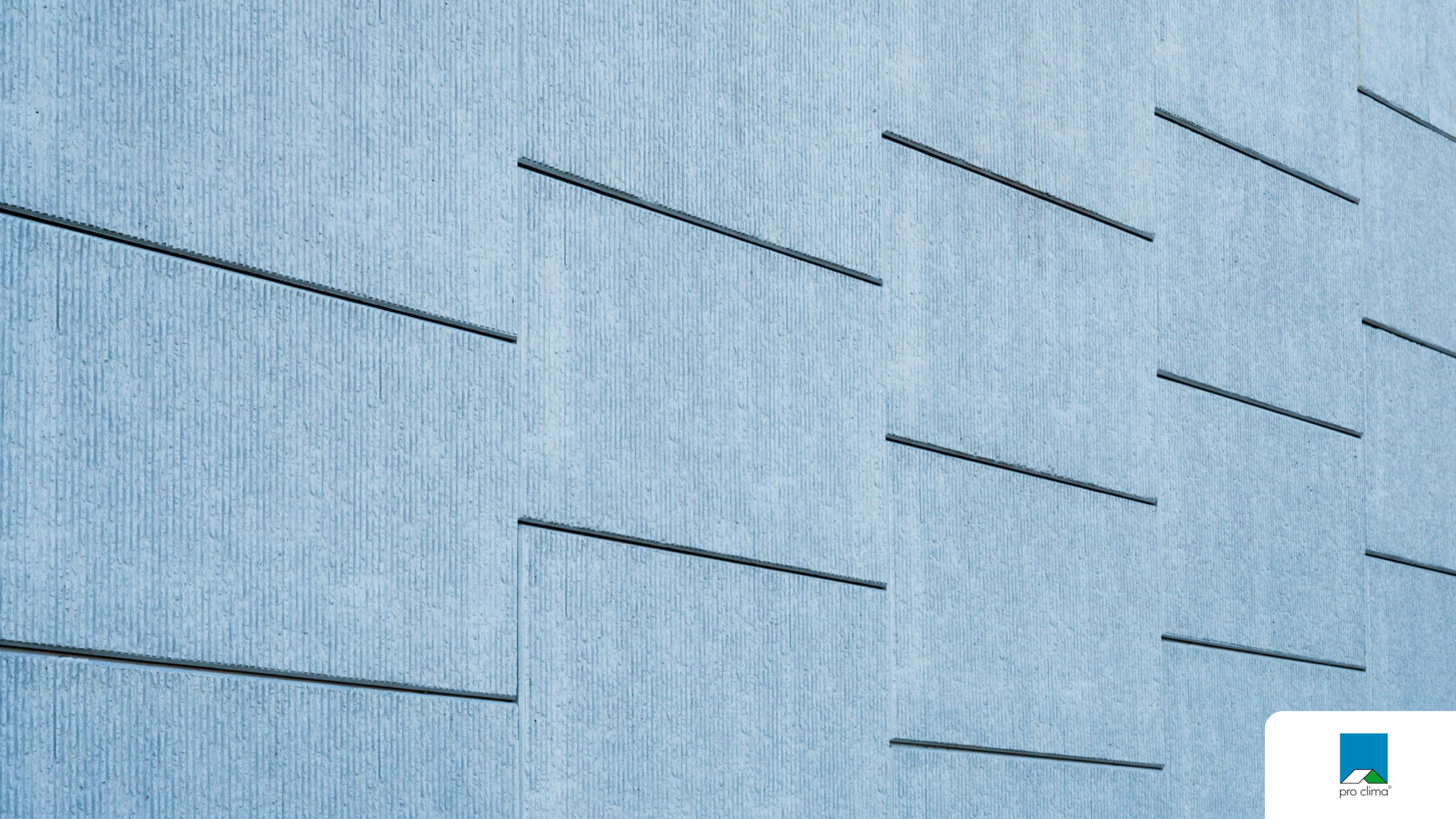
It's All a Facade

Jesse Clarke



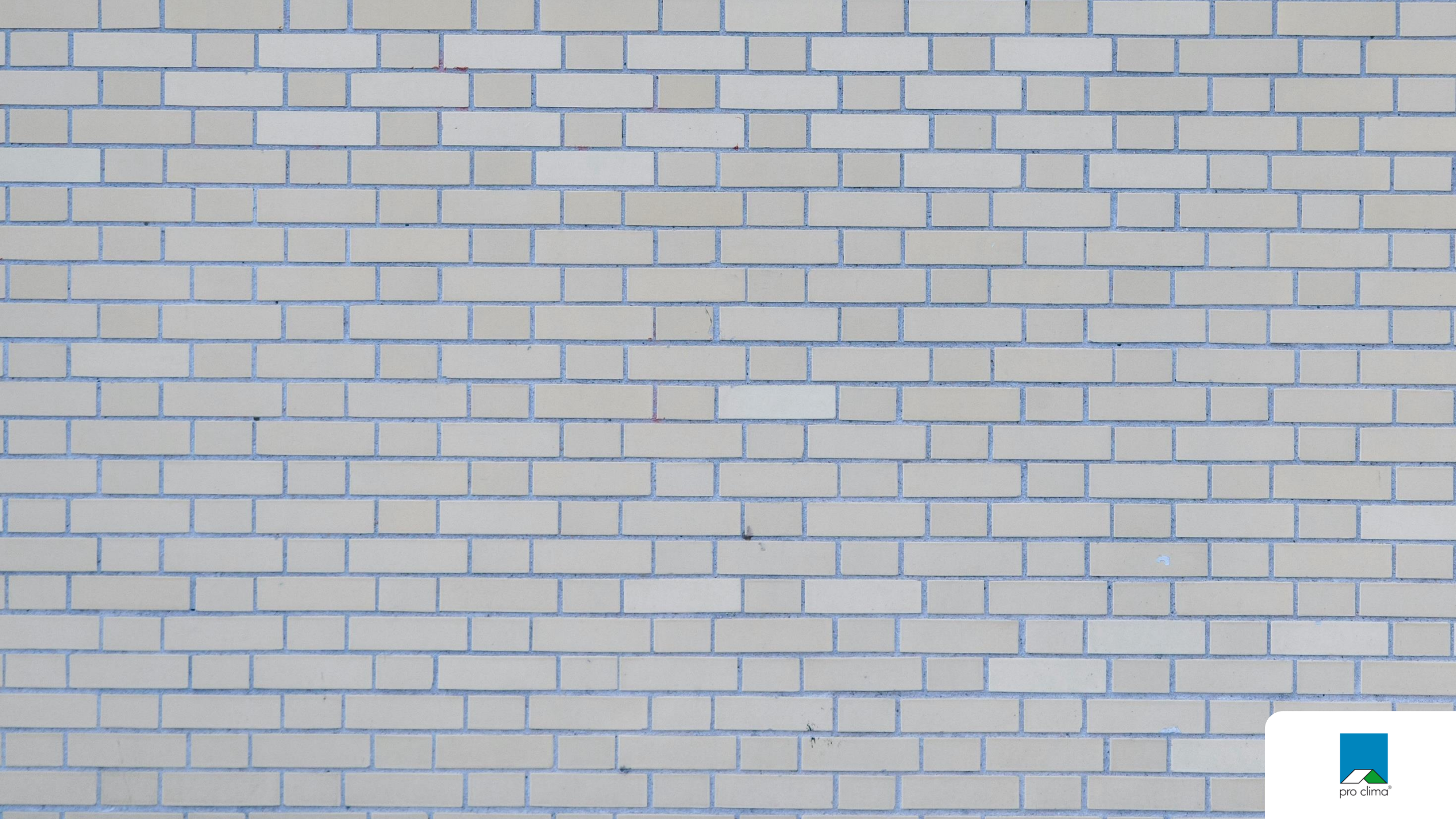






















pro clima®









pro clima

Facades

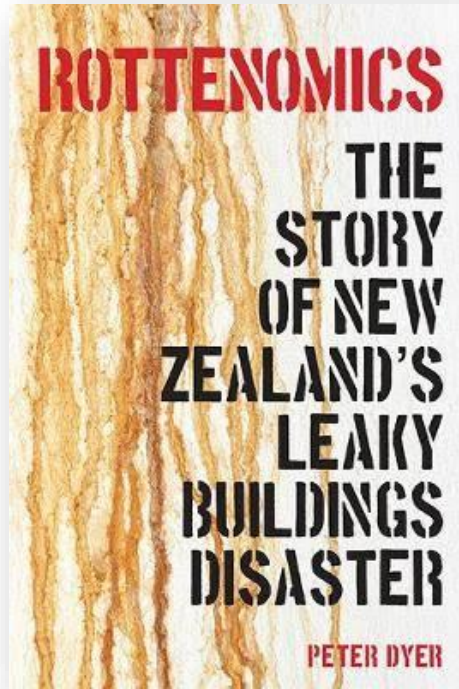
1

The risks

New Zealand Experience

External moisture and internal moisture

The School of Hard Knocks (New Zealand University of Life)



Rottenomics: The Story of New Zealand's Leaky Buildings Disaster, Peter Dyer, 2019

\$47b

From: [REDACTED]
To: "welcome" <welcome@proclima.com.au>
Cc: [REDACTED]
Sent: Friday, 2 May, 2025 12:25:20 PM
Subject: Condensation modelling and expert witness request [CU-L.FID4214125]

Hi ProClima AU

I am a construction lawyer at [REDACTED] assisting with a stalled major project affected by water ingress. As part of the causal analysis, we are investigating the façade design and construction, and the possible condensation buildup therein. We understand that within your company, Jesse Clarke has experience performing WUFI condensation modelling. Is that correct?

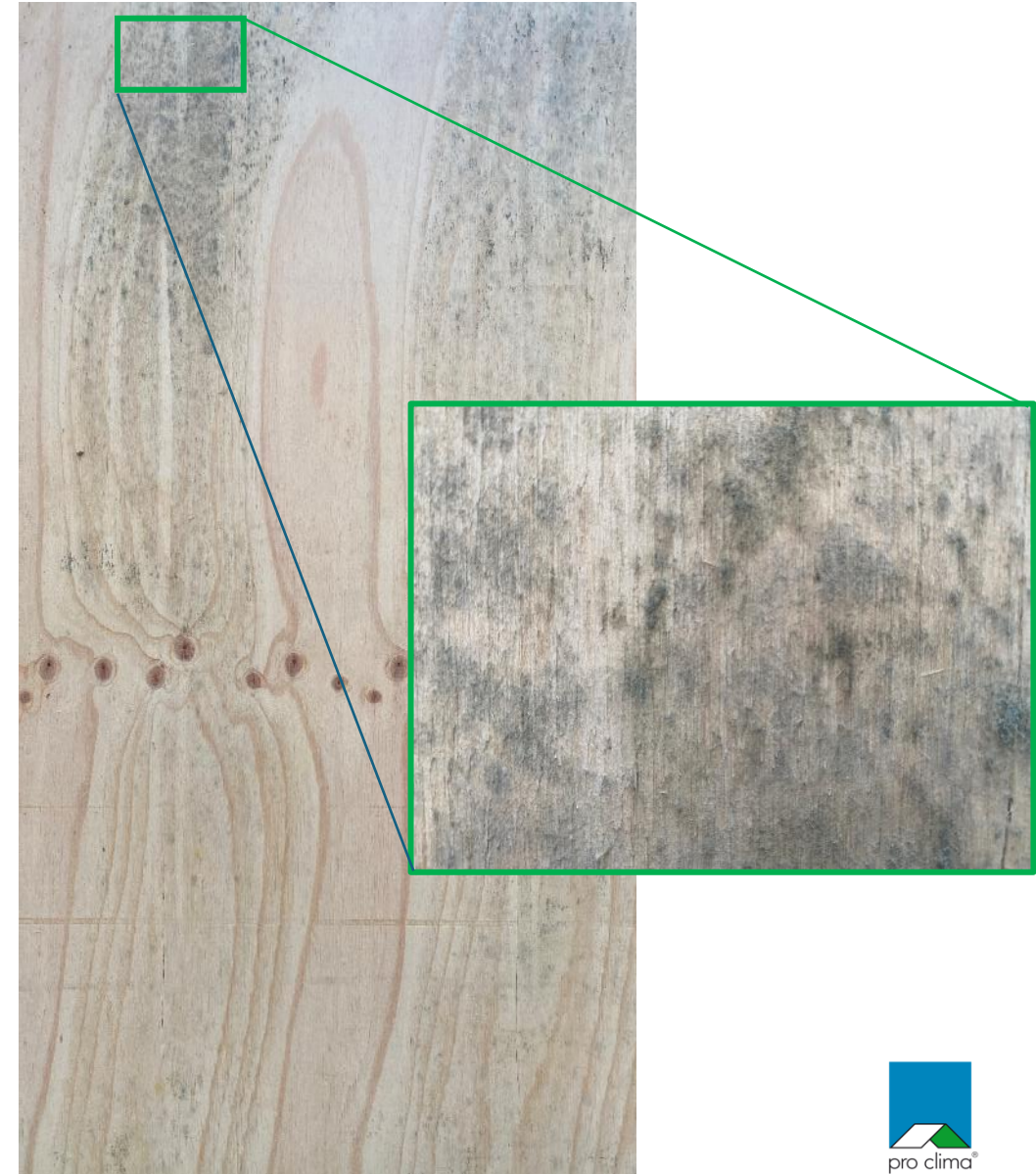
We need an expert witness to perform condensation modelling, prepare an expert report and give evidence on the results in an arbitral hearing late next year. If Jesse is interested in the role, can you please provide us with his rates and CV?

If you require further information or have any questions, please let me know.

Kind regards

[REDACTED]
Graduate at Law
[REDACTED]

Design is more than just R Values

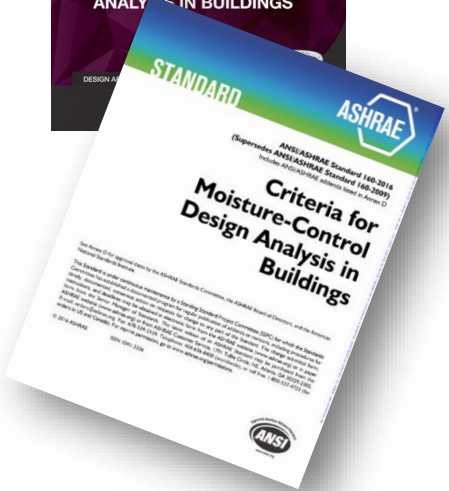


MI = 0 No growth



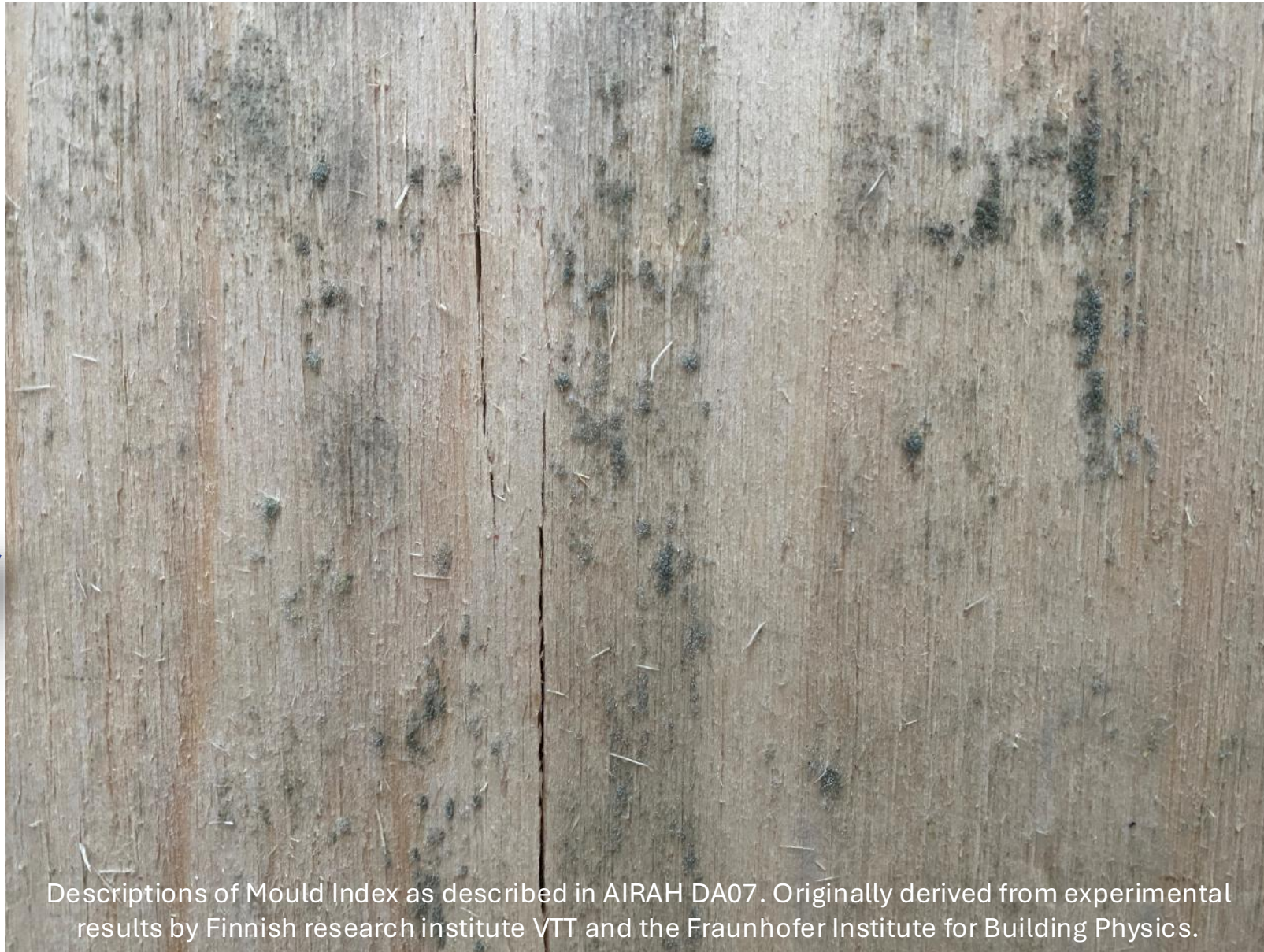
Descriptions of Mould Index as described in AIRAH DA07. Originally derived from experimental results by Finnish research institute VTT and the Fraunhofer Institute for Building Physics.

MI = 2 Several local mould growth colonies on surface (microscope)



Descriptions of Mould Index as described in AIRAH DA07. Originally derived from experimental results by Finnish research institute VTT and the Fraunhofer Institute for Building Physics.

MI = 3 Visual findings of mould on surface, < 10 % coverage, or < 50 % coverage of mould (microscope)



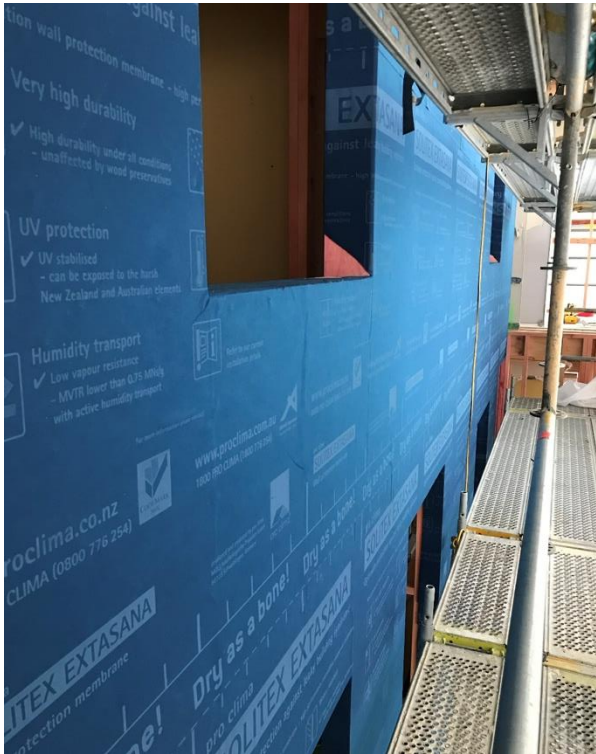
Descriptions of Mould Index as described in AIRAH DA07. Originally derived from experimental results by Finnish research institute VTT and the Fraunhofer Institute for Building Physics.

MI = 6 Heavy and tight growth, coverage about 100 %

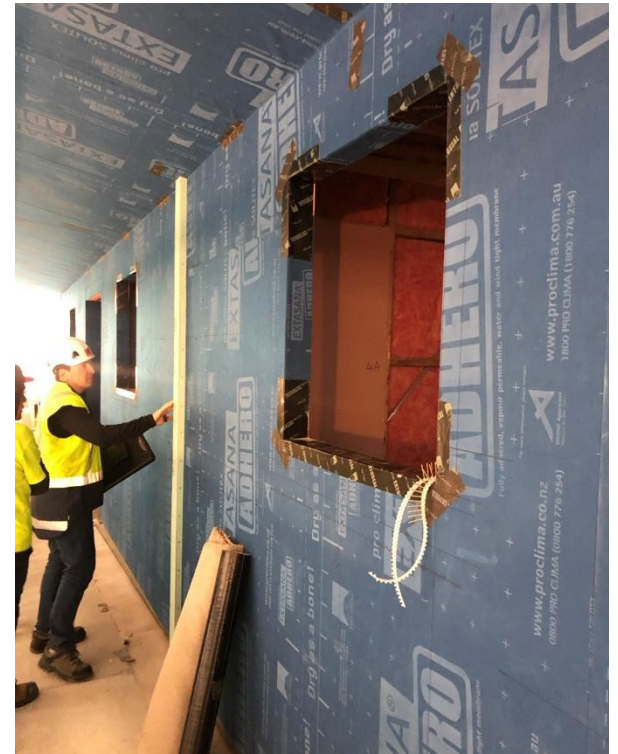
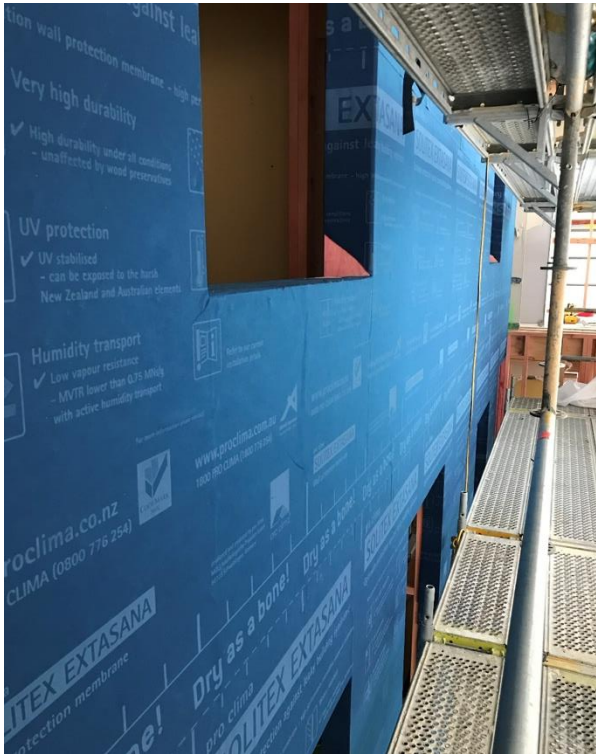


Descriptions of Mould Index as described in AIRAH DA07. Originally derived from experimental results by Finnish research institute VTT and the Fraunhofer Institute for Building Physics.

Weather Resistive Barriers (WRB)



Rain & Water Vapour



Facades

2

What are the building code requirements?

The building code requires suitable weatherproofing but requirements around prevention of entrapment of water vapour cannot be ignored.

Clause E2—External moisture

Provisions

Objective

E2.1 The objective of this provision is to safeguard people from illness or injury that could result from external moisture entering the *building*.

Functional requirement

E2.2 *Buildings* must be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside.

External Moisture NZBC – E2

Performance

E2.3.1 Roofs must shed precipitated moisture. In locations subject to snowfalls, roofs must also shed melted snow.

E2.3.2 Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to building elements, or both.

E2.3.3 Walls, floors, and structural elements in contact with, or in close proximity to, the ground must not absorb or transmit moisture in quantities that could cause undue dampness, damage to *building elements*, or both.

E2.3.4 *Building elements* susceptible to damage must be protected from the adverse effects of moisture entering the space below suspended floors.

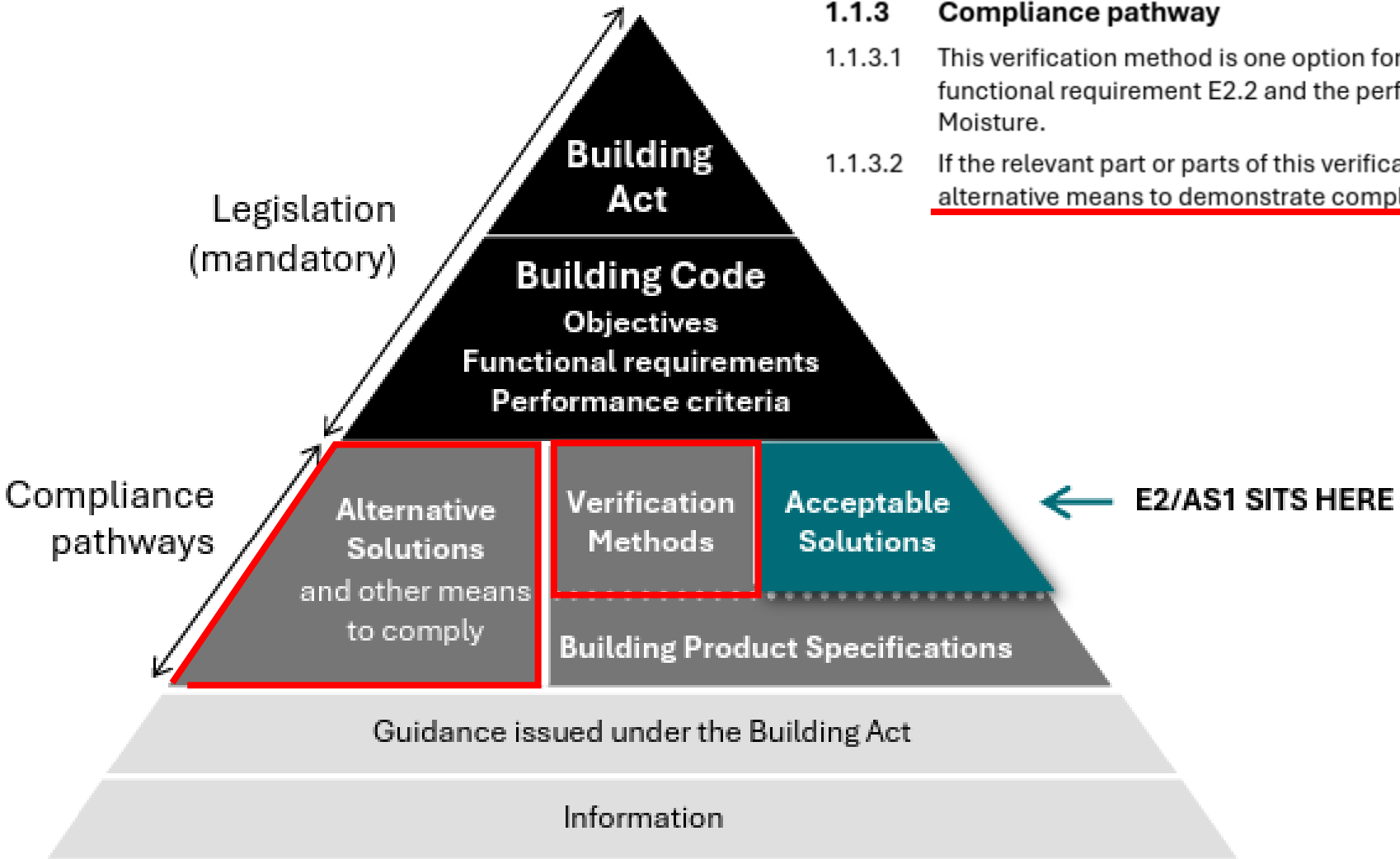
E2.3.5 *Concealed spaces* and cavities in *buildings* must be constructed in a way that prevents external moisture being accumulated or transferred and causing condensation, fungal growth, or the degradation of *building elements*.

E2.3.6 Excess moisture present at the completion of construction must be capable of being dissipated without permanent damage to *building elements*.

E2.3.7 *Building elements* must be constructed in a way that makes due allowance for the following:

- (a) the consequences of failure:
- (b) the effects of uncertainties resulting from *construction* or from the sequence in which different aspects of *construction* occur:
- (c) variation in the properties of materials and in the characteristics of the site.

External Moisture NZBC – E2

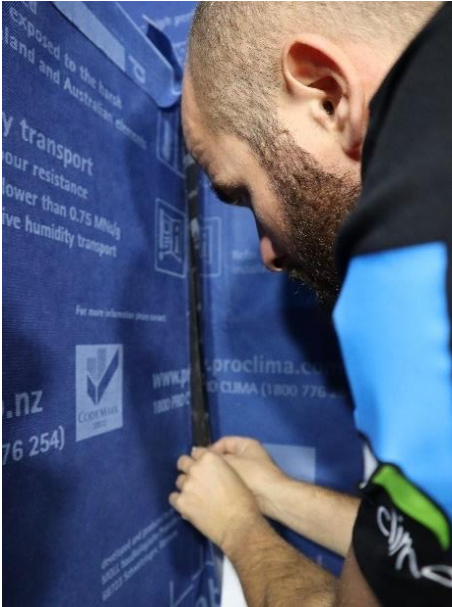


1.1.3 Compliance pathway

1.1.3.1 This verification method is one option for establishing compliance with the Building Code functional requirement E2.2 and the performance criterion in E2.3.2 in clause E2 External Moisture.

1.1.3.2 If the relevant part or parts of this verification method solution cannot be followed in full, use an alternative means to demonstrate compliance.

Full Scale Test Required



Test the WRB + Cladding!



JAN BENNE AND ASSOCIATES
TEST REPORT NO. 2019-104-S2
EQUITONE FACADE SYSTEM WITH
PROCLIMA SOLITEX EXTASANA
MEMBRANE
PROTOTYPE TEST to AS/NZS 4284:2008
for
Etex Group
February 2020

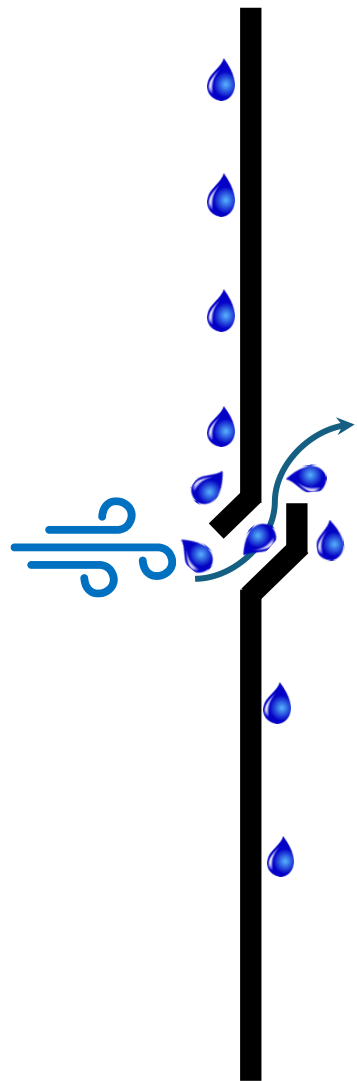

Accredited Laboratory No. 2371
Accredited for compliance with ISO/IEC 17025 - Testing

Facades

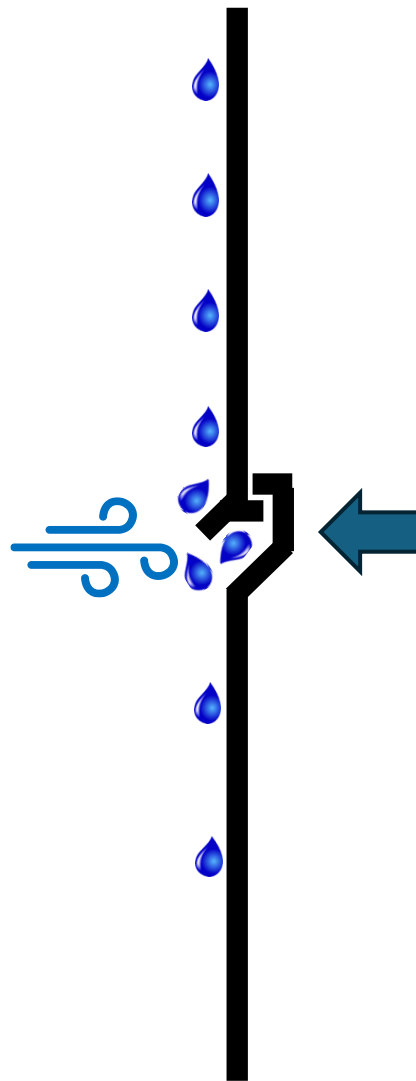
3

Cladding

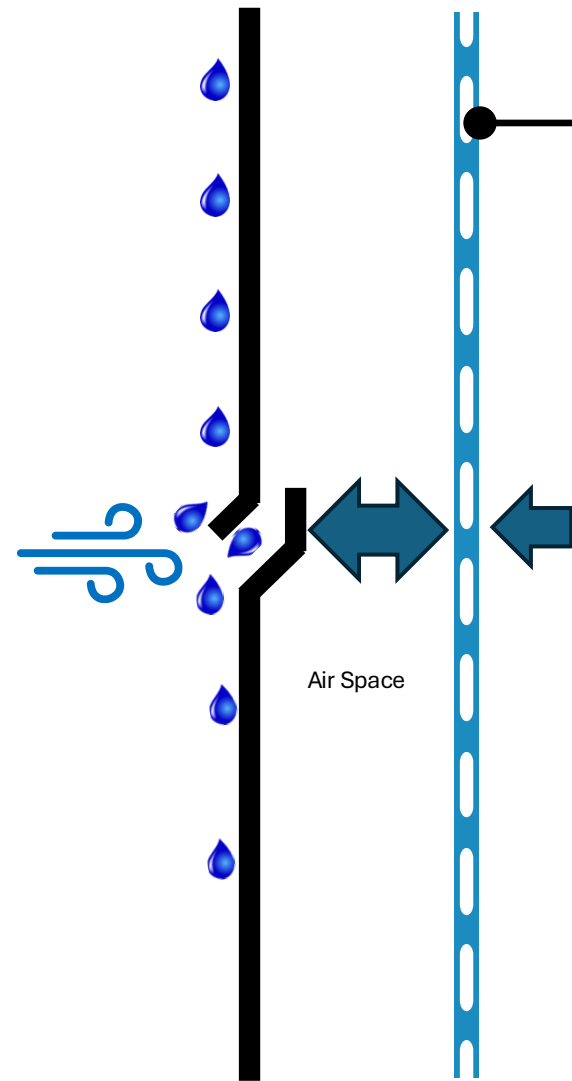
Wind pressure cannot be underestimated.



Open Joint



Baffled Joint



Rain screen

Wind barrier

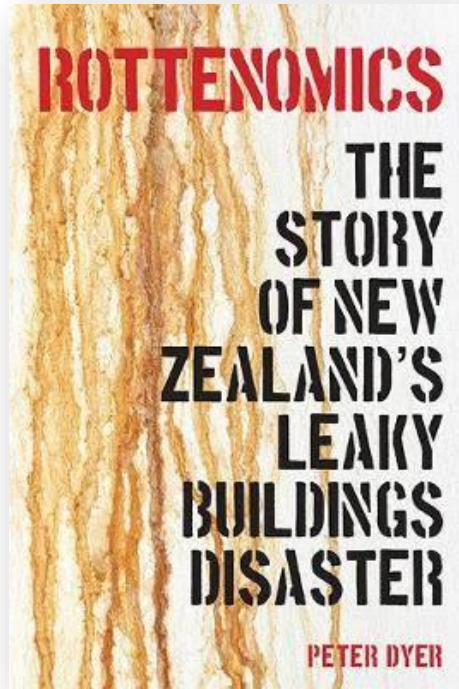
Air Space

Pro Clima SOLITEX® membranes installed as the interior air (wind) barrier & drainage plane

Essential features of the rain screen and pressure equalized wall construction (based on American Architectural Manufacturers Association, AAMA, 1971)



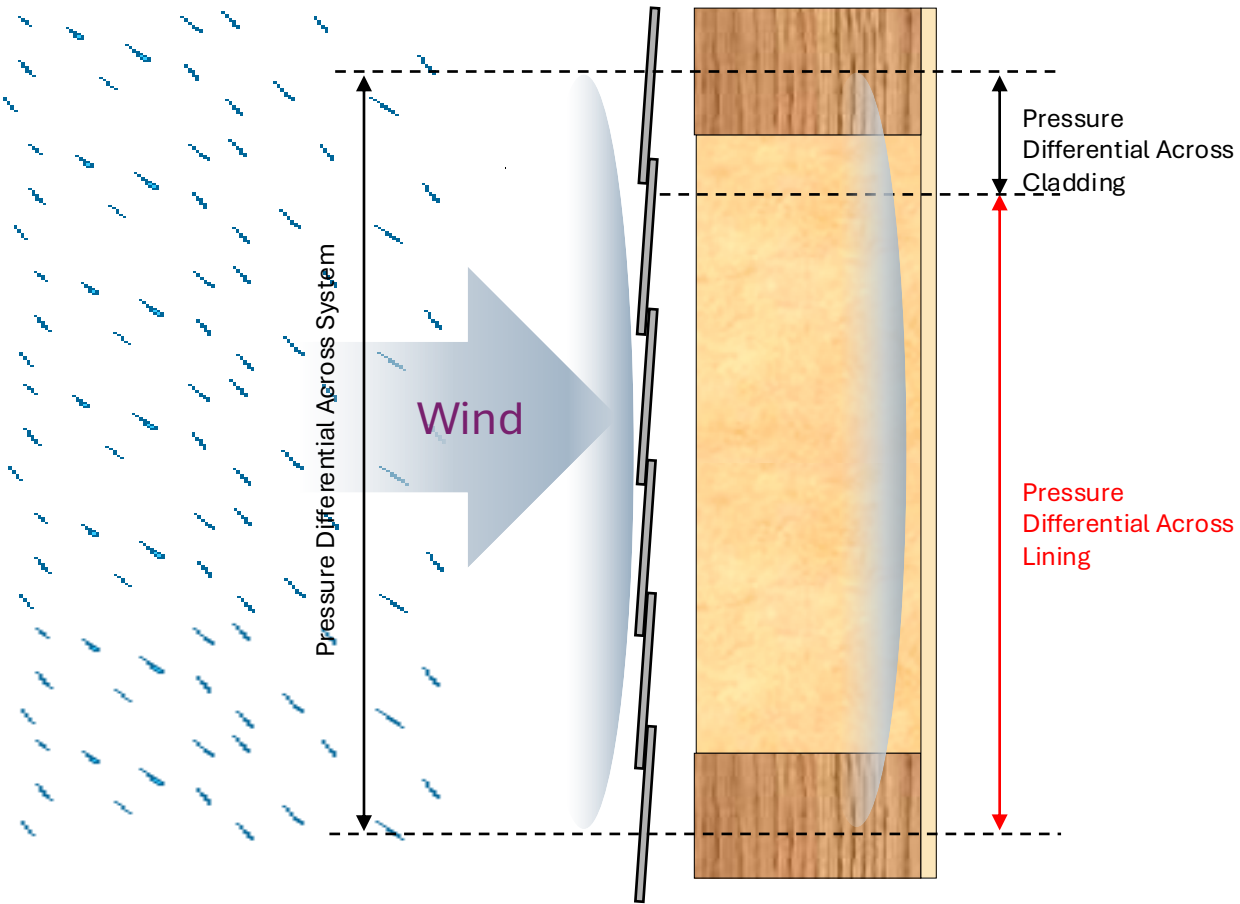
The School of Hard Knocks (New Zealand University of Life)



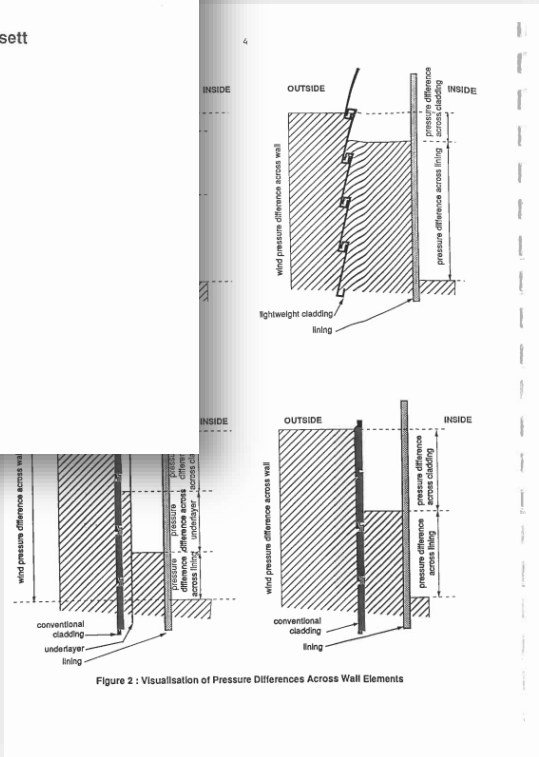
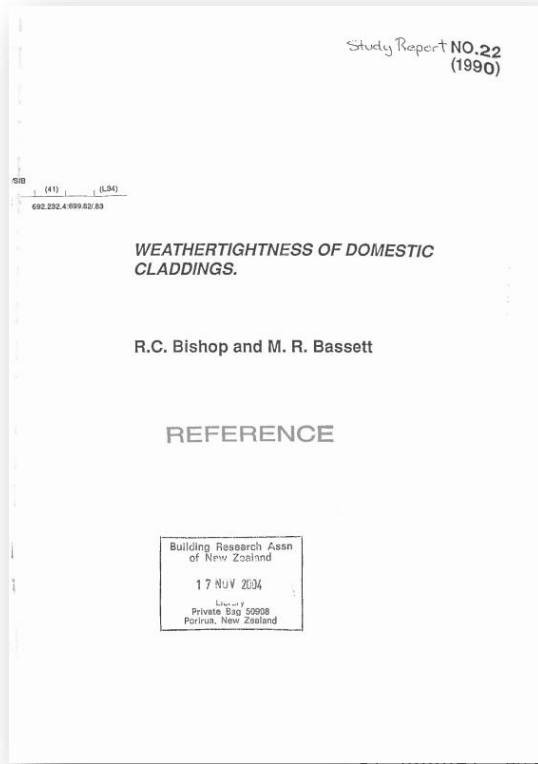
Rottenomics: The Story of New Zealand's Leaky Buildings Disaster, Peter Dyer, 2019

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BRANZ 1990 – Weathertightness of Domestic Claddings

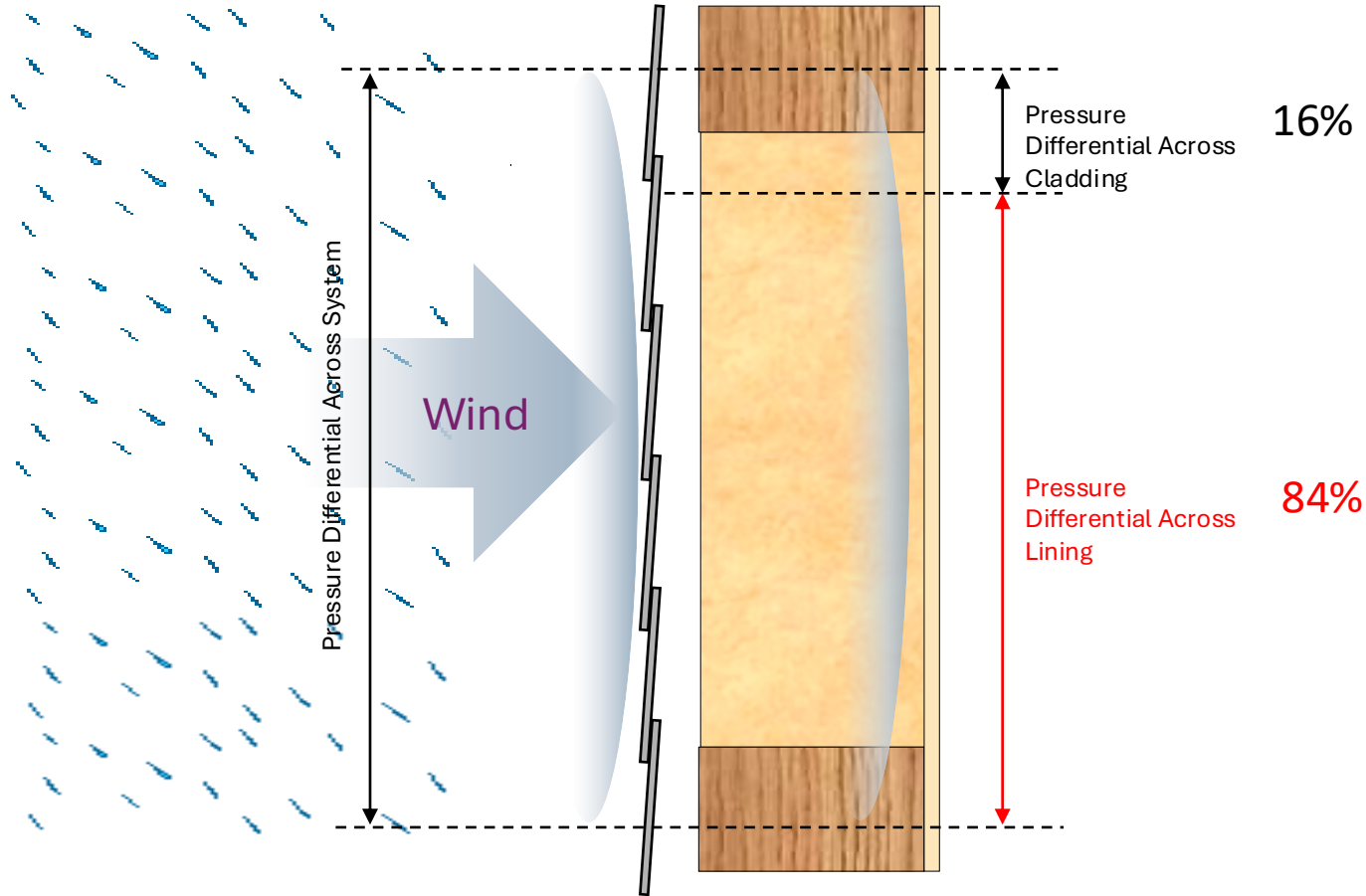


Only small pressure drop across the cladding. Plasterboard will need to take the wind load.



Weathertightness of Domestic Claddings. R.C Bishop and M. R. Bassett, 1990

BRANZ 1990 – Weathertightness of Domestic Claddings



Only small pressure drop across the cladding. Plasterboard will need to take the wind load.

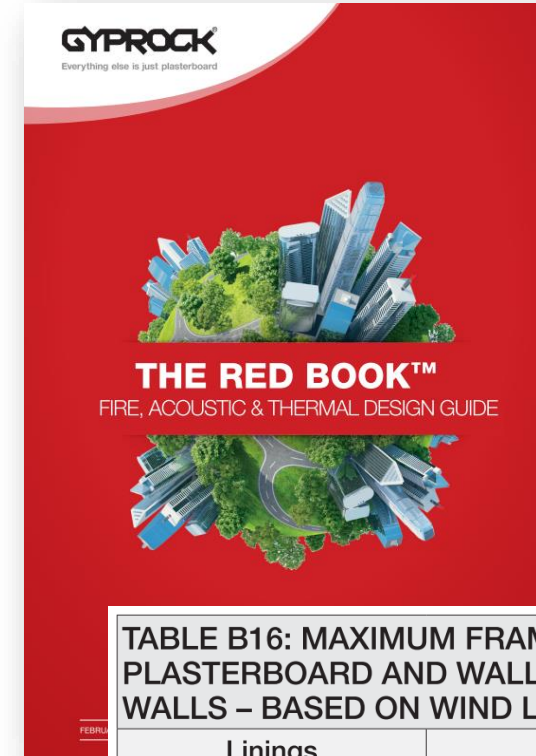
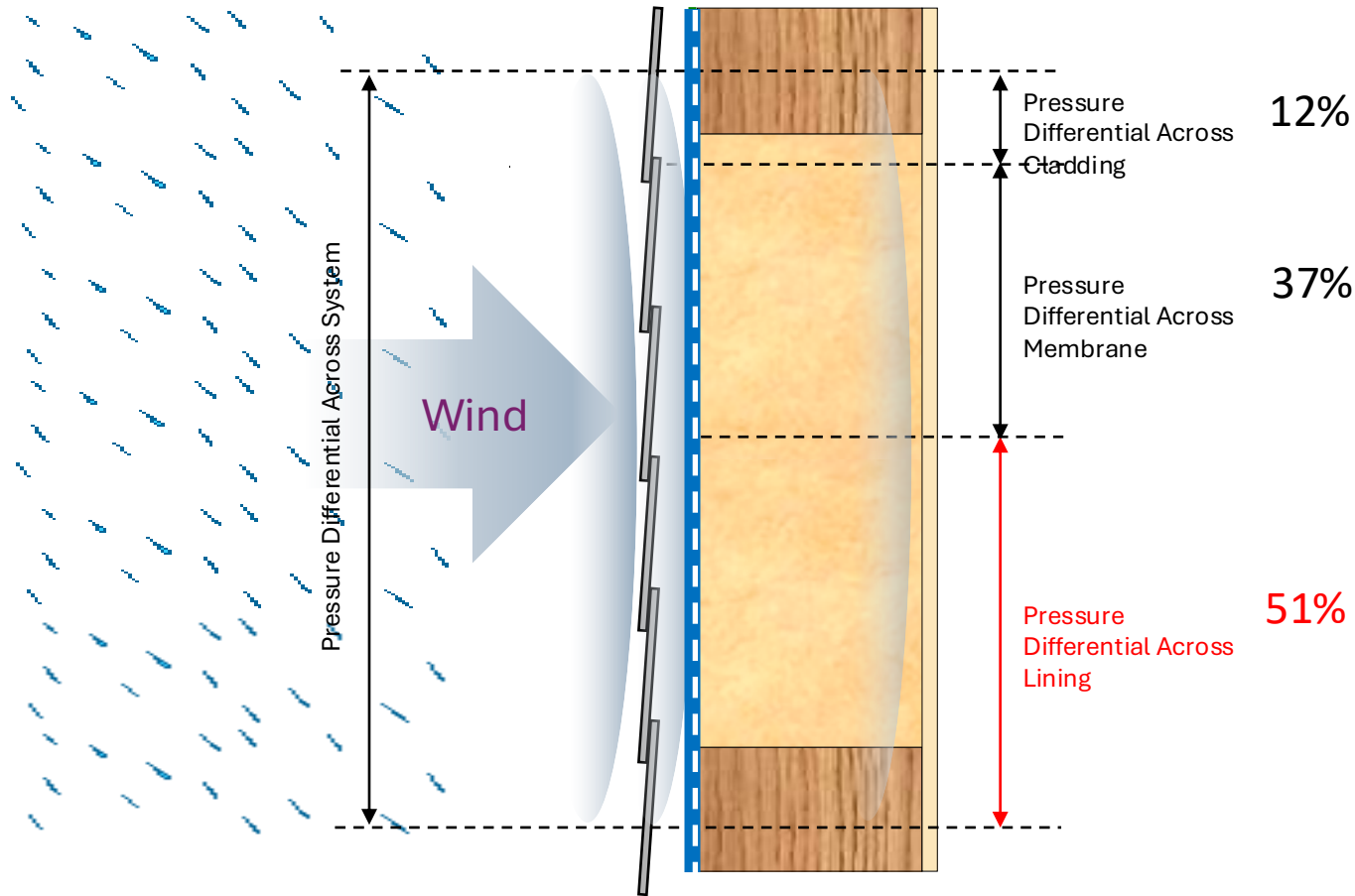


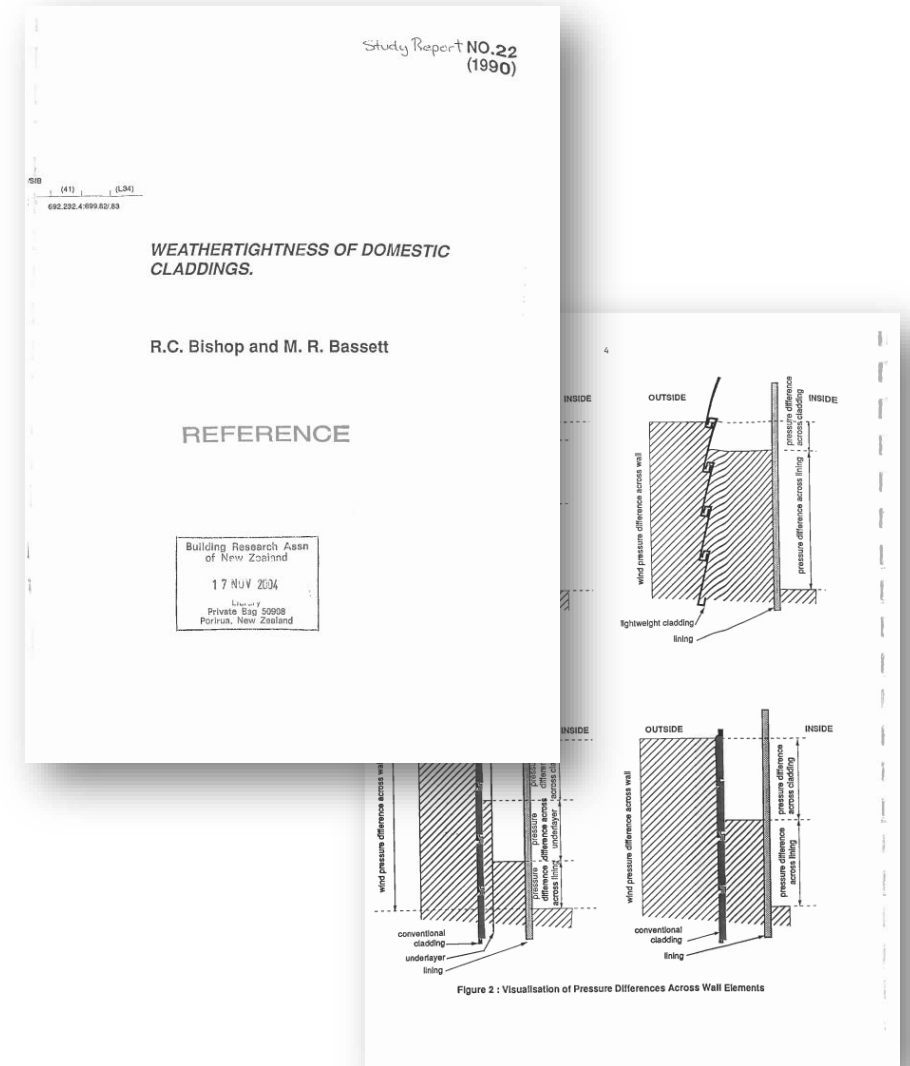
TABLE B16: MAXIMUM FRAMING CENTRES FOR PLASTERBOARD AND WALLBOARD LININGS ON WALLS – BASED ON WIND LOADS

Linings (horizontal or vertical sheet orientation)	Wind Load (kPa) Ult.		
	0.25	0.50	0.75
10mm Gyprock Plus	600	600	450
Other 10mm Gyprock plasterboards	600	600	600
13 and 16mm Gyprock plasterboards	600	600	600
6 and 9mm CeminSeal Wallboard	600	600	600

BRANZ 1990 – Weathertightness of Domestic Claddings

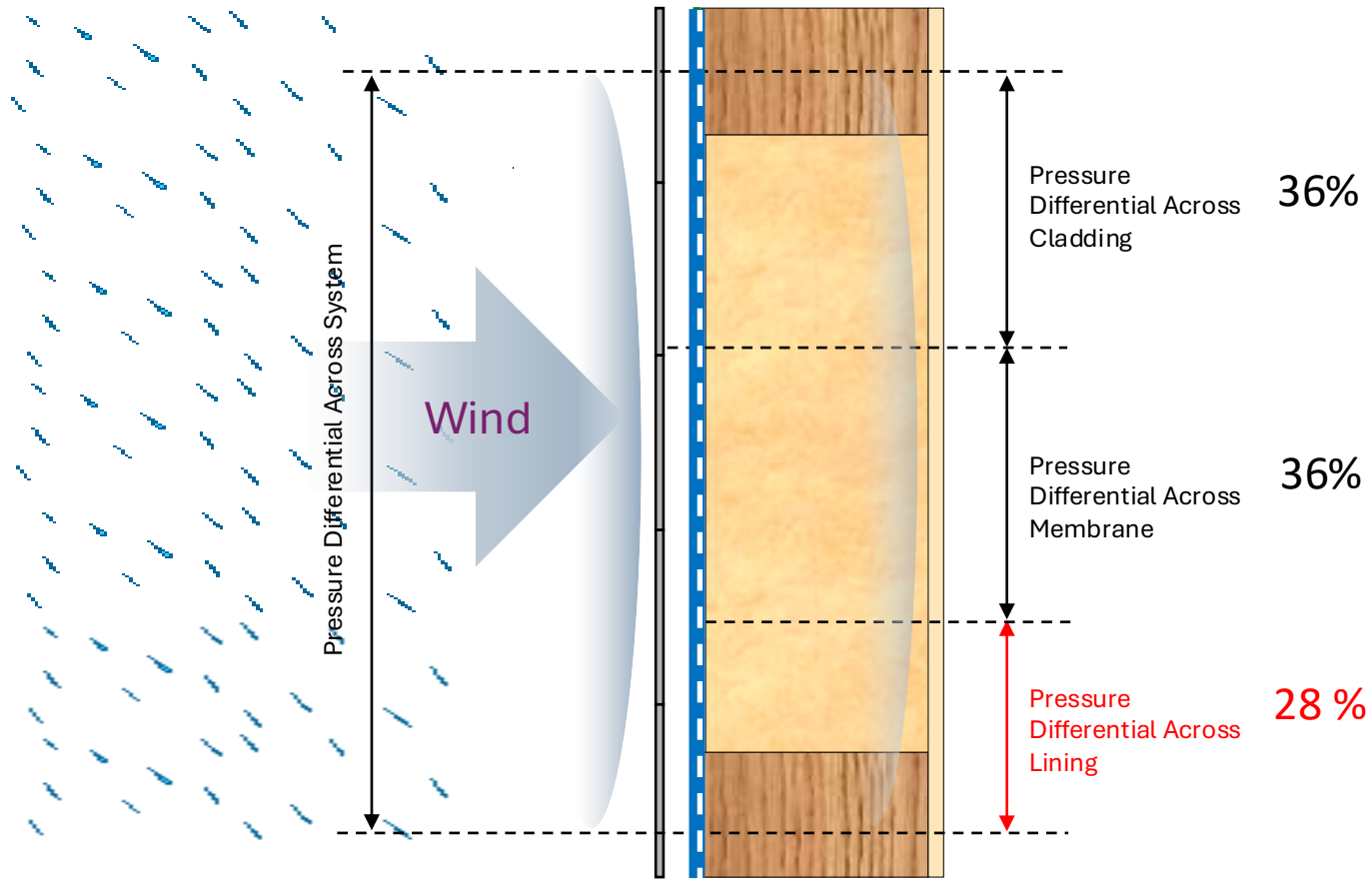


Add air Leakage Resistance to the system.
Membrane takes some of the wind load.
Cladding has smaller pressure drop.

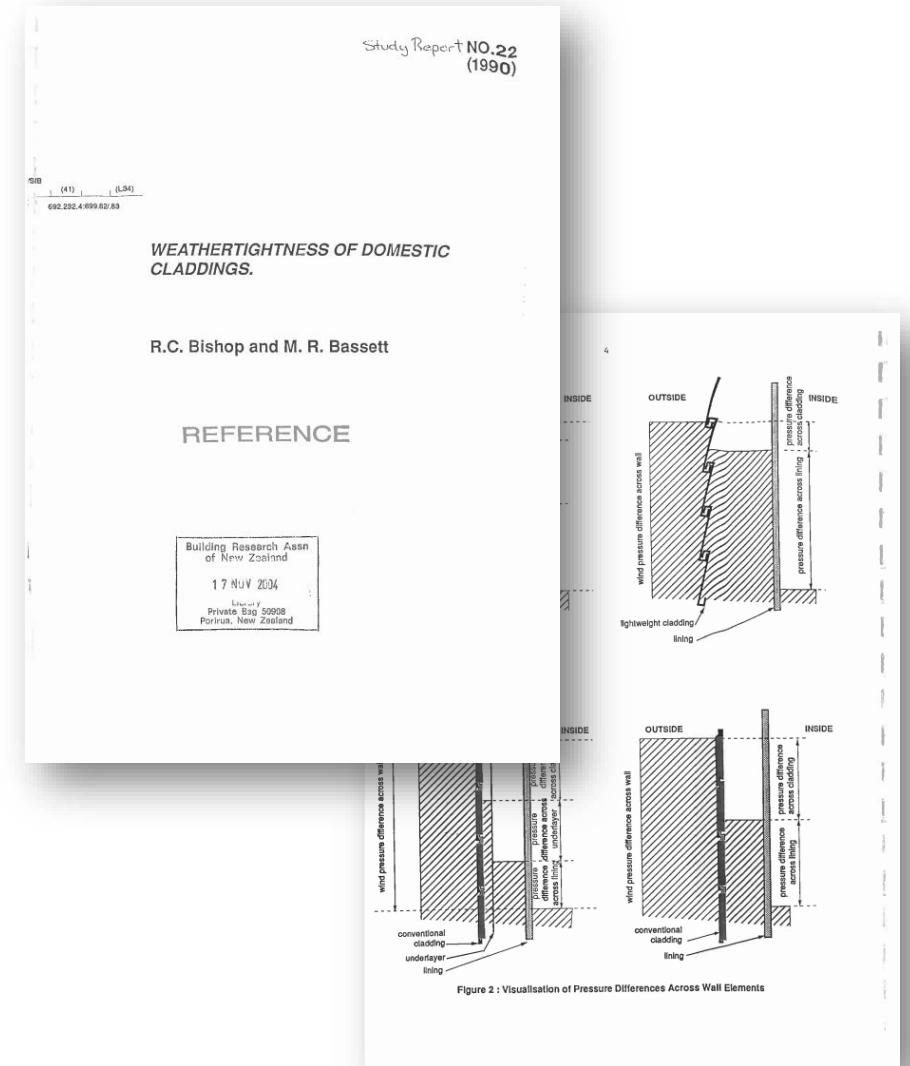


Weathertightness of Domestic Claddings.
R.C Bishop and M. R. Bassett, 1990

BRANZ 1990 – Weathertightness of Domestic Claddings

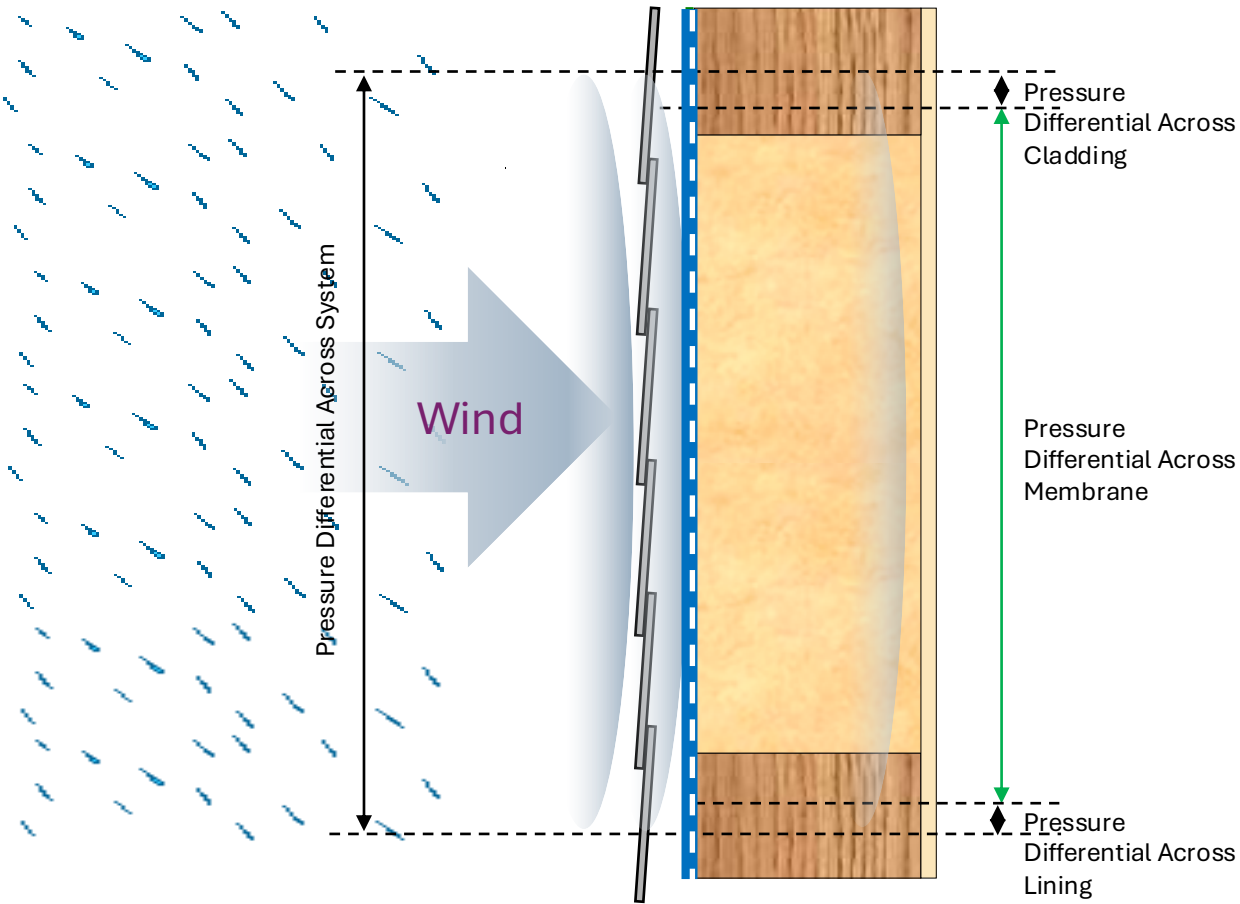


Membranes will reduce the pressure drop across the cladding. The more perfect the air seal on the membrane the lower the pressure drop across the cladding.

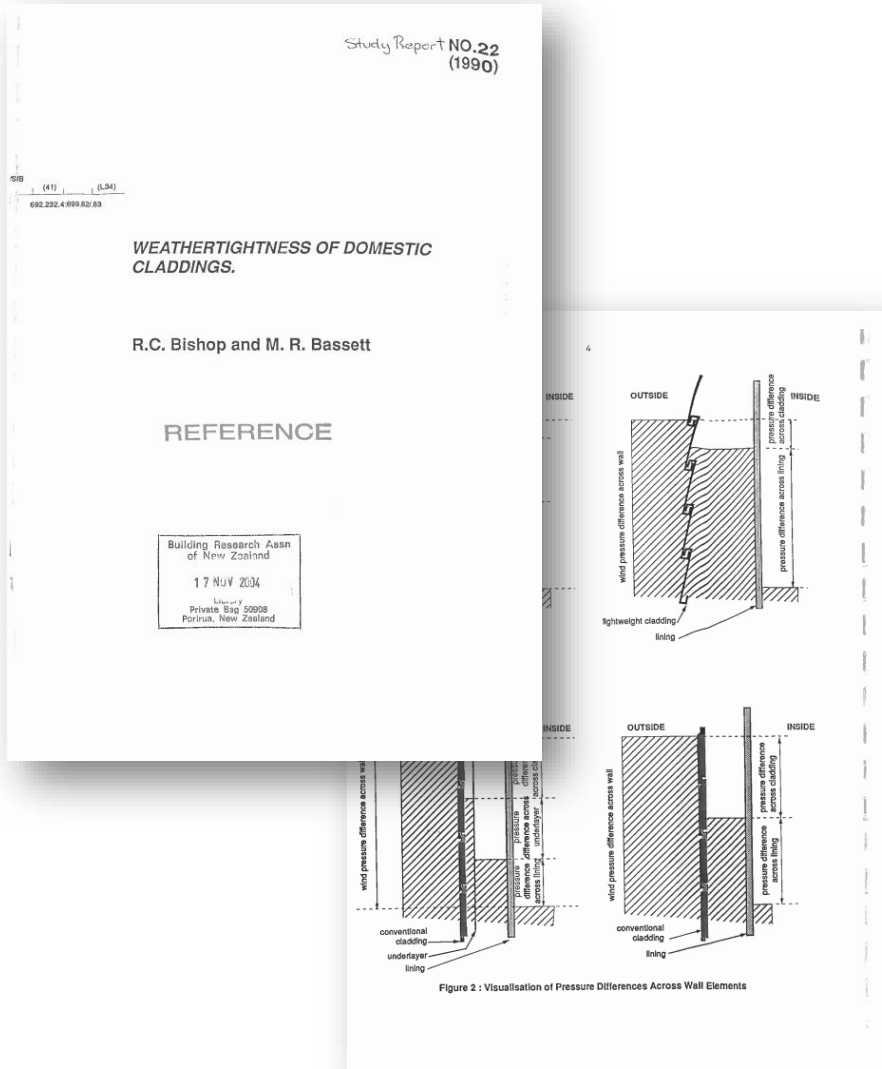


Weathertightness of Domestic Claddings.
R.C Bishop and M. R. Bassett, 1990

Drained Wall Systems – The Objective

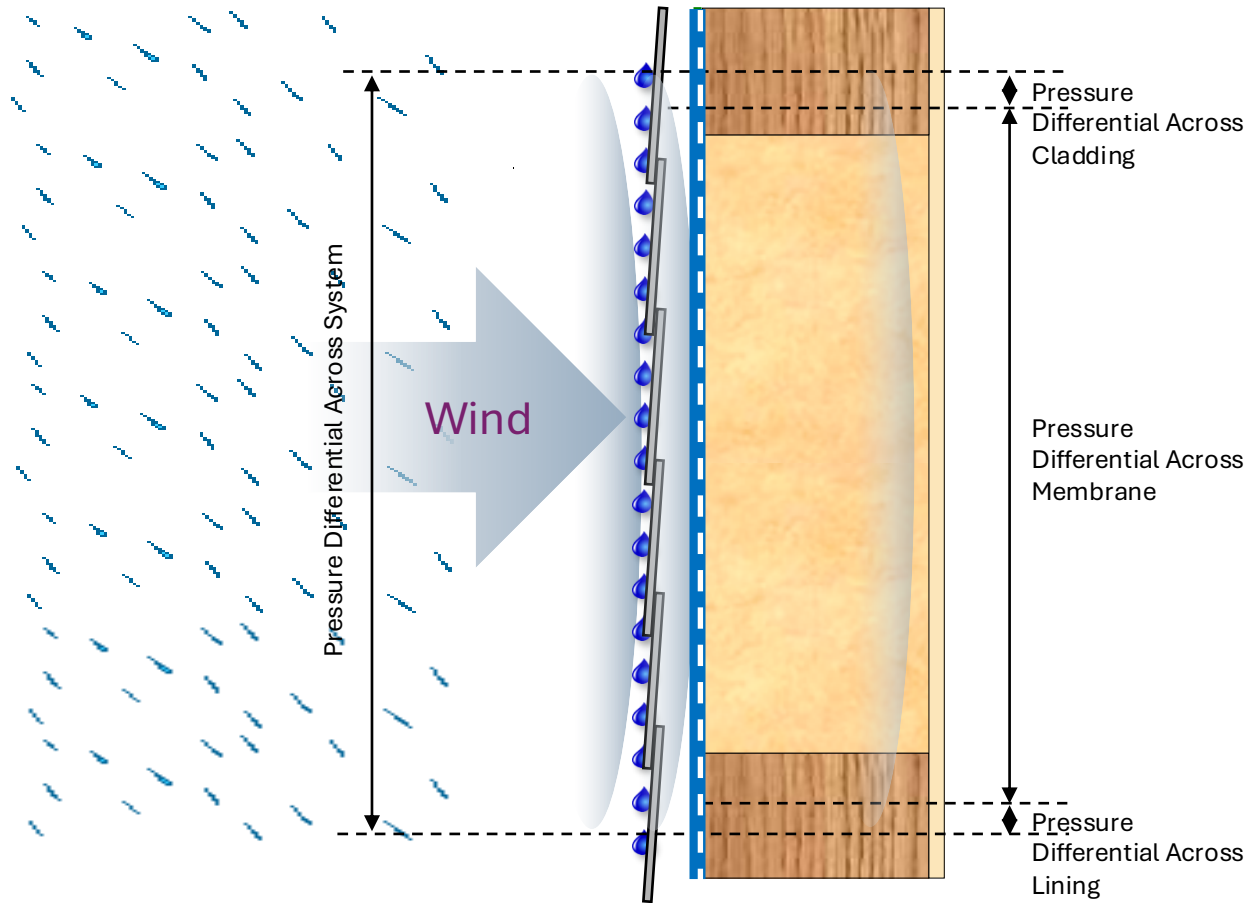


Objective is to have zero pressure drop across the cladding. Membrane takes the wind load. Plasterboard takes small load.

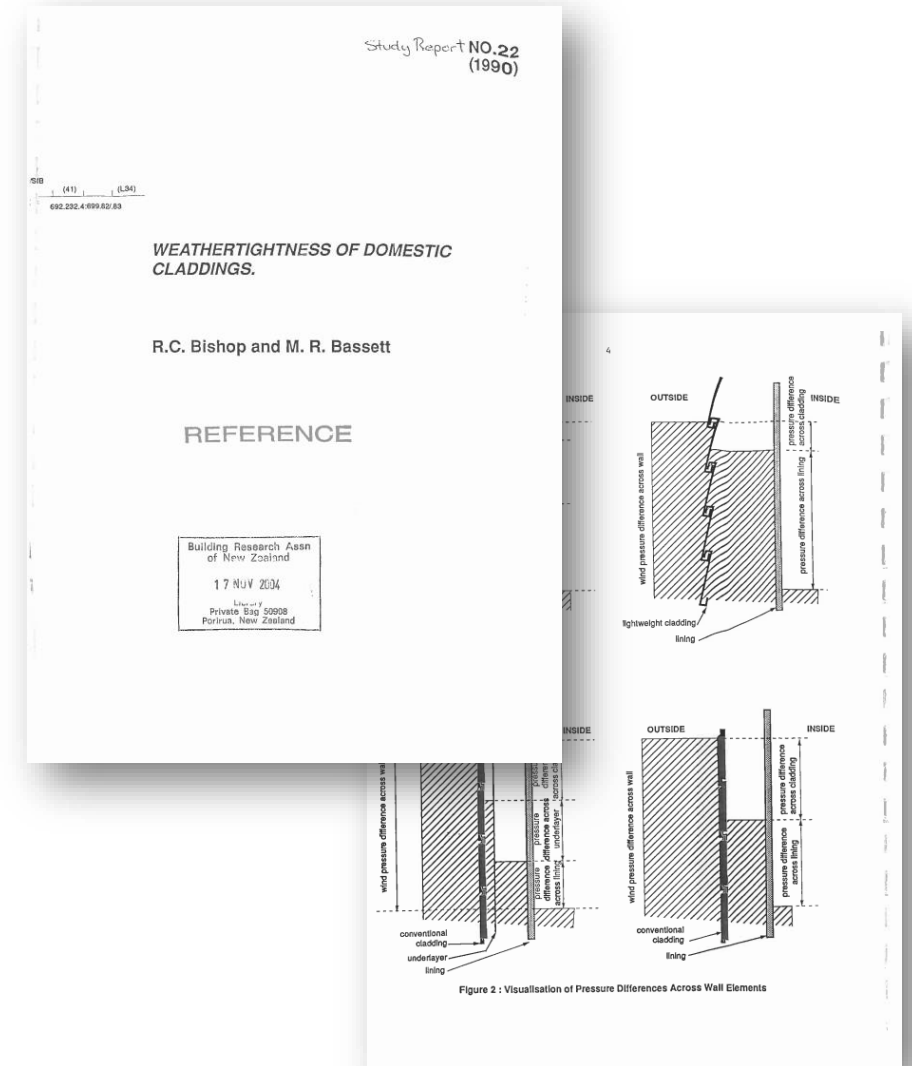


Weather-tightness of Domestic Claddings.
R.C Bishop and M. R. Bassett, 1990

Drained Wall Systems – Where we want to be



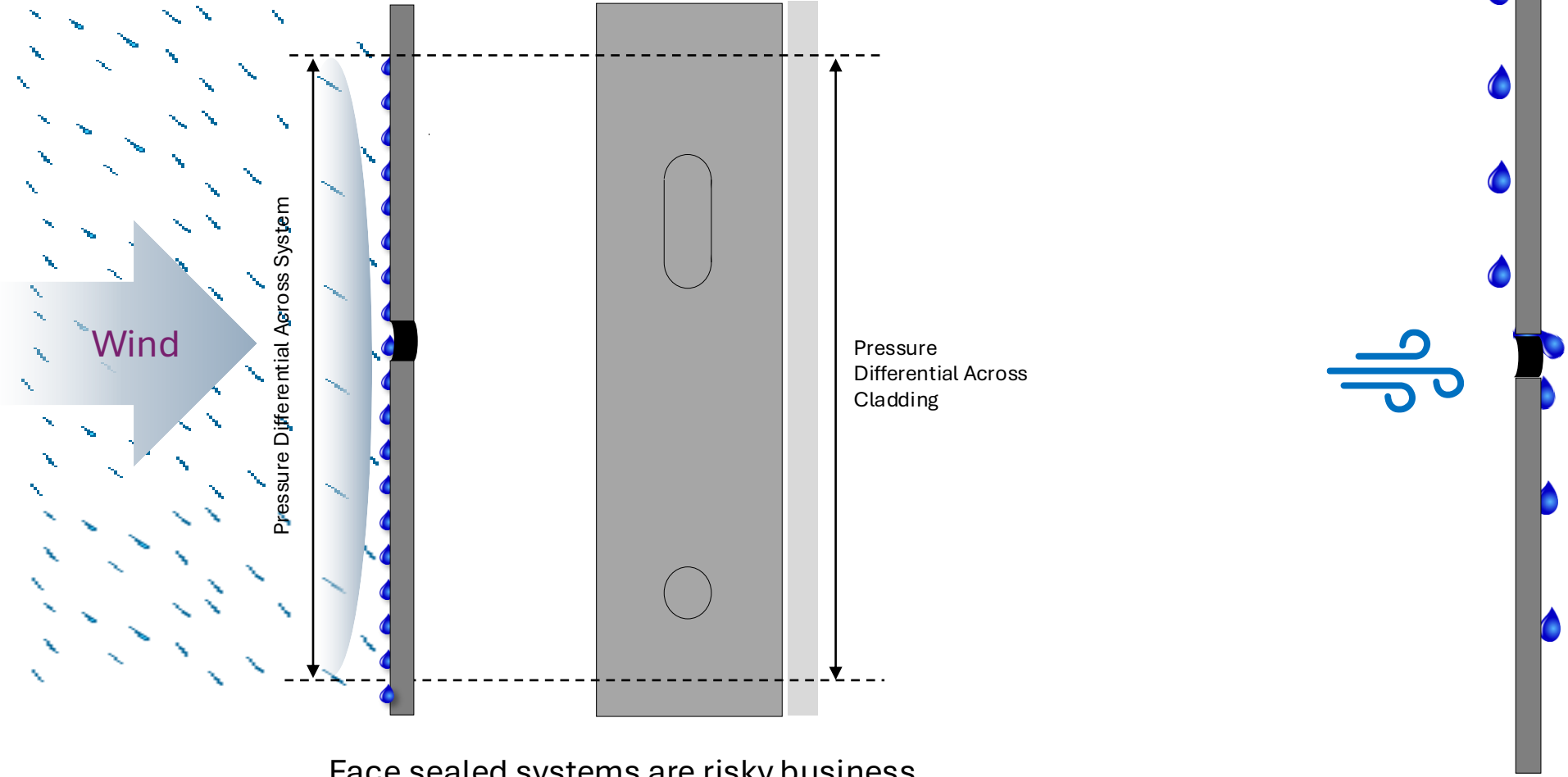
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Weathertightness of Domestic Claddings.
R.C Bishop and M. R. Bassett, 1990

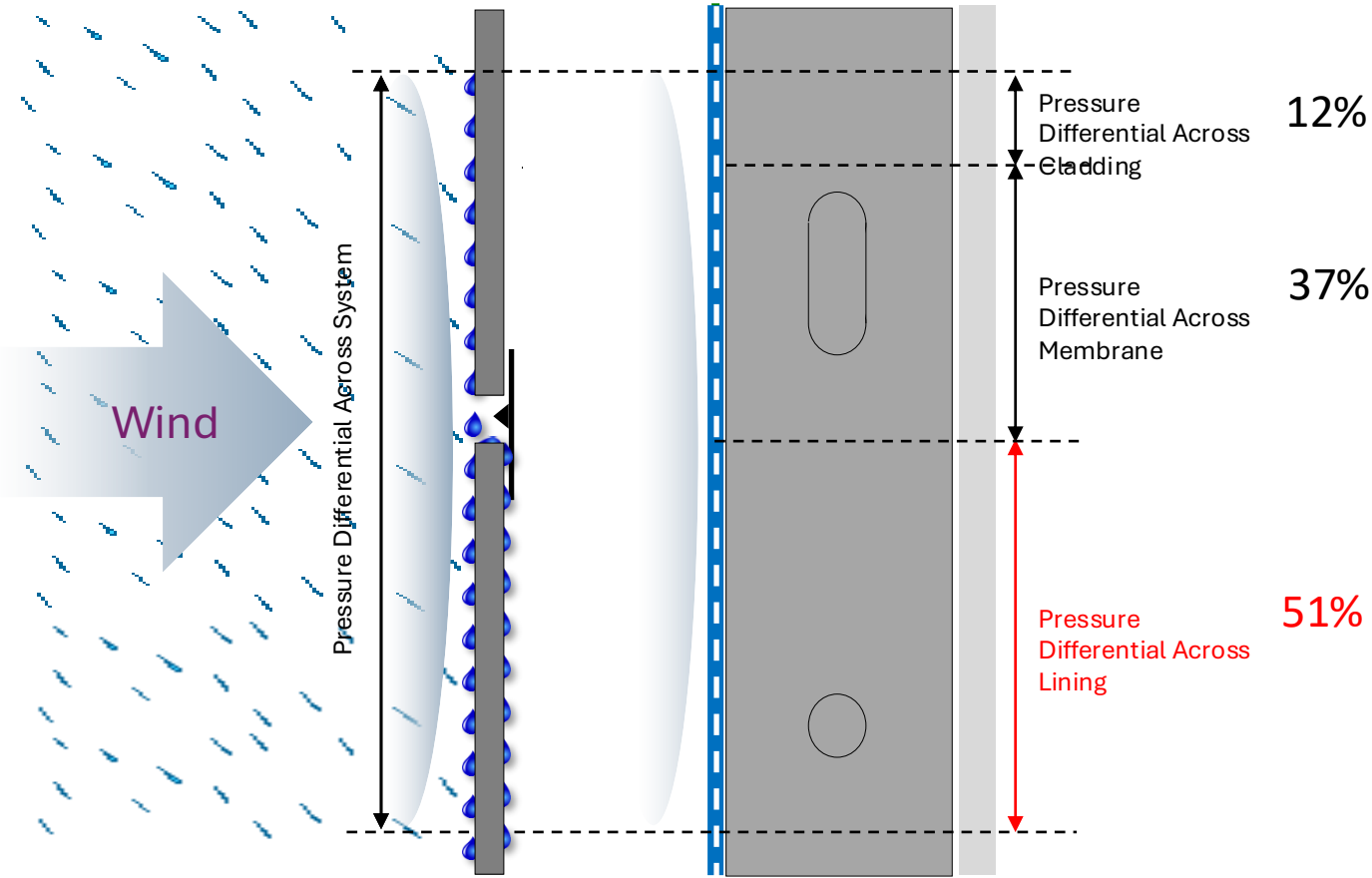
Barrier System

Cladding experiences **ALL** pressure difference



Face sealed systems are risky business

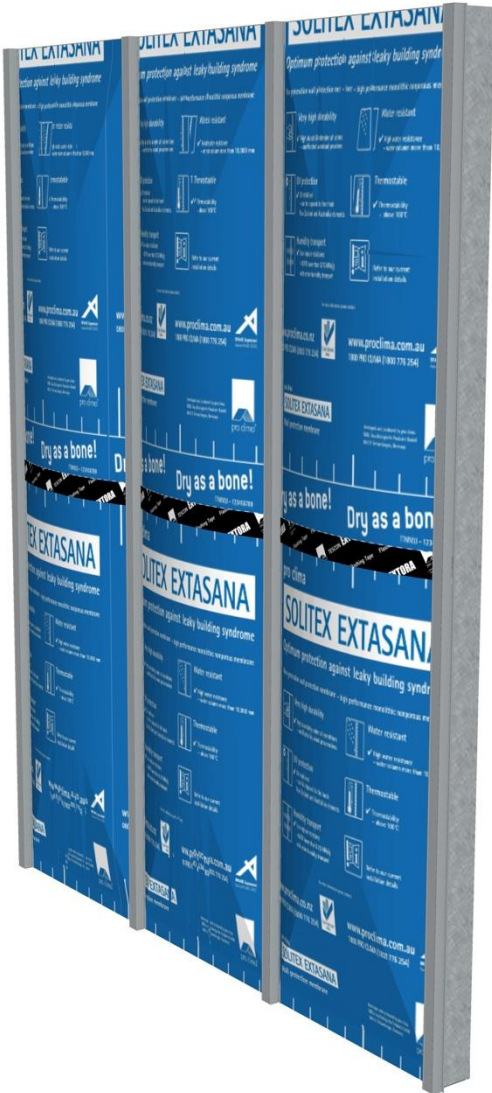
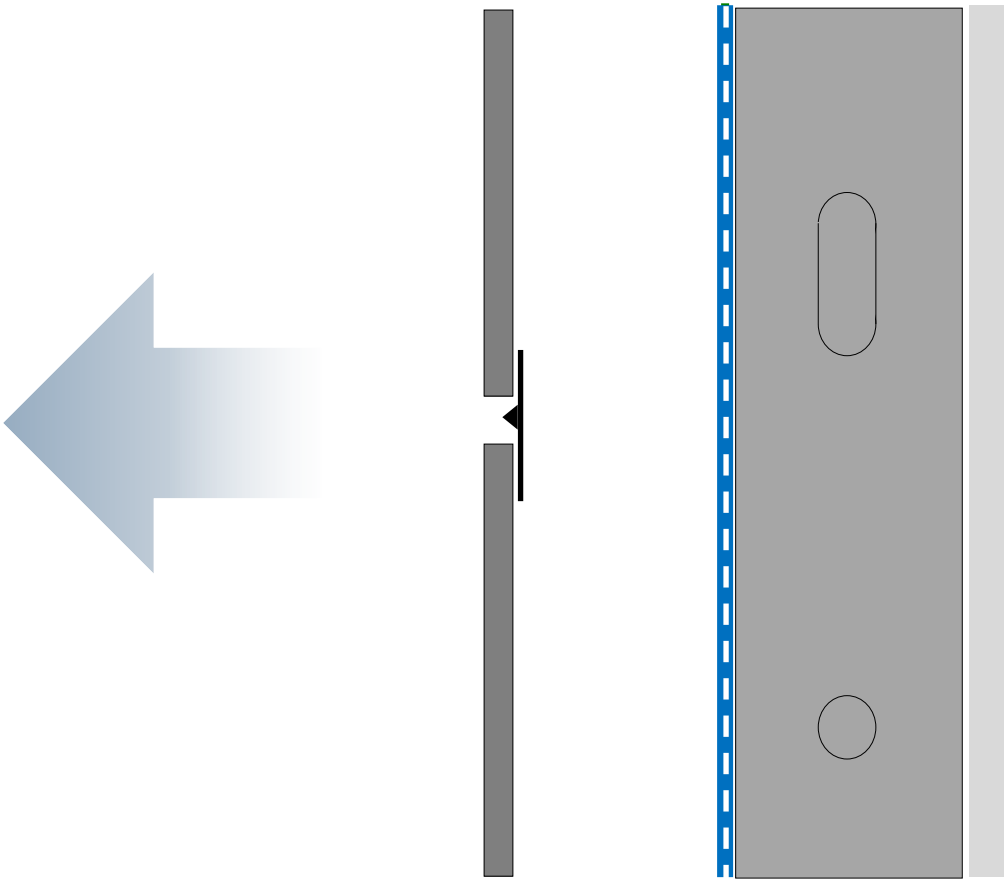
Baffled Joints



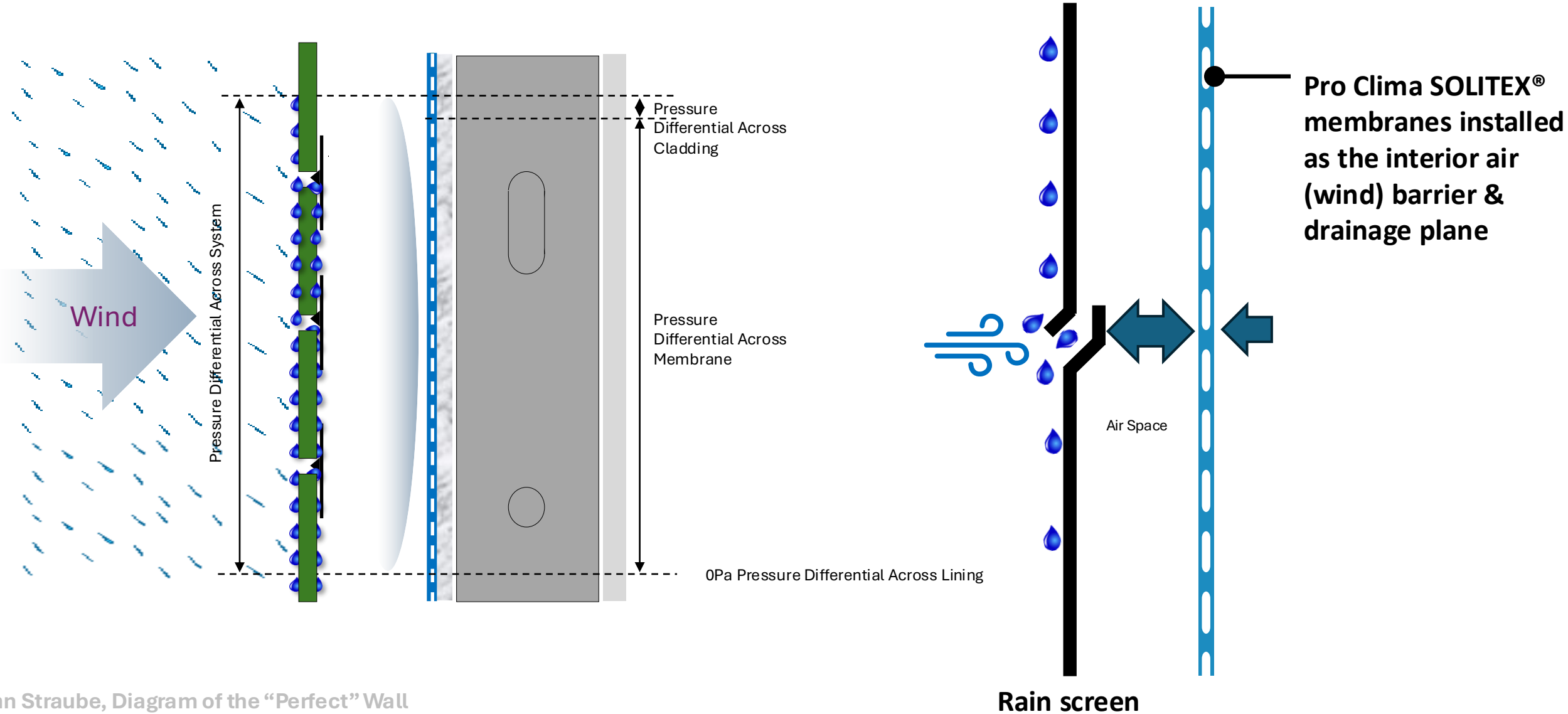
Meanwhile in Australia a heavy reliance on flexible membranes



Baffled Joints

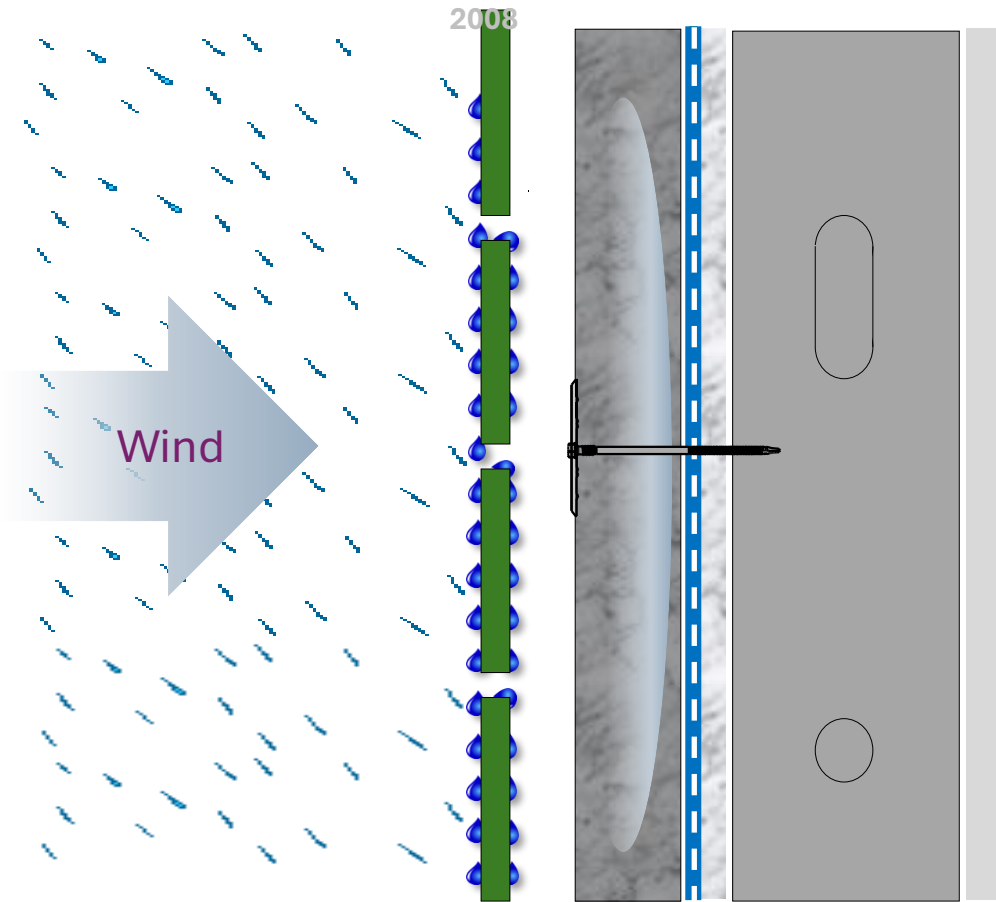


Pressure Equalised



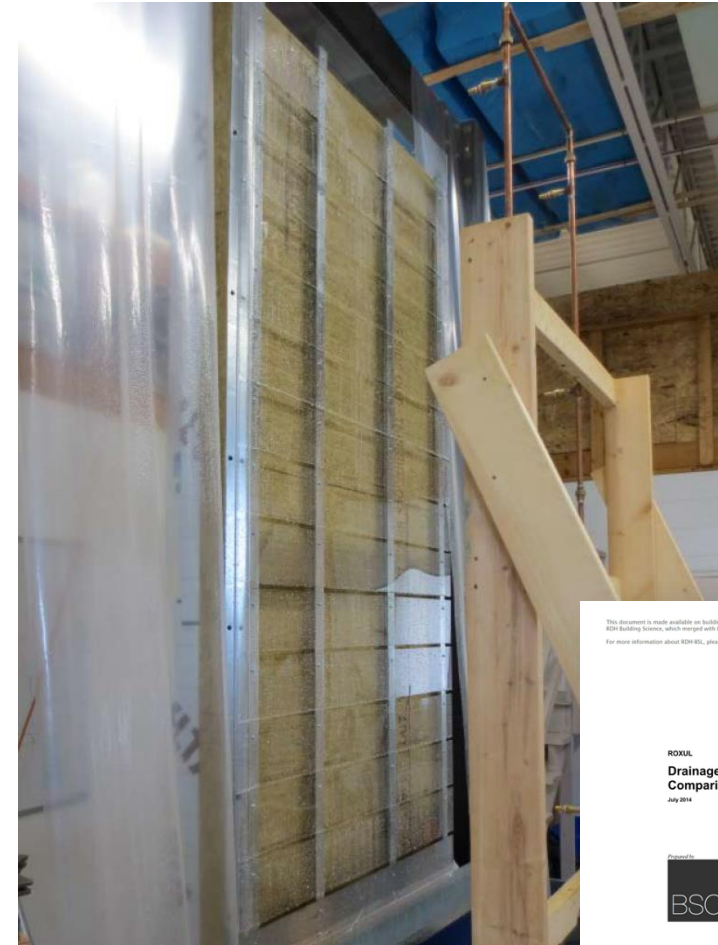
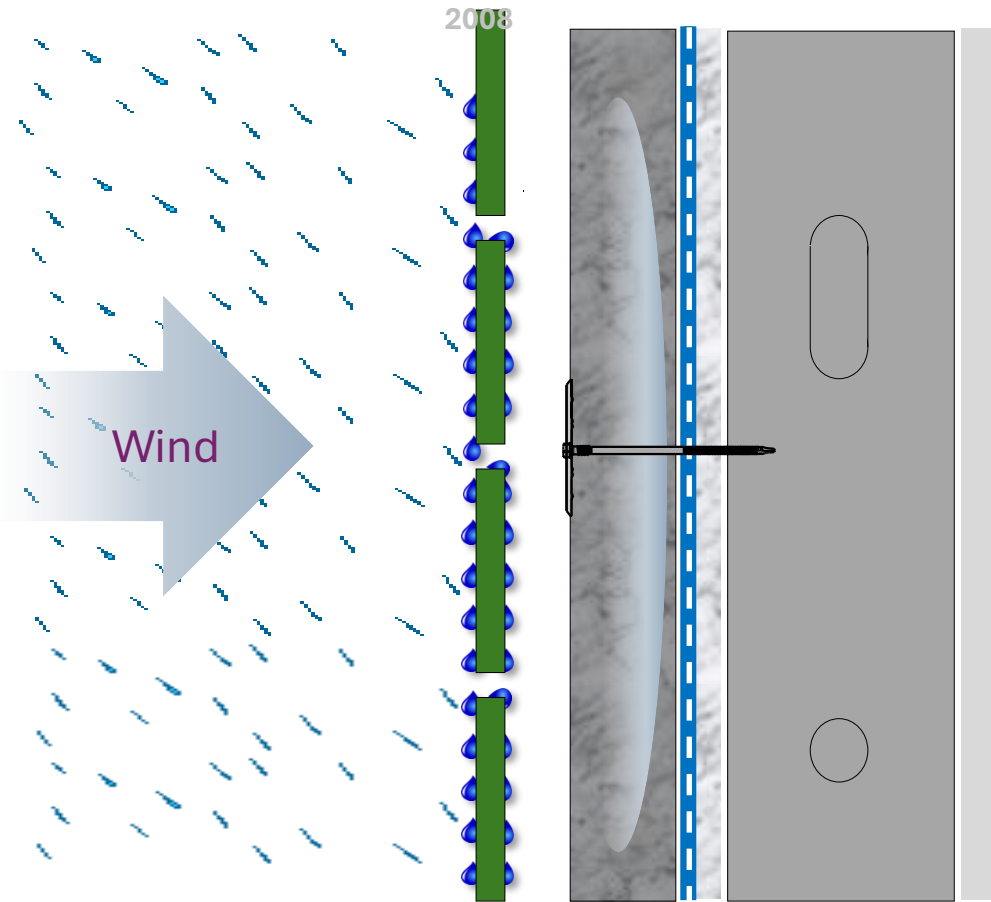
2008 – The Perfect Wall

Lstiburek, J. Building Science Insight-001: The perfect Wall, www.building science.com,

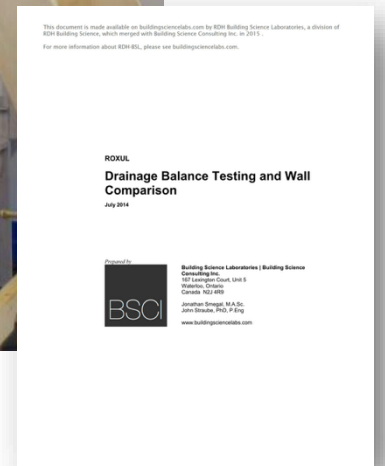


2014 – The Perfect Wall

Lstiburek, J. Building Science Insight-001: The perfect Wall, www.buildingscience.com, 2008

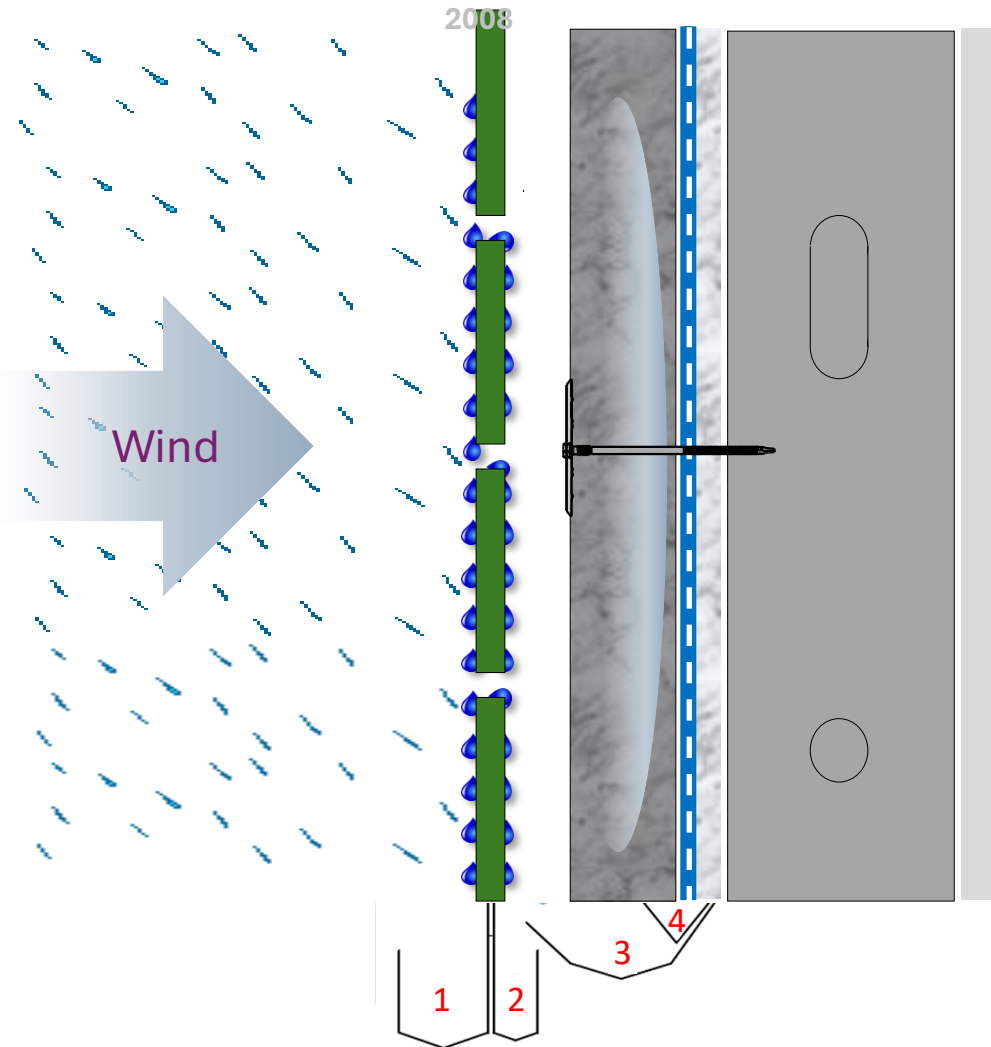


Jonathan Smegal & John Straube, BSCI, ROXUL
Drainage Balance Testing and Wall Comparison,
July 2014

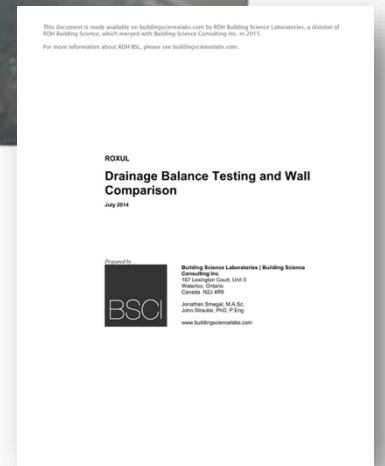


2014 – The Perfect Wall

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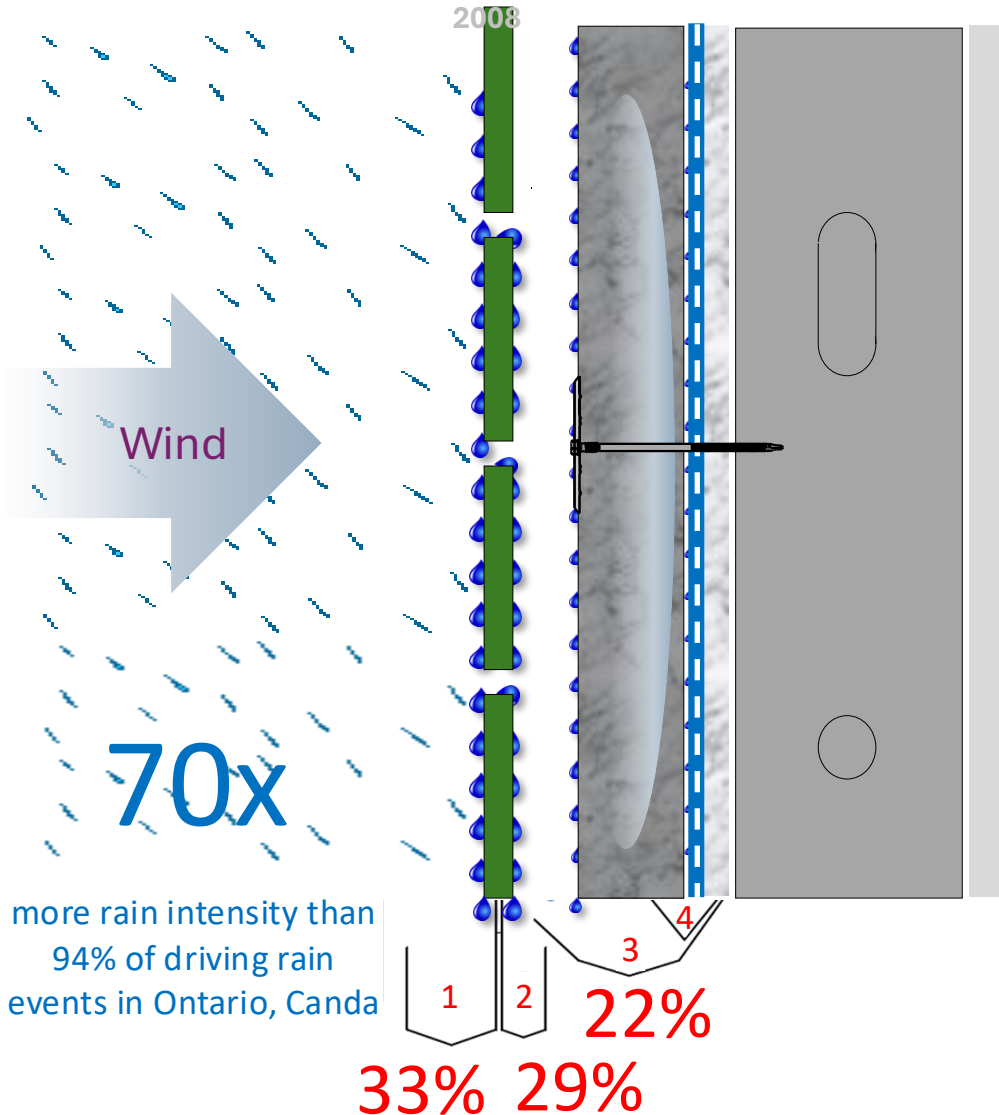


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Drainage Balance Testing and Wall Comparison,
July 2014

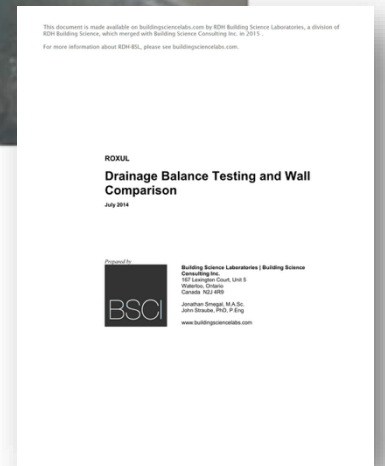


2014 – The Perfect Wall

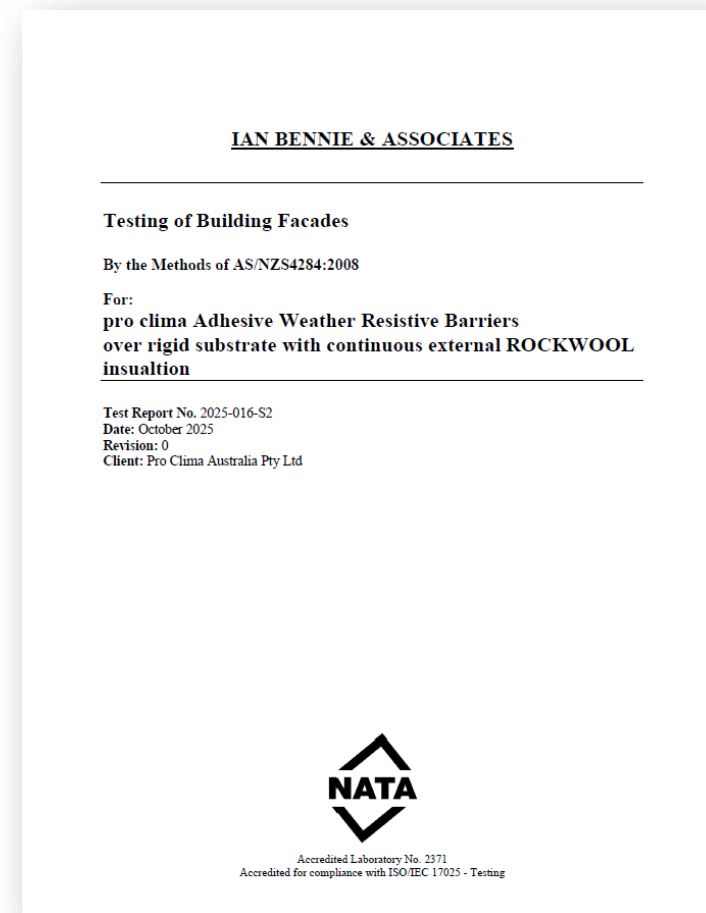
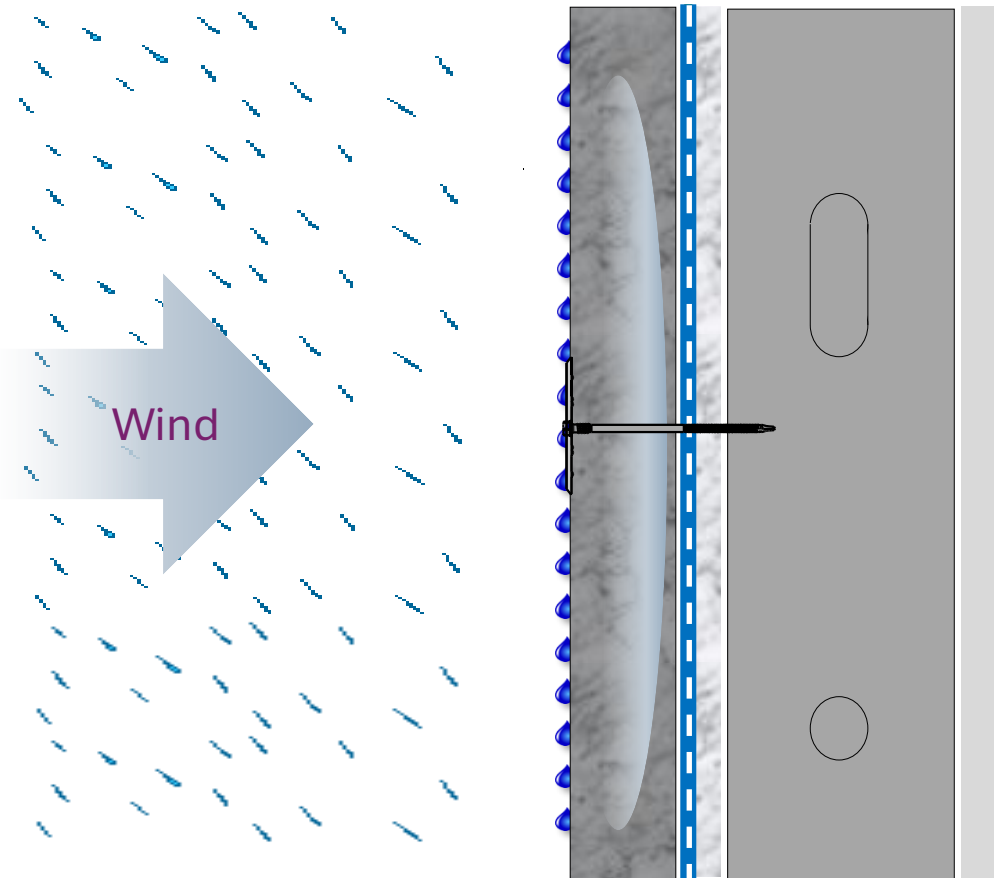
Lstiburek, J. Building Science Insight-001: The perfect Wall, www.buildingscience.com,



Jonathan Smegal & John Straube, BSCI, ROXUL
Drainage Balance Testing and Wall Comparison,
July 2014



What if...



Ian Bennie and Associates, January 2025



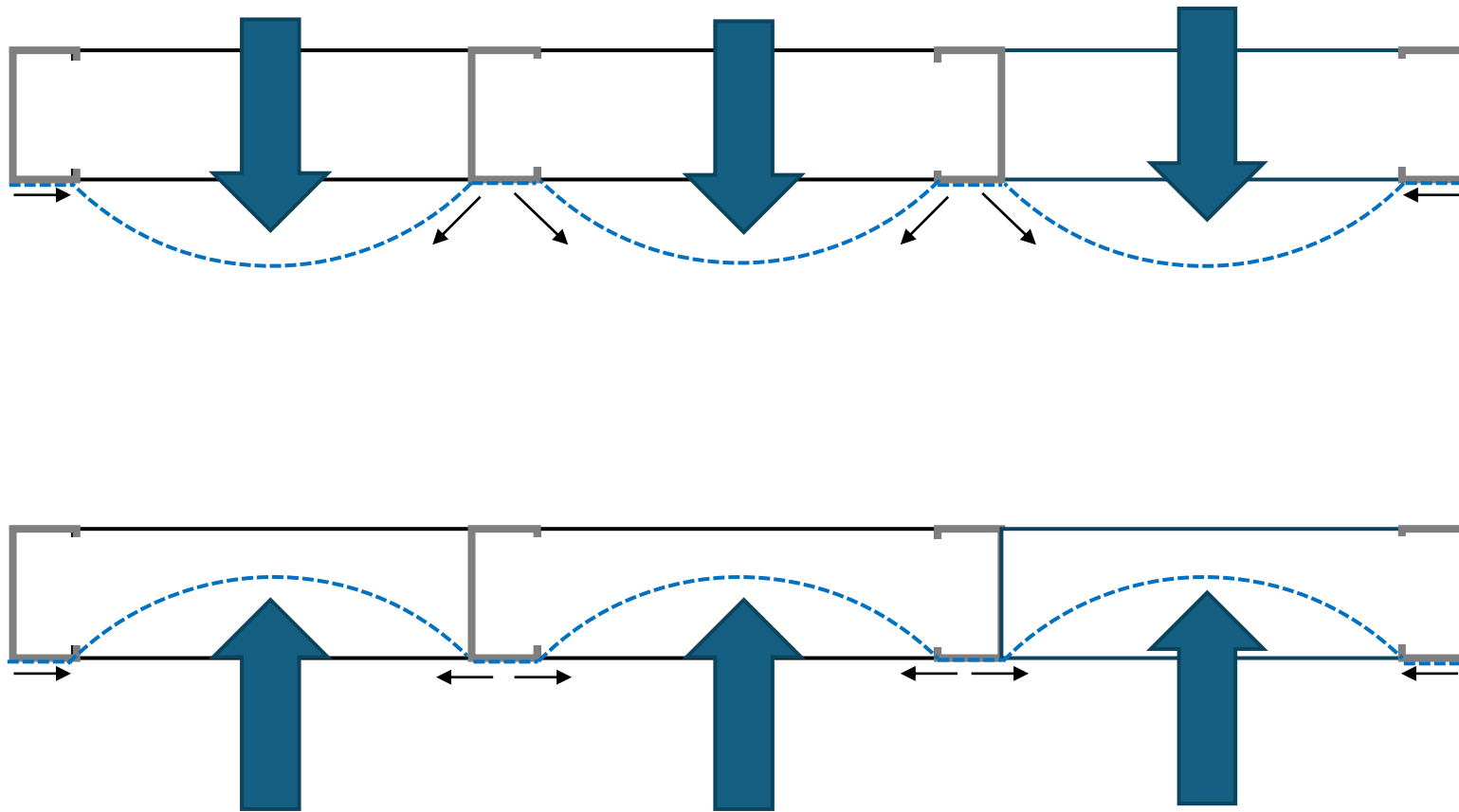
Facades

4

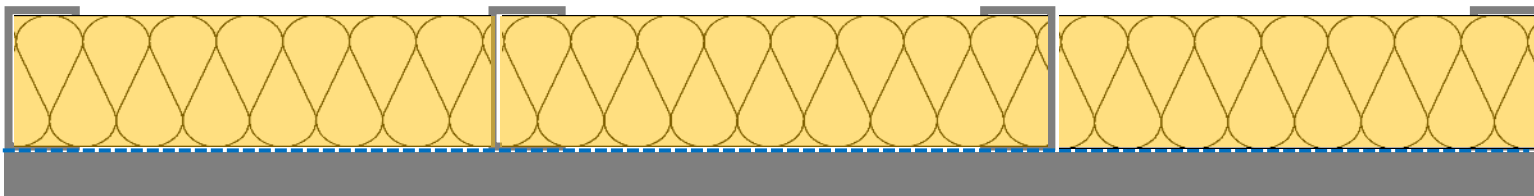
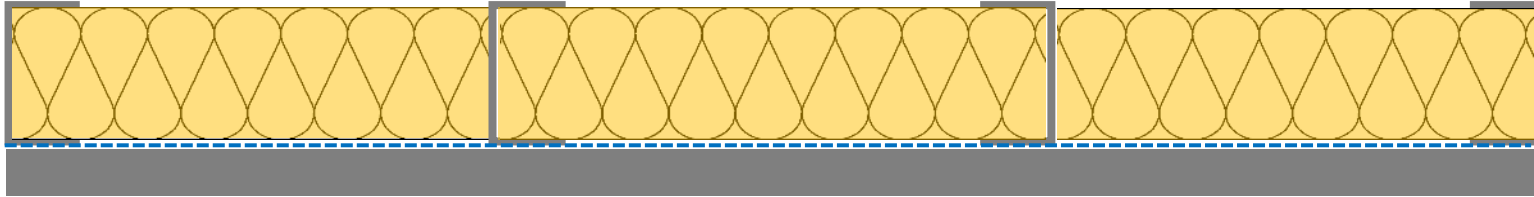
Wind Pressure

The most well sealed layer takes the wind pressure

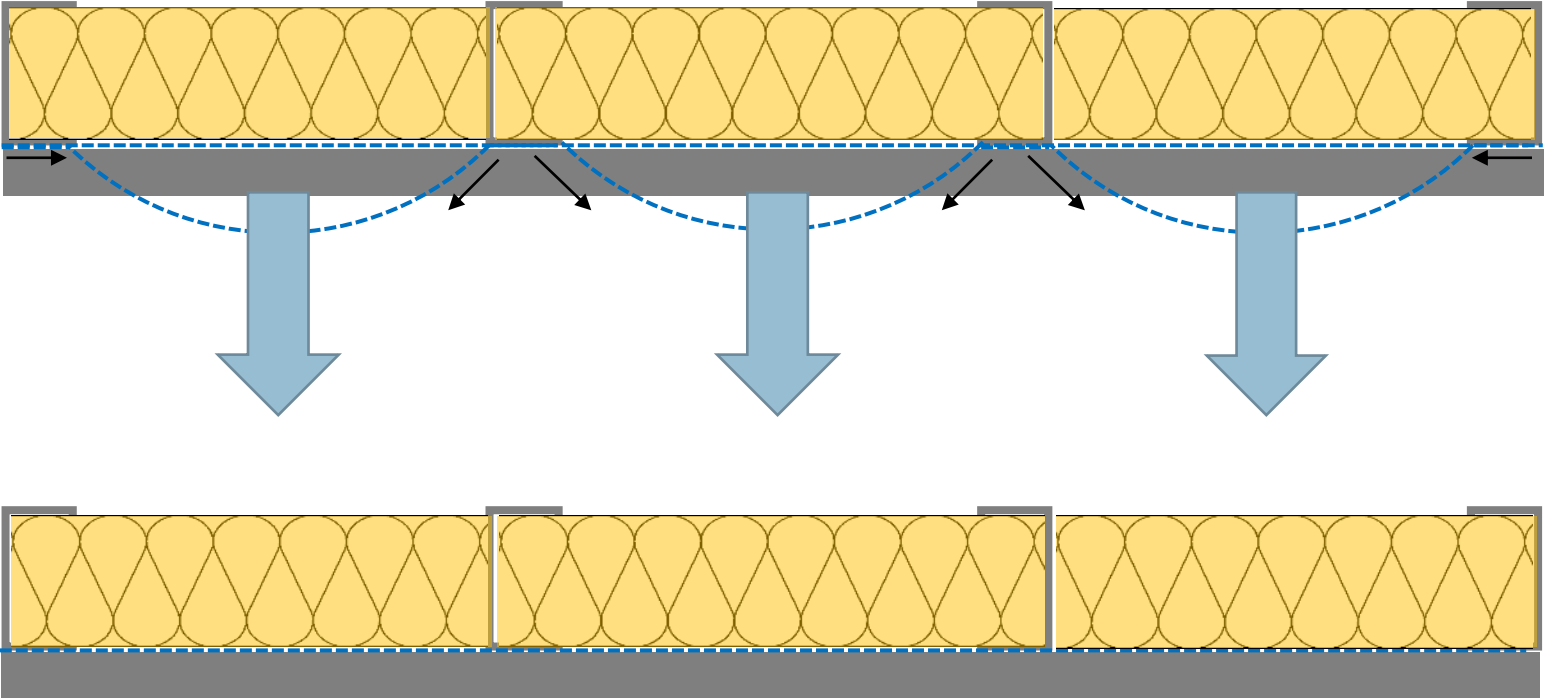
Pliable Building Membranes and Underlays



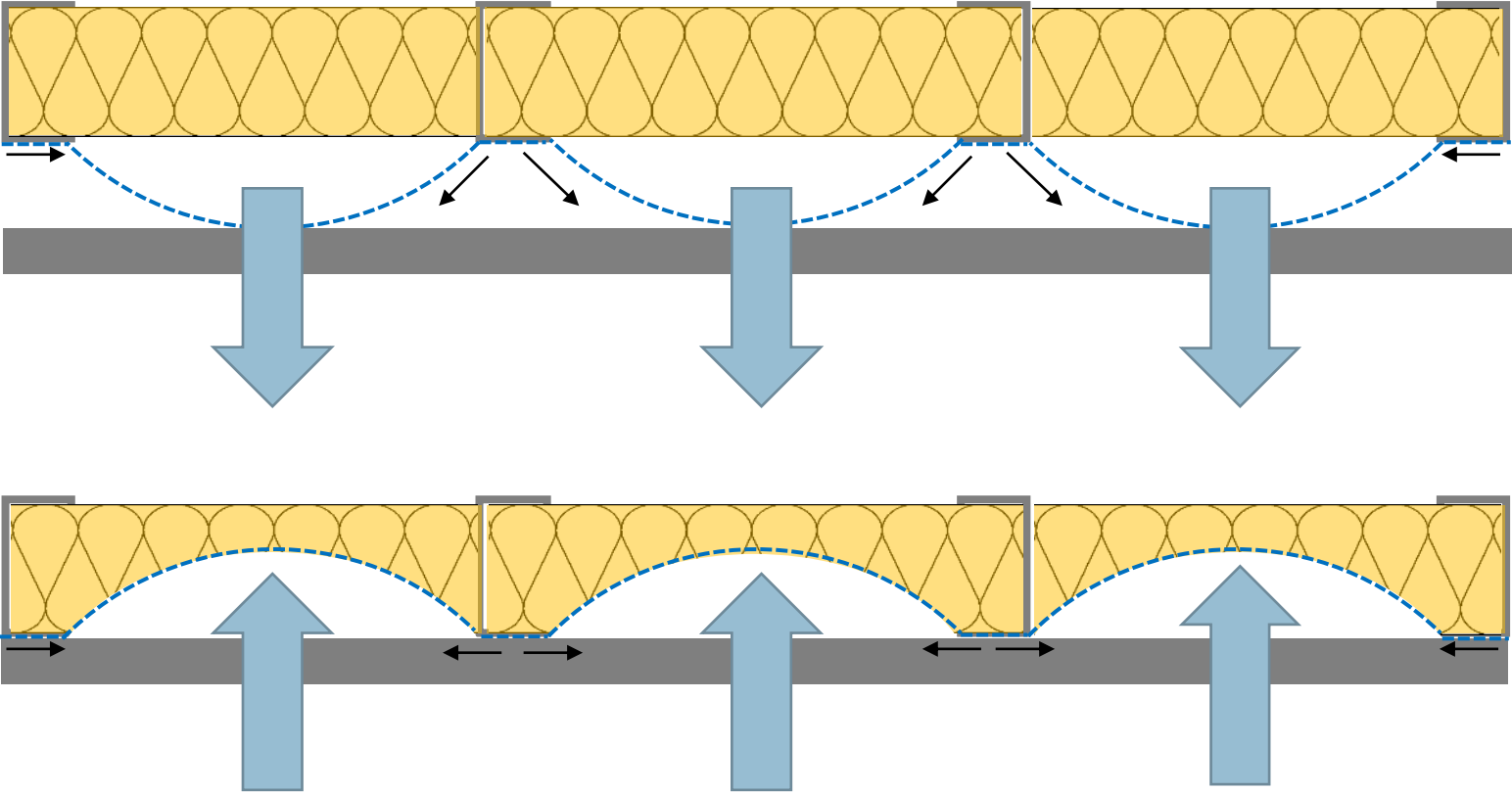
Pressure & Performance



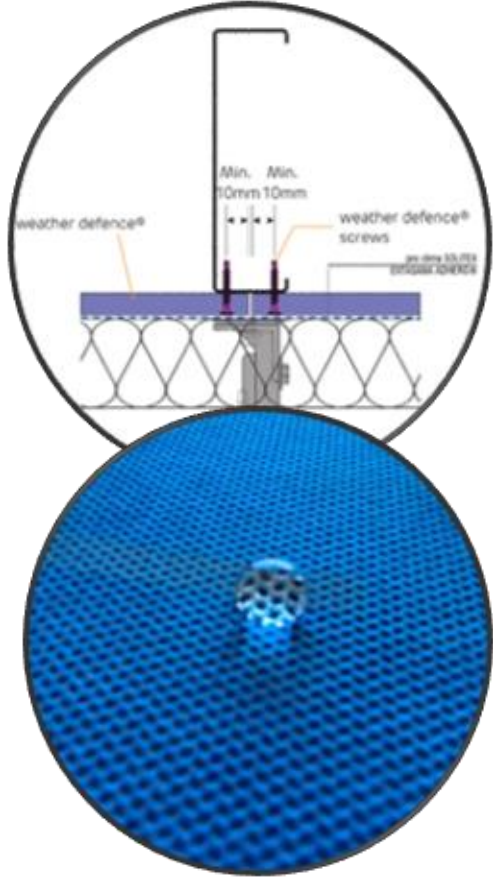
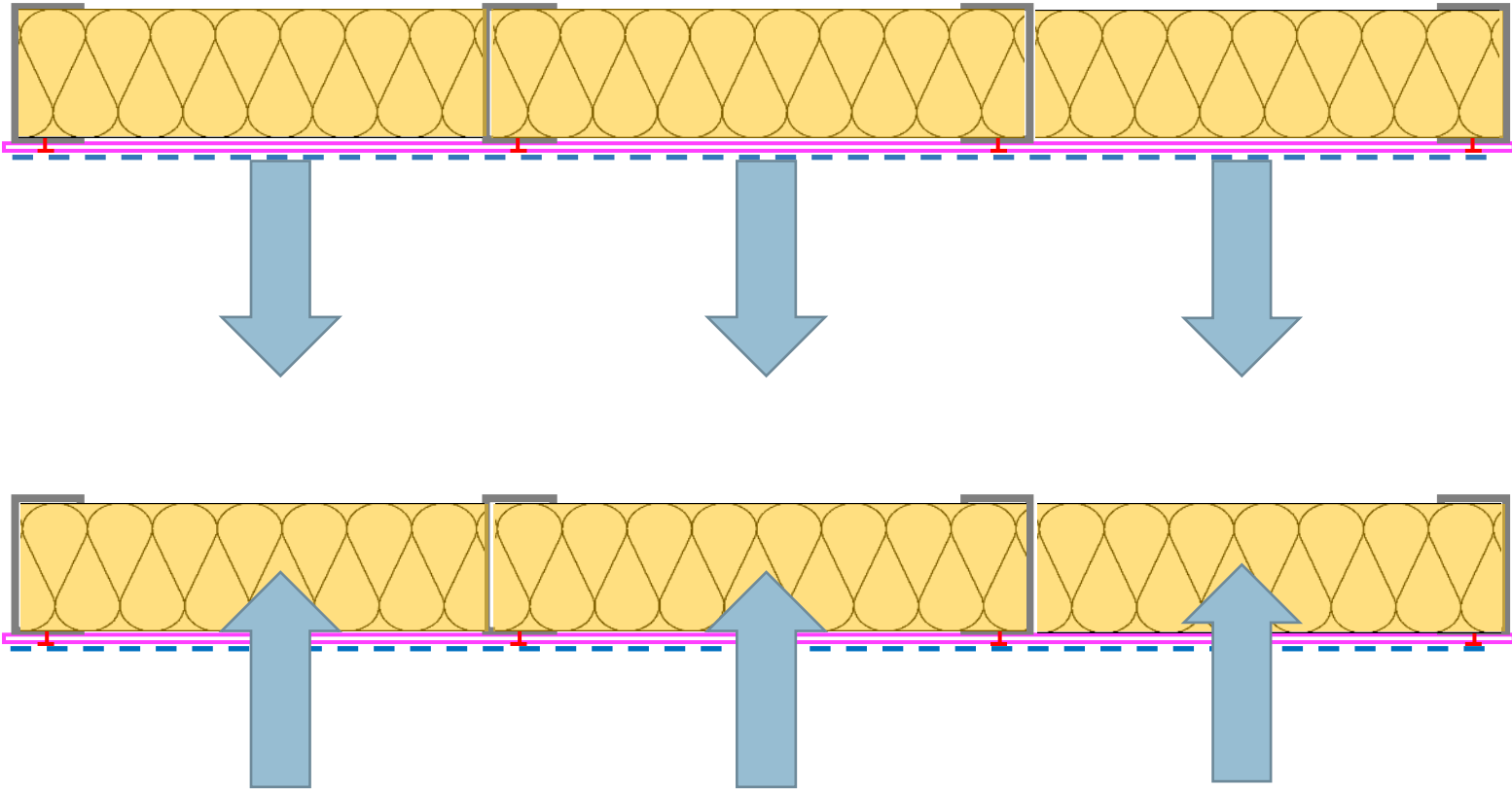
Pressure & Performance



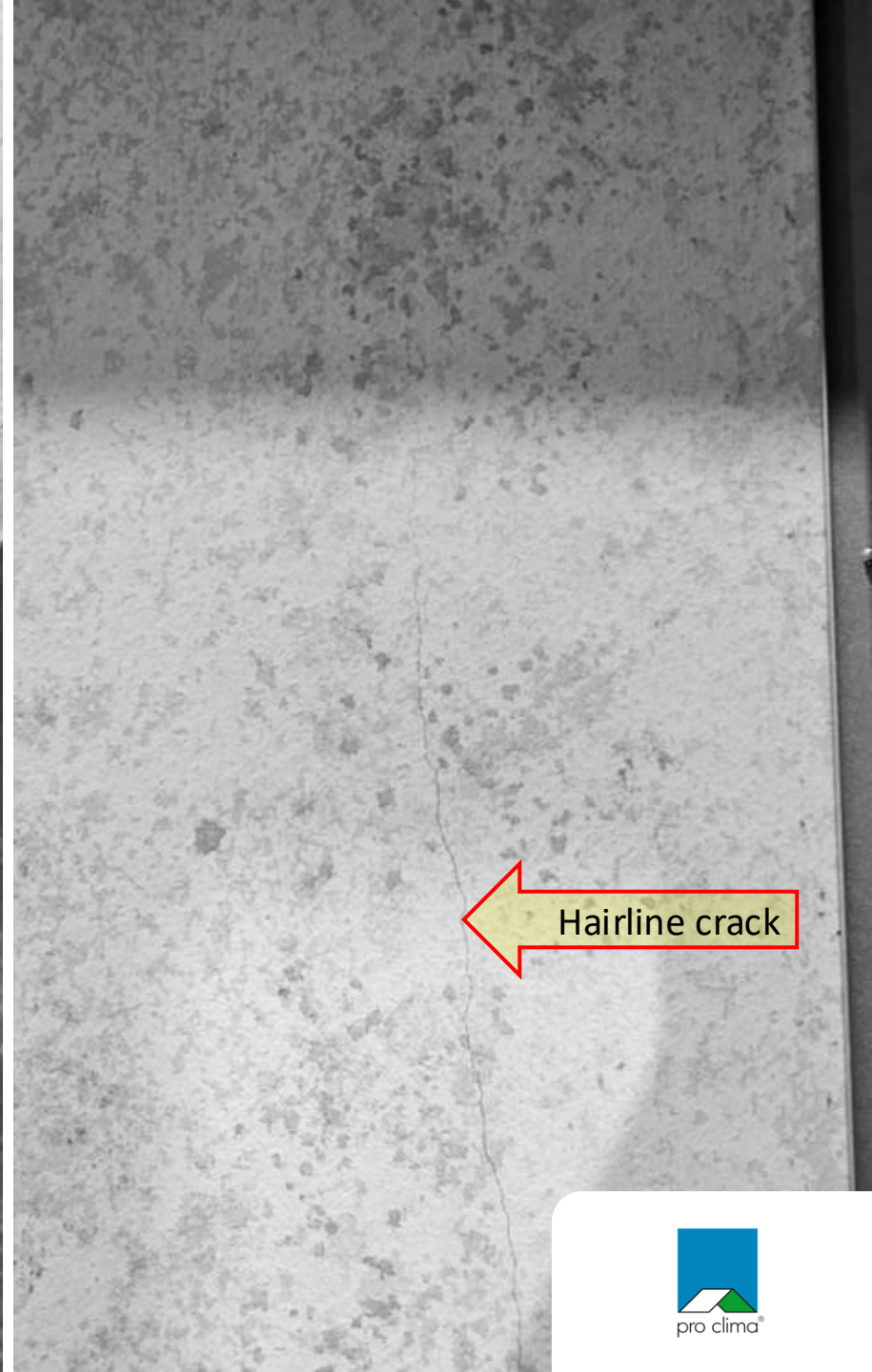
Pressure & Performance



Pressure & Performance

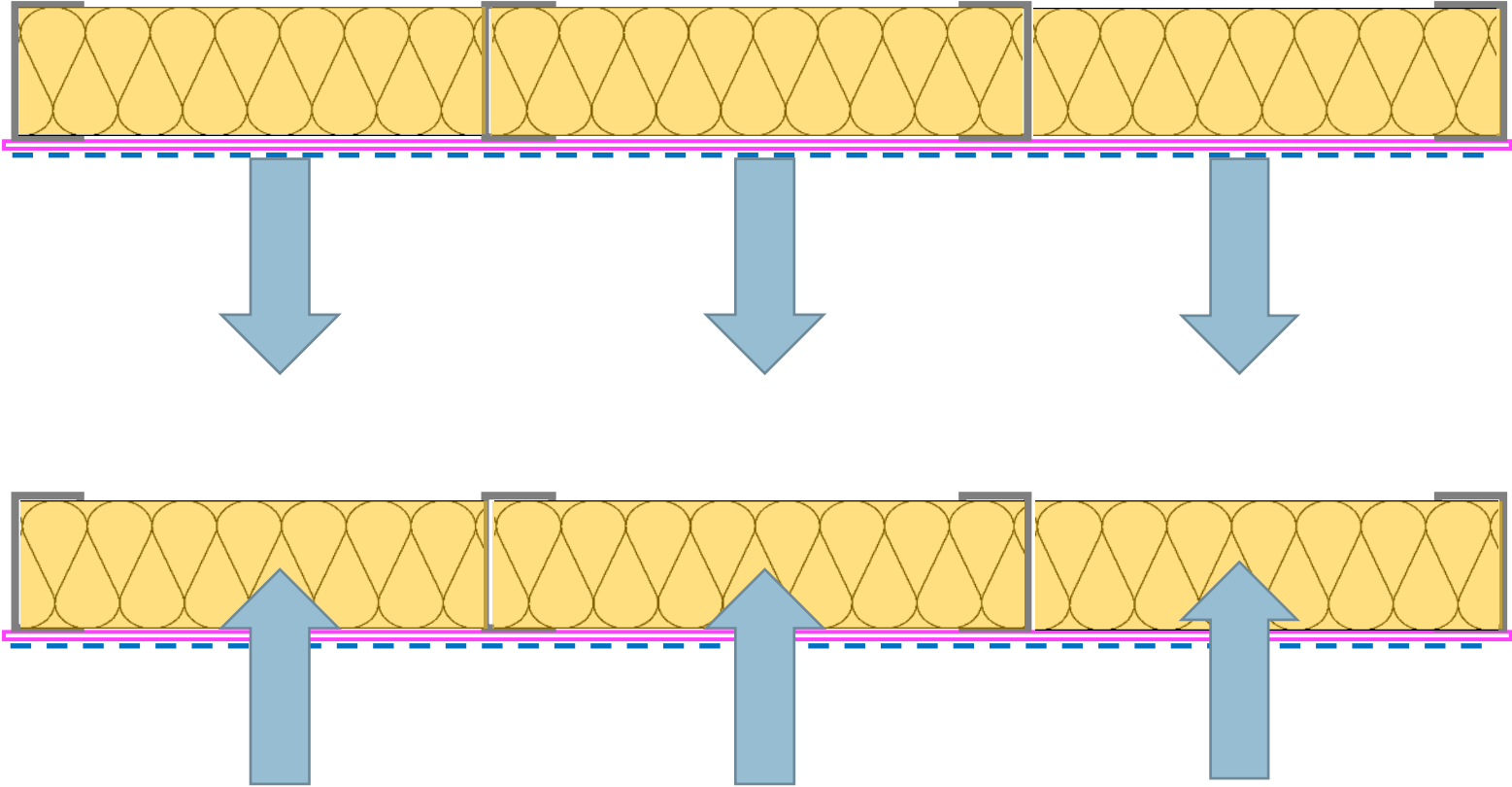


Building movement cracking
Wind pressure cracking
Screw head leaks

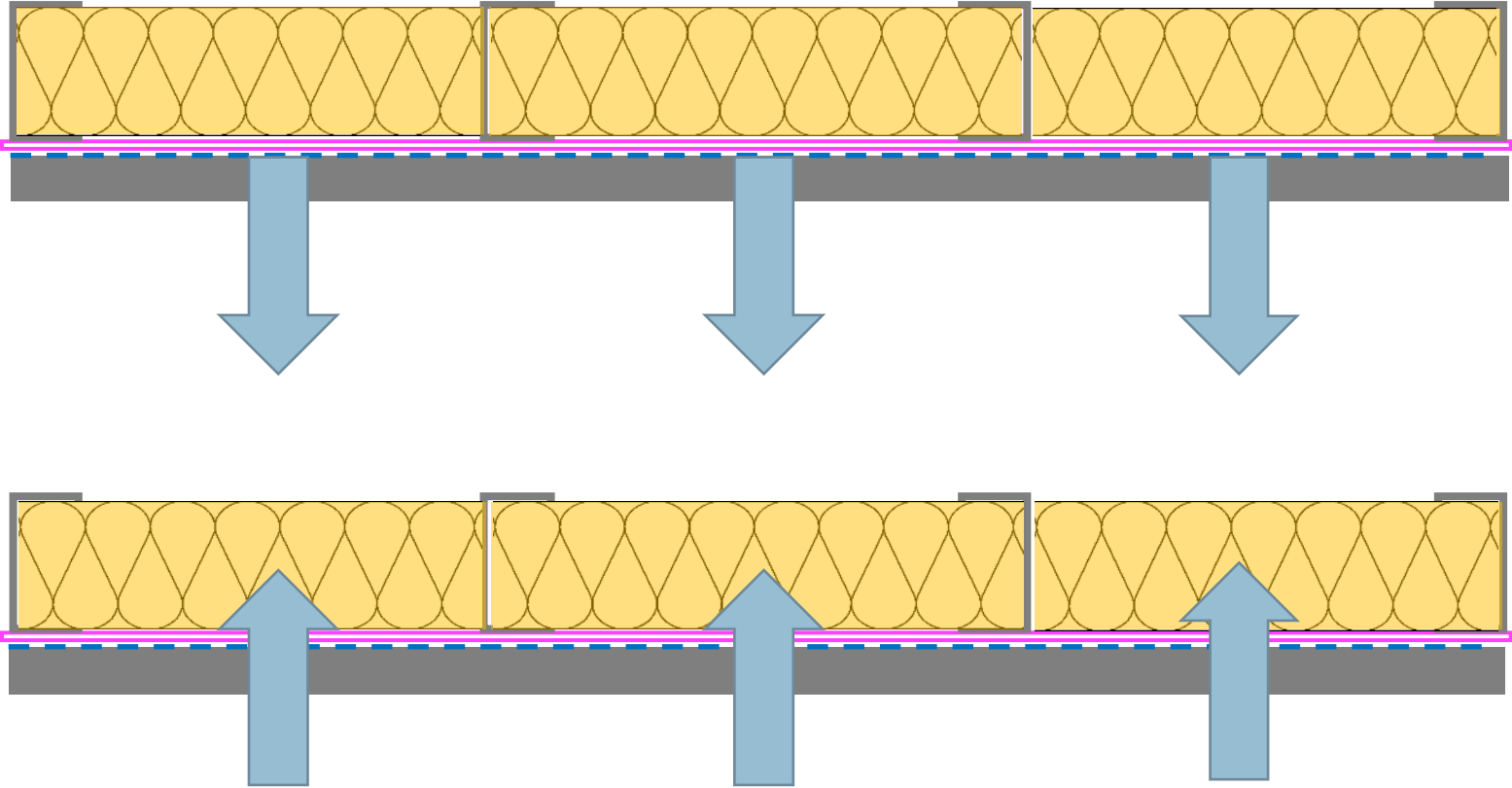


Hairline crack

Pressure & Performance



Pressure & Performance



Facades

5

Flexible Membranes

Details Drive the outcome

ROCKWOOL® Safe n Silent
Non-combustible Mineral Wool

PRESSFIX
Pressing Tool

SOLITEX EXTASANA
Class 4
Weather Resistive Barrier

DUPLEX
Double Sided
Adhesive Tape

TESCON EXTOSEAL®
Sill Tape

TESCON NAIDECK Patch
Self Sealing Patches

TESCON NAIDECK
Self Sealing Strip

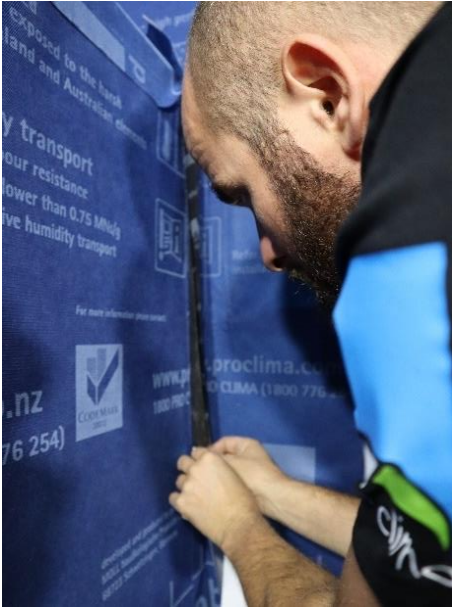
TESCON EXTORA®
Weathertight
Sealing Tape





*In all life, when a
thing works better,
usually it is more
beautiful to the eye.
Enzo Ferrari*

Full Scale Test with Cladding



Test the WRB + Cladding!



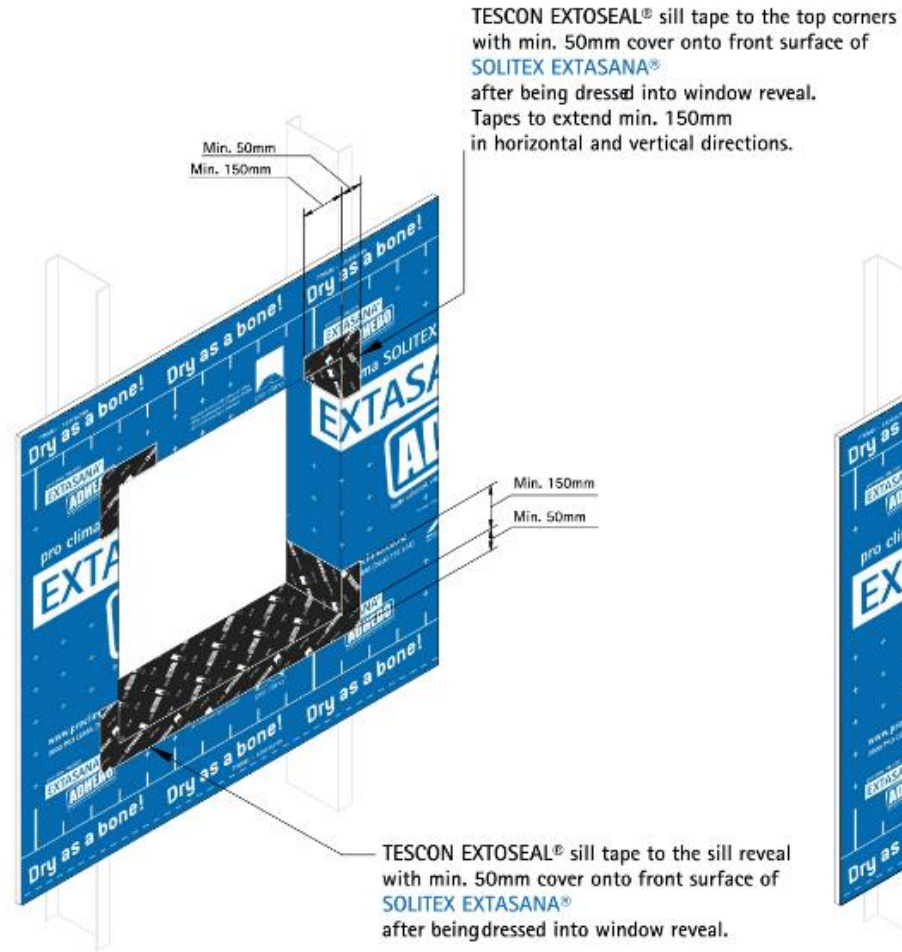
Facades

6

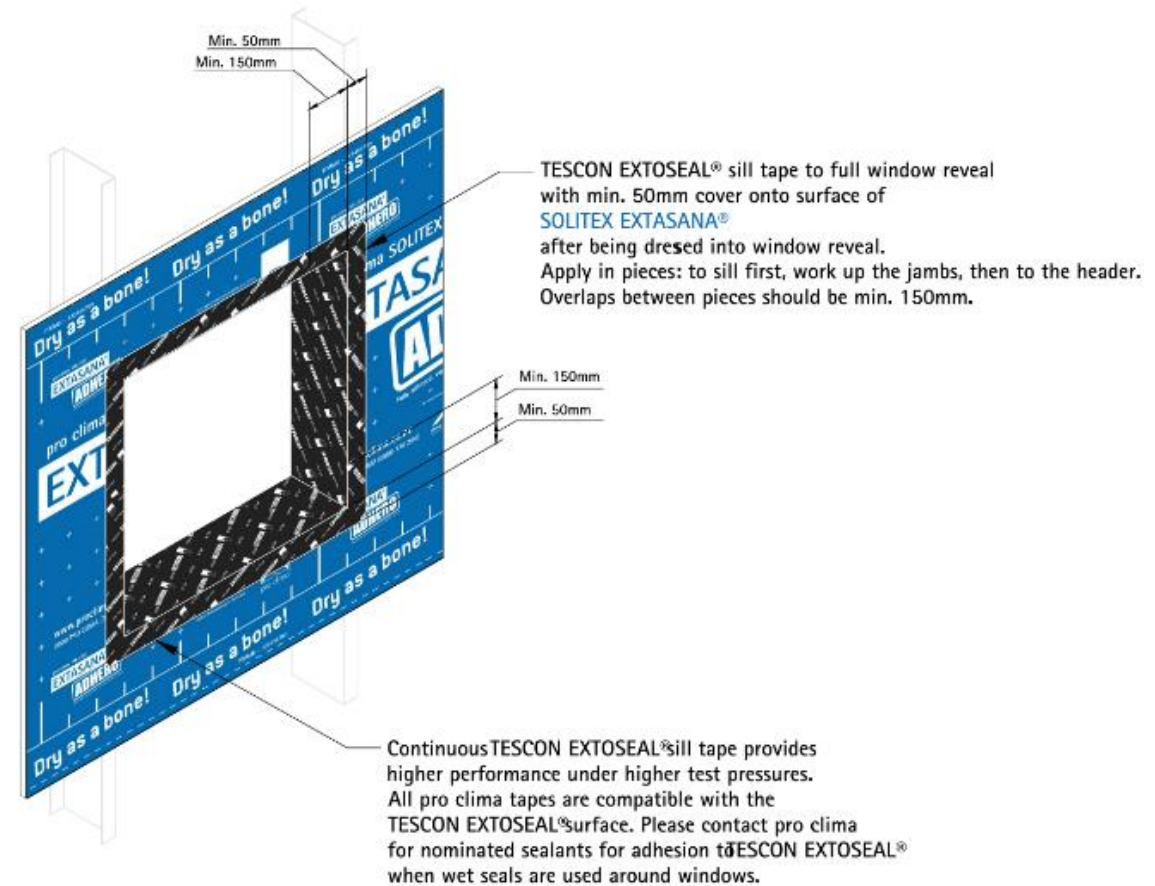
Windows

The critical Failure Point

AS/NZS 4284 Tested Window Details – TESCON EXTOSEAL®



1. Window Reveal – Using TESCON EXTOSEAL® Type 1 – Sill & Corners

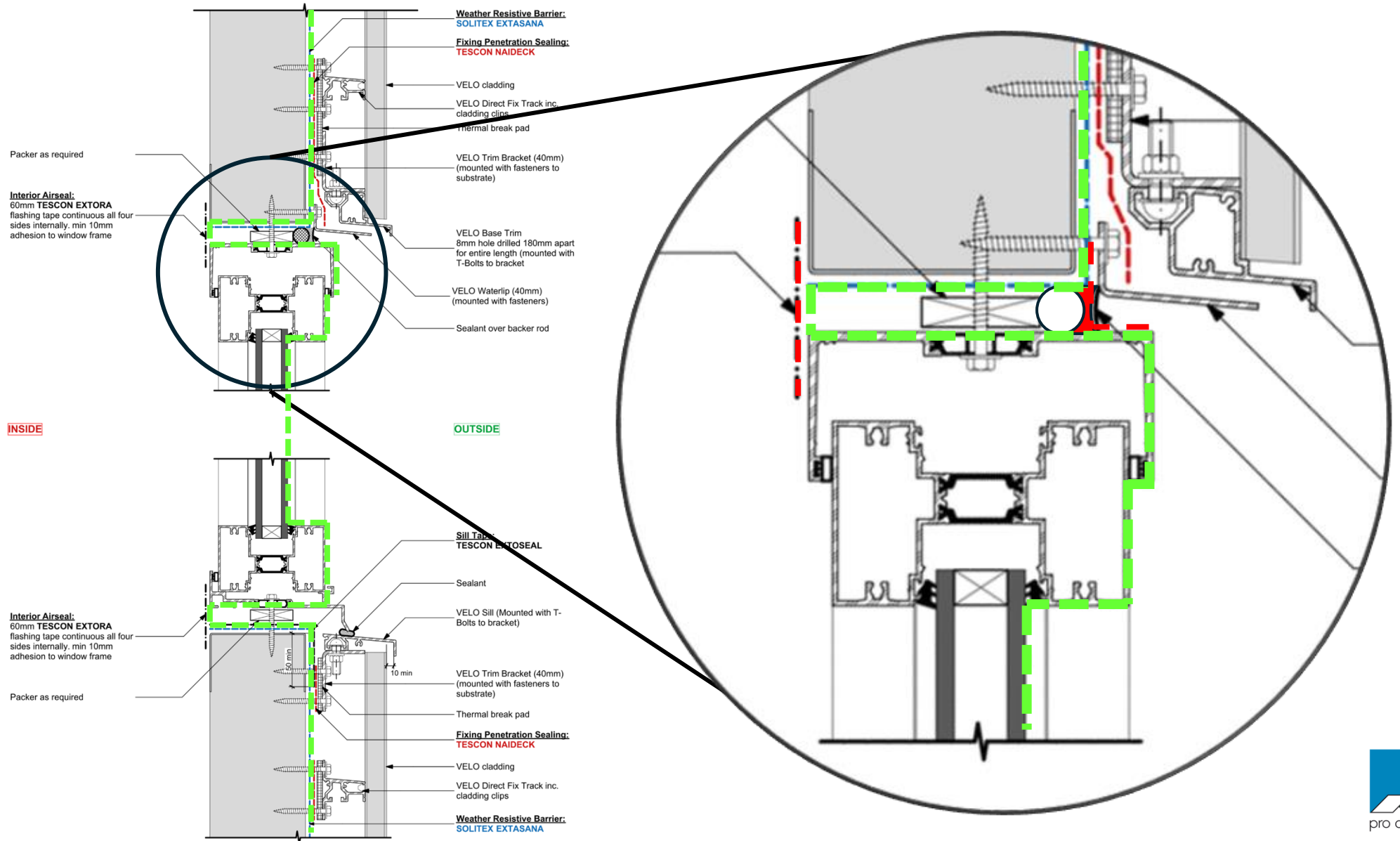


2. Window Reveal – Using TESCON EXTOSEAL® Type 2 – Continuous

TESCO



AS 4284 Tested Window Details – TESCON EXTORA®



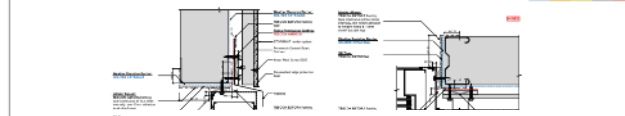


AS/NZS 4284 Tested Window Details – TESCON EXTORA®

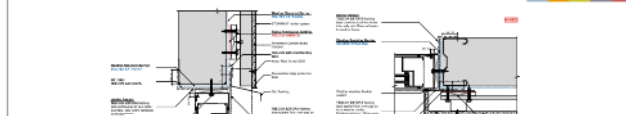
ES4441 Residential Recessed uPVC Window on Timber Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4241 Commercial Flush Aluminium Window on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



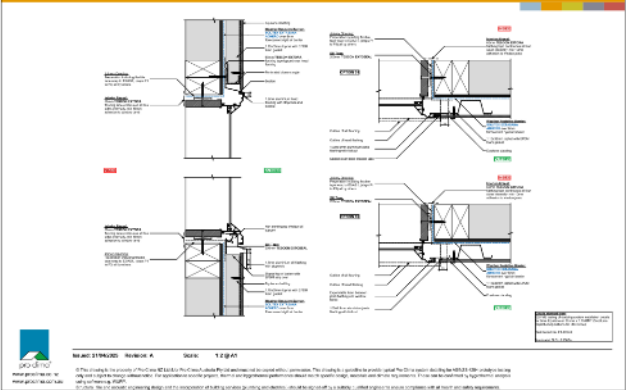
ES4242 Commercial Recessed Aluminium Window on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4243 Residential Flush Aluminium Window on Timber Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



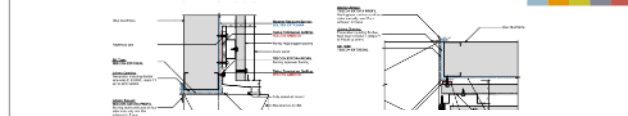
ES4244 Residential Flush Aluminium Window on Timber Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4245 Commercial Recessed Aluminium Window on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4541 Service Box on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



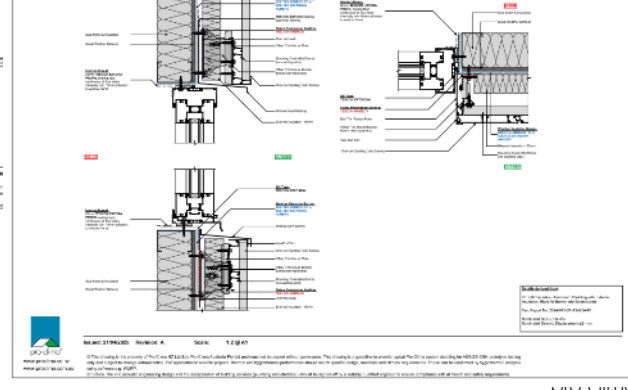
ES4246 Commercial Recessed Aluminium Window on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4252 Service Box on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



ES4247 Commercial Recessed Aluminium Window on Metal Structure
Weatheright Window Connection - TESCON EXTORA® Back Seal



Facades

7

Rigid Boards

Can handle the pressure

ROCKWOOL™ Safe n Silent
Non-combustible Mineral Wool

SOLITEX ADHERO® FC
SOLITEX EXTASANA ADHERO®
Adhesive WRB Membrane

PRESSFIX XL
Pressing Tool

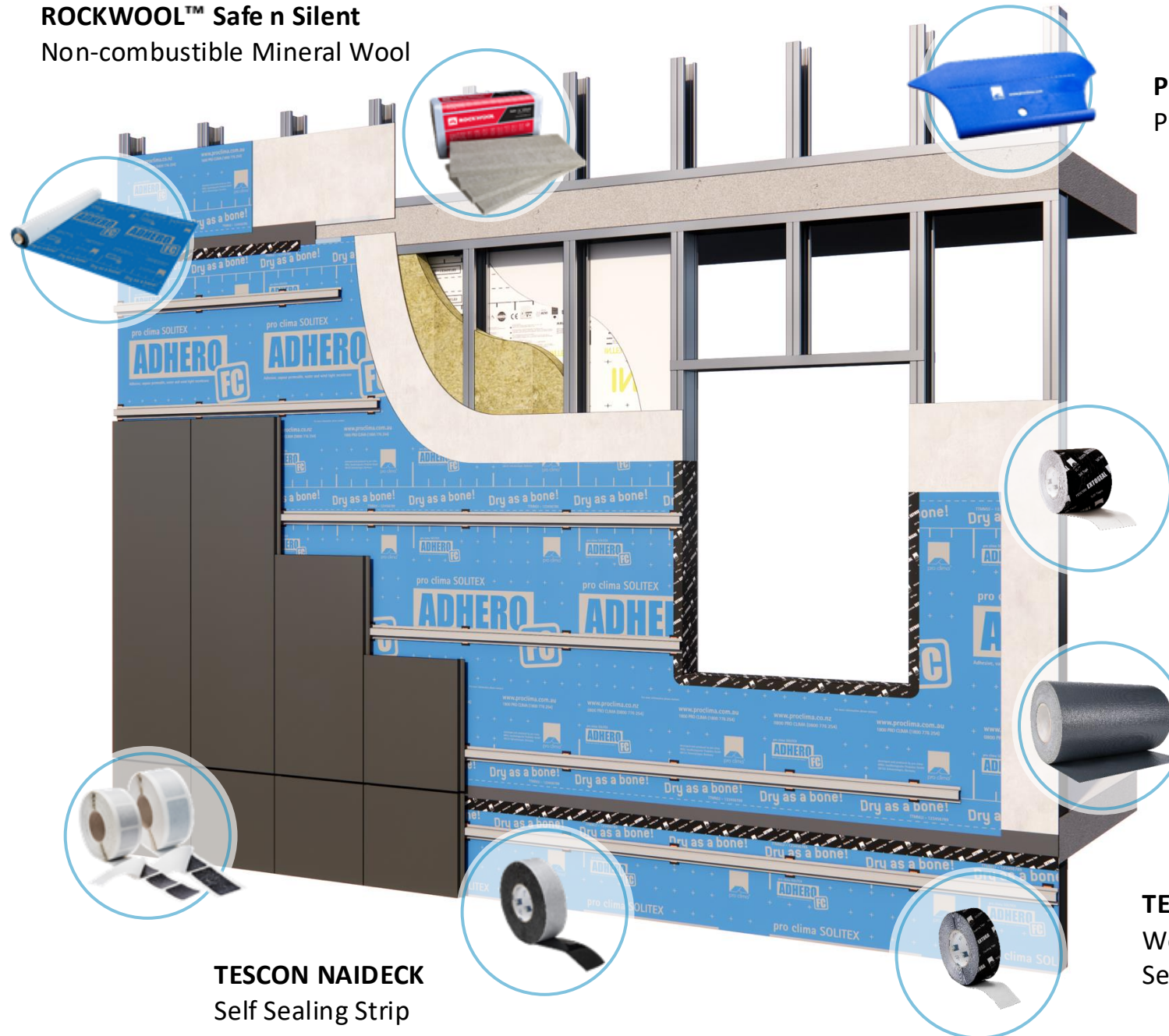
TESCON EXTOSEAL®
Sill Tape

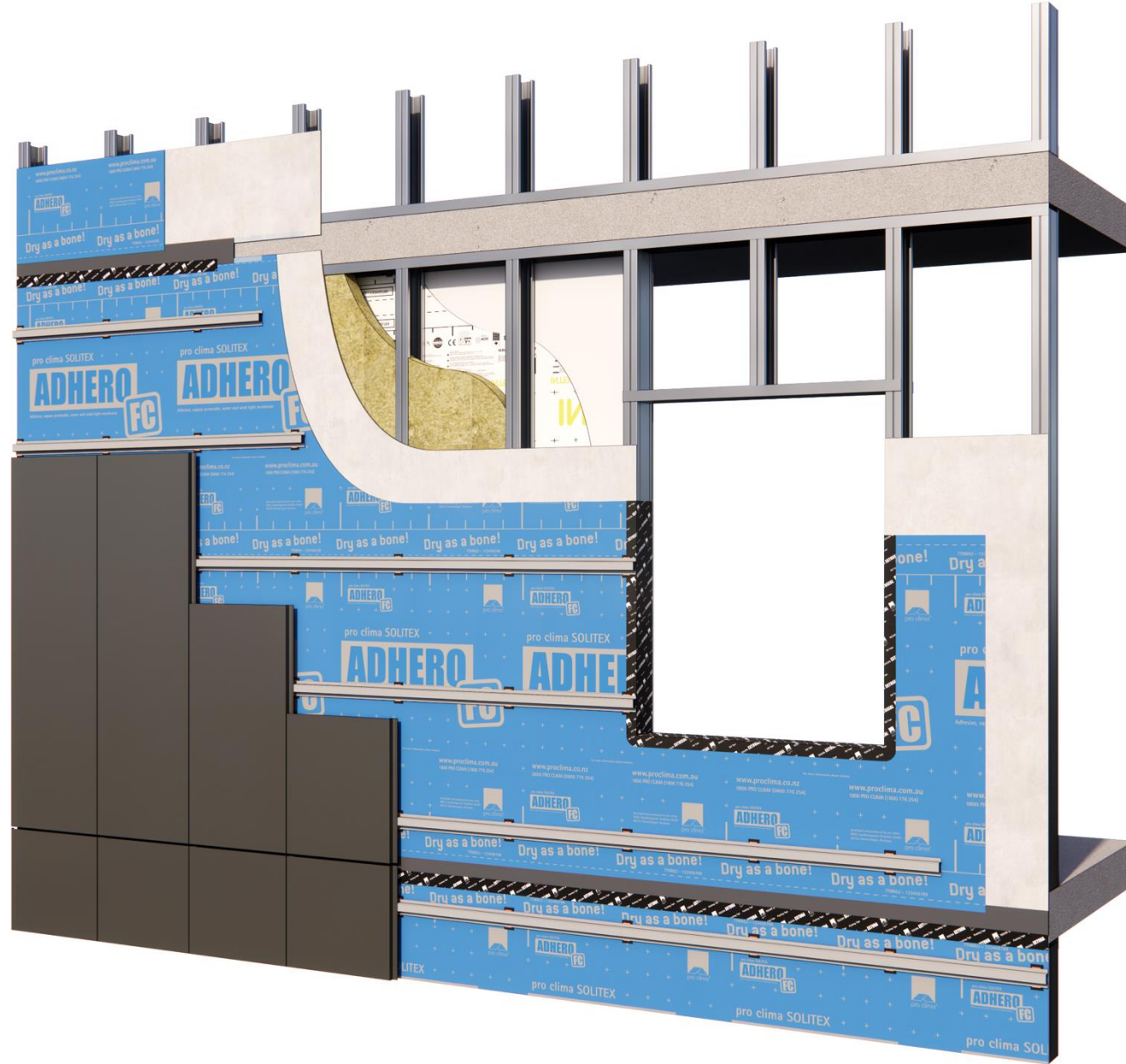
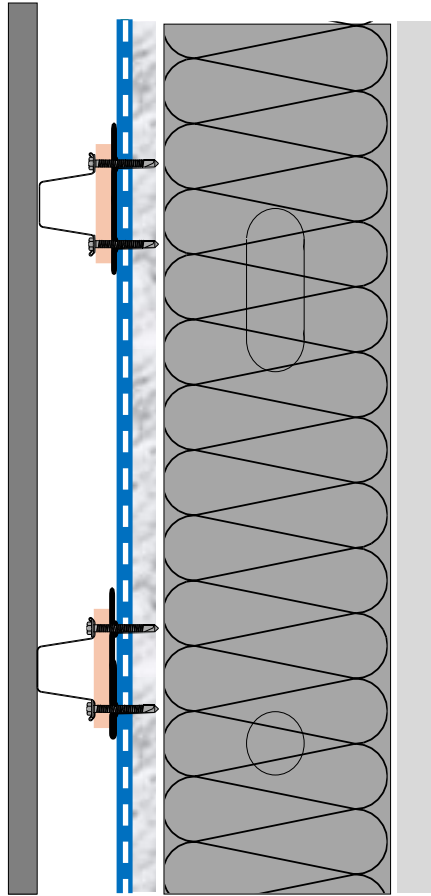
TFLEX
Façade Control
Joint Material

TESCON NAIDECK Patch
Self Sealing Patches

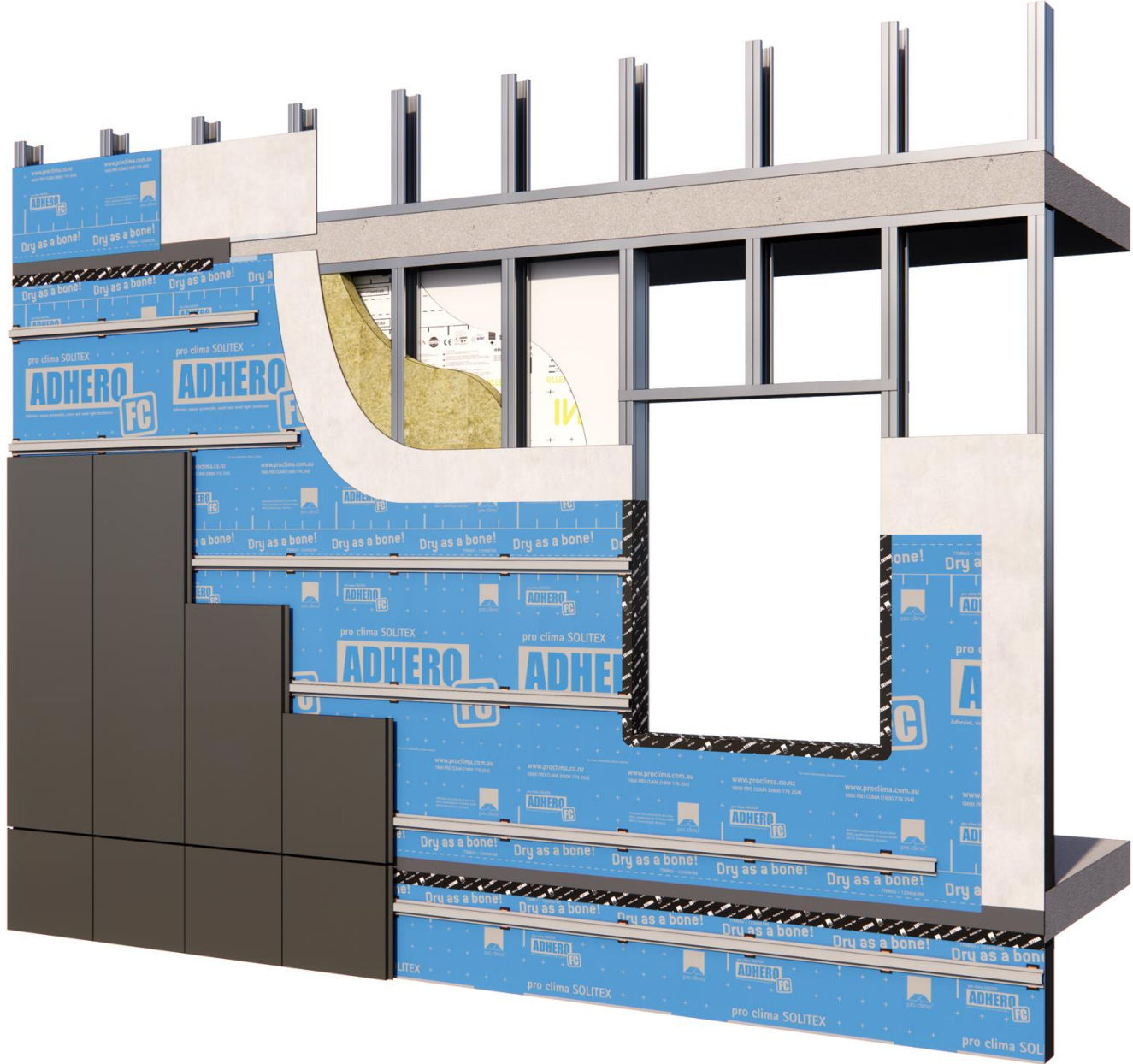
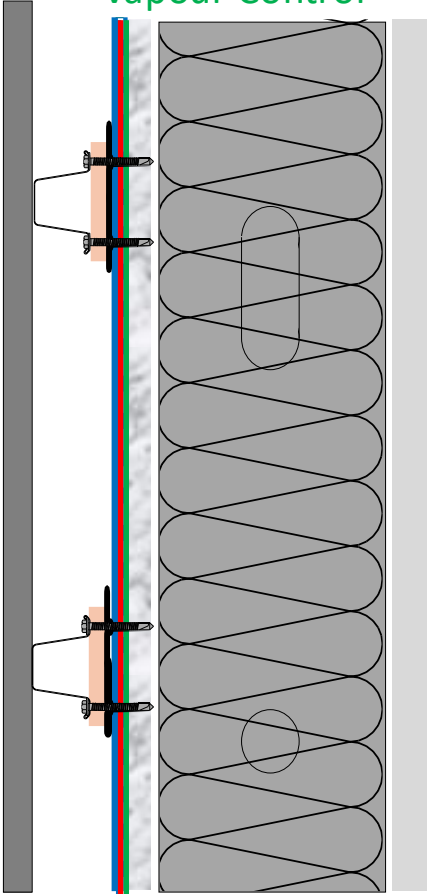
TESCON NAIDECK
Self Sealing Strip

TESCON EXTORA®
Weathertight
Sealing Tape

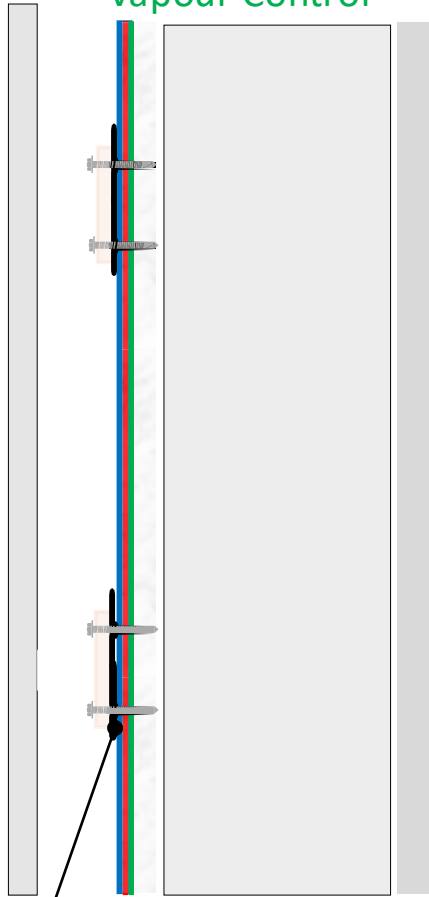




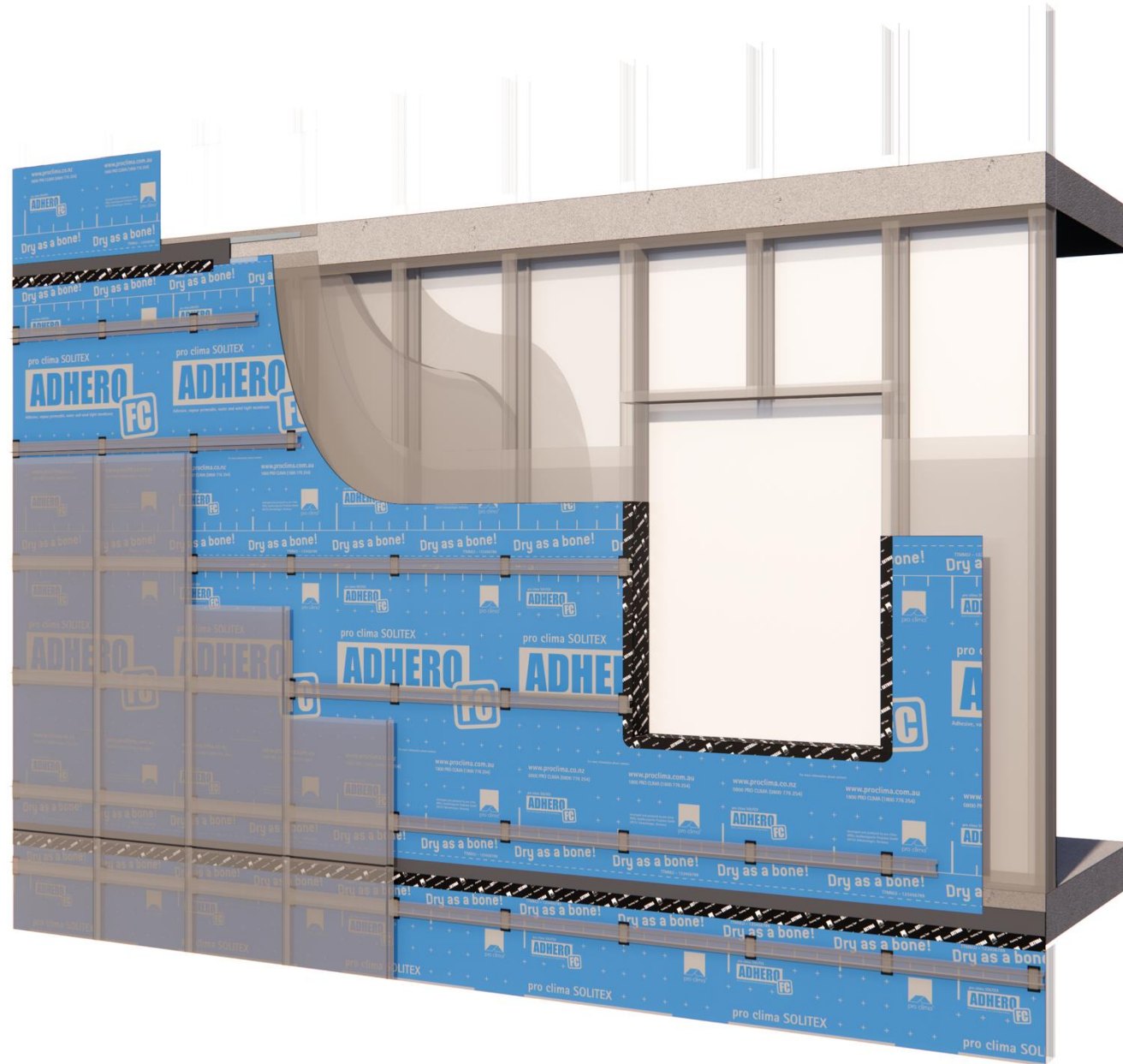
Water Barrier
Air Barrier
Vapour Control



Water Barrier
Air Barrier
Vapour Control



Attachments



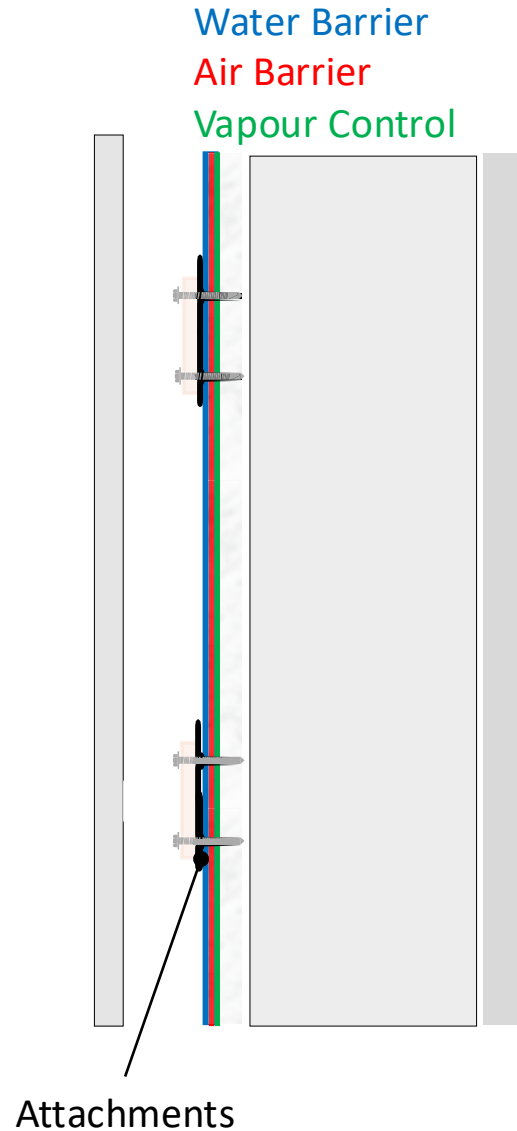
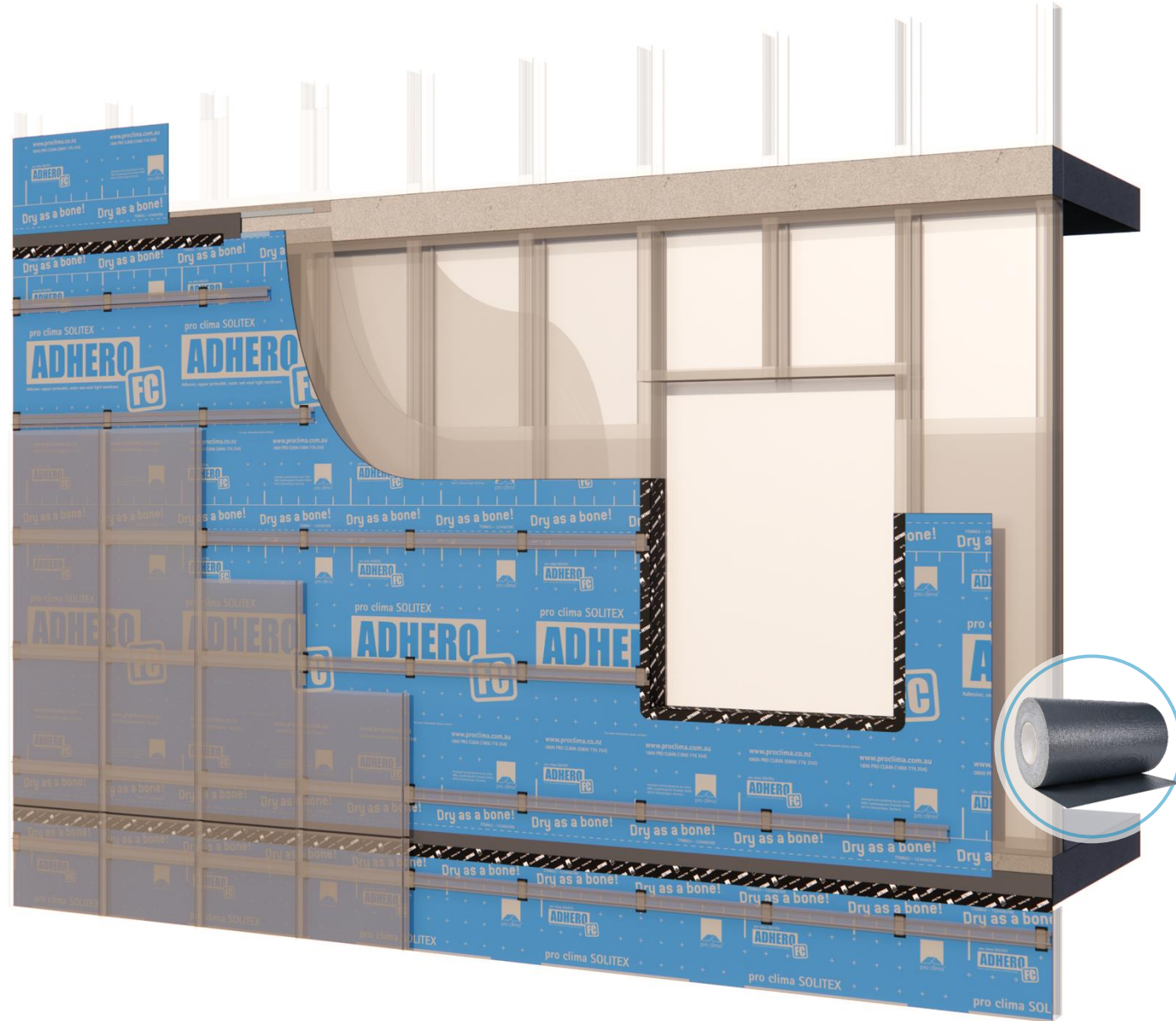


Table 4. Air Infiltration observations and results.

File: 2025-016-S1-AI1		Date: 03/03/2025
Chamber Pressure (Pa)	Sample Leakage (L/S)	Sample Leakage (L/S/m ²)
+150	0.3	Less than 0.1 [¶]
-150	0.1	Less than 0.1 [¶]
+50*	0.2	Less than 0.1 [¶]
-50*	0.2	Less than 0.1 [¶]
+75*	0.4	Less than 0.1 [¶]
-75*	0.1	Less than 0.1 [¶]
+300*	0.2	Less than 0.1 [¶]
-300*	0.1	Less than 0.1 [¶]





TFLEX
Façade Control
Joint Material



pro clima SOLITEX EXTASANA ADHERO®
Self-Adhesive Weather Resistive Barrier

SOLITEX EXTASANA ADHERO® provides the ultimate weather protection layer for your walls and roofs under all conditions. When fully adhered to rigid substrates, it provides protection from wind, driving rain and other external sources of water, whilst allowing escape through the vapour permeable, non-porous TEEE® layer.

- ✓ Superior UV resistance (180 days exposure)
- ✓ Isolates leaks caused by accidental damage or penetrations
- ✓ Outstanding long-term durability
- ✓ Ultimate resistance against extreme wind gusts
- ✓ Ideal for pre-fab systems

pro clima SOLITEX EXTASANA ADHERO®
Self-Adhesive Weather Resistive Barrier

Technical Data		Regulatory compliance	
Claim: Frost & protection layer		Membrane	Monosol, TEEE film
Adhesive	Water-resistant SOLUD adhesive	Water-resistant	SOLUD adhesive
Release film	Stainless steel PE film	Release film	Stainless steel PE film
UV stability and weather exposure	180 days	UV stability and weather exposure	180 days
Fire classification	Depends on substrate*	Fire classification	Depends on substrate*
Vapour classification	Class 4 (Water permeability)	Vapour classification	Class 4 (Water permeability)
Flammability index	< 5	Flammability index	< 5
Temperature resistance	-40 °C to +100 °C	Temperature resistance	-40 °C to +100 °C
Heat shrinkage @ 70°C	Max 1.0%	Heat shrinkage @ 70°C	Max 1.0%
Edge tear	Max 1.0%	Edge tear	Max 1.0%
Tensile strength	Max 1.0%	Tensile strength	Max 1.0%
Tack strength	Max 1.0%	Tack strength	Max 1.0%
Vapour permeance	0.000000	Vapour permeance	0.000000
Water control	Pass 1, 100 mm	Water control	Pass 1, 100 mm
Fastener	Fast / Back	Fastener	Fast / Back
Emulsifier	None	Emulsifier	None
Surface water absorbency	100 g/m²	Surface water absorbency	100 g/m²
Air control	1.1 MPerm	Air control	1.1 MPerm
Moisture shrinkage	Max 1.0%	Moisture shrinkage	Max 1.0%
Surface weight	140 g/m²	Surface weight	140 g/m²
Electrical conductivity	Electrolytic non-conductive	Electrical conductivity	Electrolytic non-conductive
*TEEE Performance Classification (Other Data: *Performance characteristics will be modified by the rigid substrate)			

IMPORTANT INFORMATION

- This product is deemed non-combustible* as it is less than 1mm thick and has flammability index less than 5.
- This product is designed to withstand up to 180 days UV exposure before cladding is installed.
- This product can withstand exposure to temperatures of up to 100°C and down to -40°C behind external claddings.

*According to NCC 2019 Vol 1 Cl 9.8 (a)(4), NCC 2019 Vol 2 3.7.1 (1), NCC 2022 Vol 1 Cl 9.8 (a)(4) & Cl 9.8 (a)(5) & Cl 9.8 (a)(6) & Cl 9.8 (a)(7) & Cl 9.8 (a)(8) & Cl 9.8 (a)(9) & Cl 9.8 (a)(10) & Cl 9.8 (a)(11) & Cl 9.8 (a)(12) & Cl 9.8 (a)(13) & Cl 9.8 (a)(14) & Cl 9.8 (a)(15) & Cl 9.8 (a)(16) & Cl 9.8 (a)(17) & Cl 9.8 (a)(18) & Cl 9.8 (a)(19) & Cl 9.8 (a)(20) & Cl 9.8 (a)(21) & Cl 9.8 (a)(22) & Cl 9.8 (a)(23) & Cl 9.8 (a)(24) & Cl 9.8 (a)(25) & Cl 9.8 (a)(26) & Cl 9.8 (a)(27) & Cl 9.8 (a)(28) & Cl 9.8 (a)(29) & Cl 9.8 (a)(30) & Cl 9.8 (a)(31) & Cl 9.8 (a)(32) & Cl 9.8 (a)(33) & Cl 9.8 (a)(34) & Cl 9.8 (a)(35) & Cl 9.8 (a)(36) & Cl 9.8 (a)(37) & Cl 9.8 (a)(38) & Cl 9.8 (a)(39) & Cl 9.8 (a)(40) & Cl 9.8 (a)(41) & Cl 9.8 (a)(42) & Cl 9.8 (a)(43) & Cl 9.8 (a)(44) & Cl 9.8 (a)(45) & Cl 9.8 (a)(46) & Cl 9.8 (a)(47) & Cl 9.8 (a)(48) & Cl 9.8 (a)(49) & Cl 9.8 (a)(50) & Cl 9.8 (a)(51) & Cl 9.8 (a)(52) & Cl 9.8 (a)(53) & Cl 9.8 (a)(54) & Cl 9.8 (a)(55) & Cl 9.8 (a)(56) & Cl 9.8 (a)(57) & Cl 9.8 (a)(58) & Cl 9.8 (a)(59) & Cl 9.8 (a)(60) & Cl 9.8 (a)(61) & Cl 9.8 (a)(62) & Cl 9.8 (a)(63) & Cl 9.8 (a)(64) & Cl 9.8 (a)(65) & Cl 9.8 (a)(66) & Cl 9.8 (a)(67) & Cl 9.8 (a)(68) & Cl 9.8 (a)(69) & Cl 9.8 (a)(70) & Cl 9.8 (a)(71) & Cl 9.8 (a)(72) & Cl 9.8 (a)(73) & Cl 9.8 (a)(74) & Cl 9.8 (a)(75) & Cl 9.8 (a)(76) & Cl 9.8 (a)(77) & Cl 9.8 (a)(78) & Cl 9.8 (a)(79) & Cl 9.8 (a)(80) & Cl 9.8 (a)(81) & Cl 9.8 (a)(82) & Cl 9.8 (a)(83) & Cl 9.8 (a)(84) & Cl 9.8 (a)(85) & Cl 9.8 (a)(86) & Cl 9.8 (a)(87) & Cl 9.8 (a)(88) & Cl 9.8 (a)(89) & Cl 9.8 (a)(90) & Cl 9.8 (a)(91) & Cl 9.8 (a)(92) & Cl 9.8 (a)(93) & Cl 9.8 (a)(94) & Cl 9.8 (a)(95) & Cl 9.8 (a)(96) & Cl 9.8 (a)(97) & Cl 9.8 (a)(98) & Cl 9.8 (a)(99) & Cl 9.8 (a)(100)

PRODUCT DESCRIPTION
SOLITEX EXTASANA ADHERO® is a UV stabilised and tear resistant self-adhesive weather resistive barrier (WRB). A non-porous water resistant TEEE film is laminated at high temperature between two layers of spun bonded polypropylene with a full layer of water-resistant SOLUD adhesive and siliconised release paper.

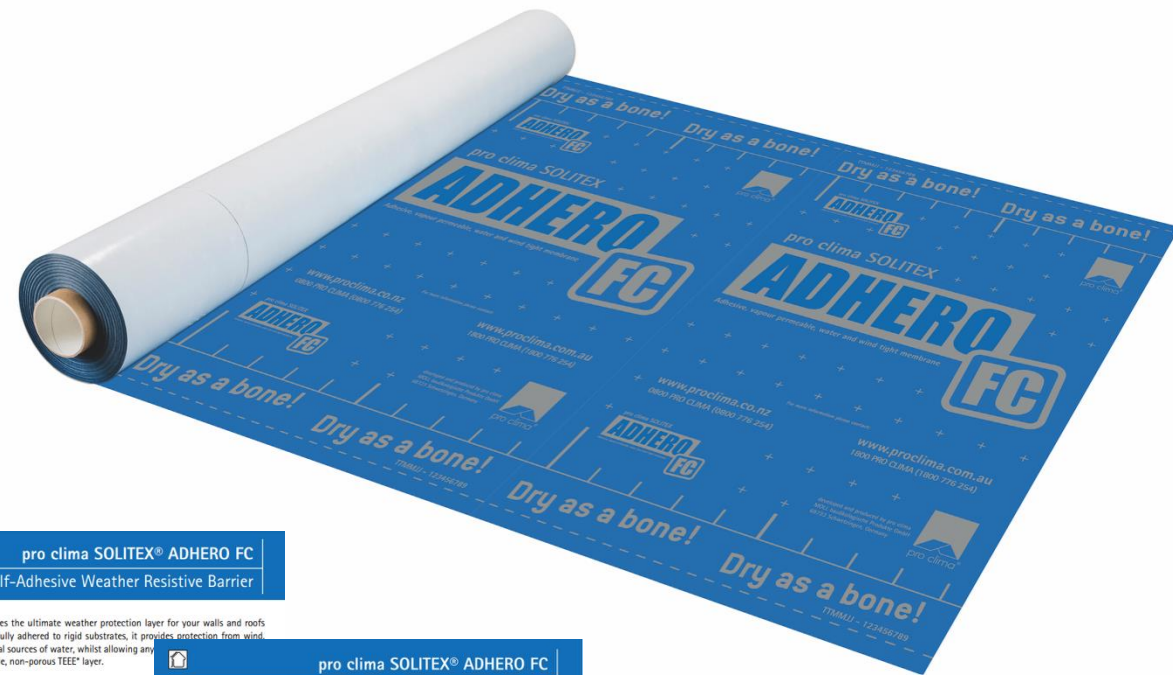
WEATHER EXPOSURE
This product is a weather resistive barrier (WRB) designed to withstand up to 180 days direct exposure to UV and still fulfil the intended use for air and water control. Exterior cladding should be detailed to prevent direct sunlight onto the membrane in service.

APPLICATION NOTES
This product is suitable for use in BAL regions up to and including BAL FZ in accordance with AS 3958

Delivery Form	ID CODE	LENGTH	WIDTH	AREA	KG/ROLL	QTY
1480x1000	3000	1.5 m	45 m	12	1	

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pro clima SOLITEX® ADHERO FC
Self-Adhesive Weather Resistive Barrier

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- ✓ Isolates leaks caused by accidental damage or penetrations
- ✓ Outstanding long-term durability
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Vapour classification	Class 4 (Water permeability)	Vapour classification	Class 4 (Water permeability)
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Temperature resistance	-40 °C to +100 °C	Temperature resistance	-40 °C to +100 °C
Heat shrinkage @ 70°C	Max 1.0%	Heat shrinkage @ 70°C	Max 1.0%
Edge tear	Max 1.0%	Edge tear	Max 1.0%
Tensile strength	Max 1.0%	Tensile strength	Max 1.0%
Tack strength	Max 1.0%	Tack strength	Max 1.0%
Vapour performance	0.000000	Vapour performance	0.000000
Water control	Pass 1, 100 mm	Water control	Pass 1, 100 mm
Fastener	Fast / Back	Fastener	Fast / Back
Emulsifier	None	Emulsifier	None
Surface water absorbency	100 g/m²	Surface water absorbency	100 g/m²
Air control	1.1 MPerm	Air control	1.1 MPerm
Moisture shrinkage	Max 1.0%	Moisture shrinkage	Max 1.0%
Surface weight	140 g/m²	Surface weight	140 g/m²
Electrical conductivity	Electrolytic non-conductive	Electrical conductivity	Electrolytic non-conductive
*TEEE Performance Classification (Other Data: *Performance characteristics will be modified by the rigid substrate)			

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PRODUCT DESCRIPTION
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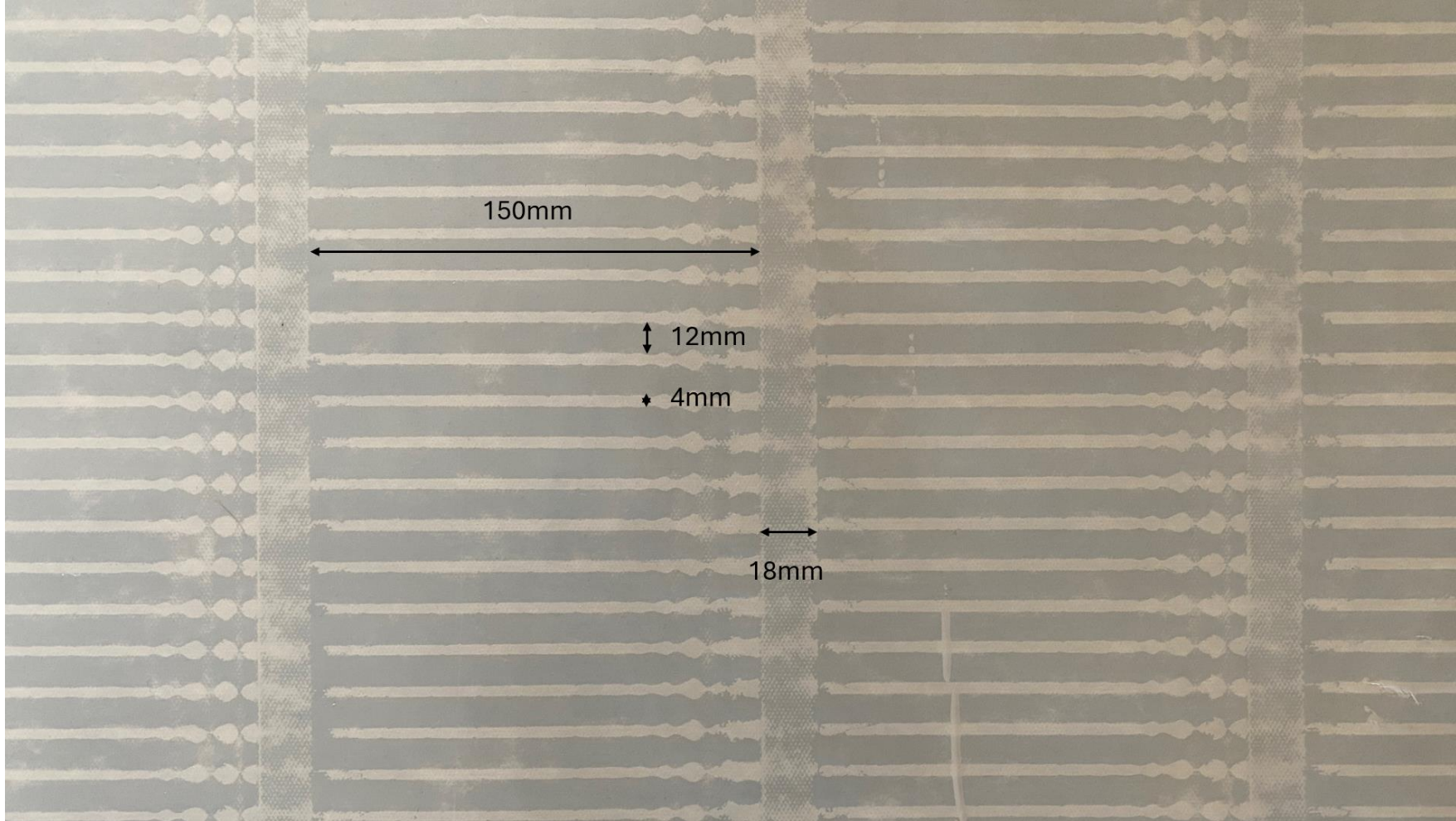
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www.proclima.com.au

2.1 MN.s/g

0.59 MN.s/g

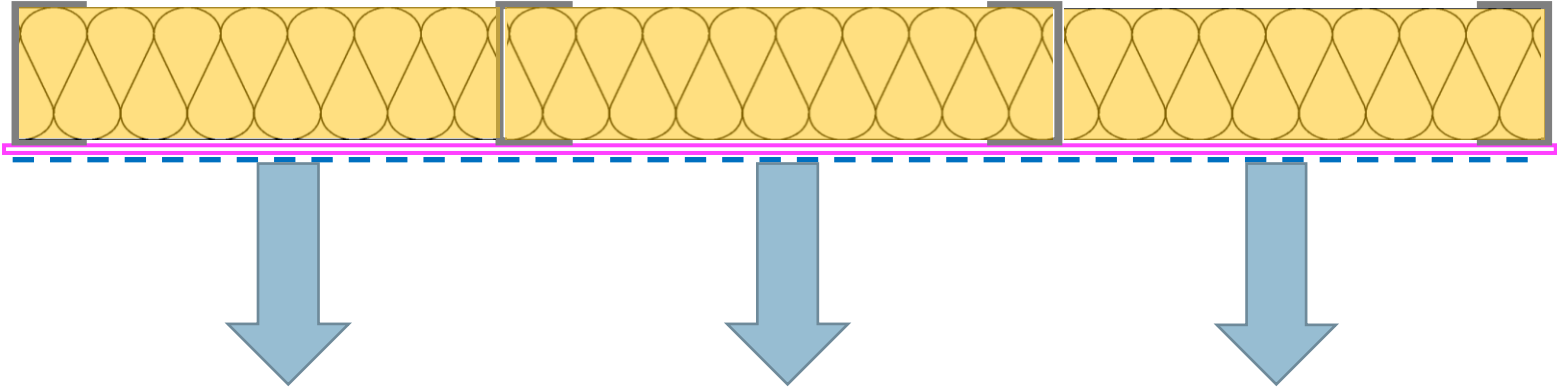


Why SOLITEX ADHERO® FC?

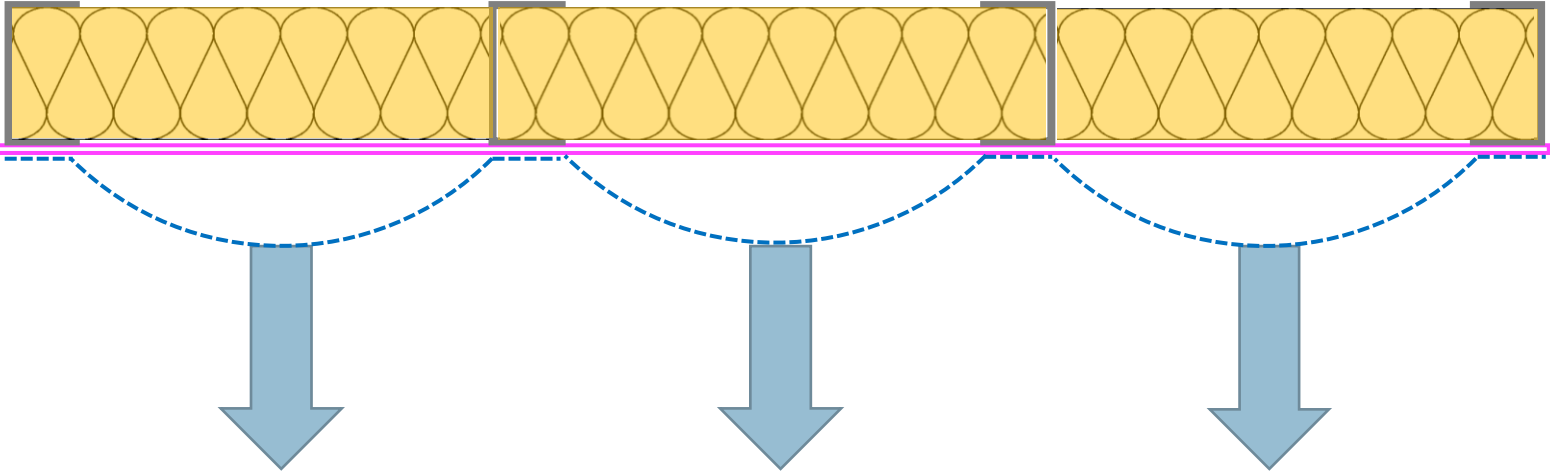


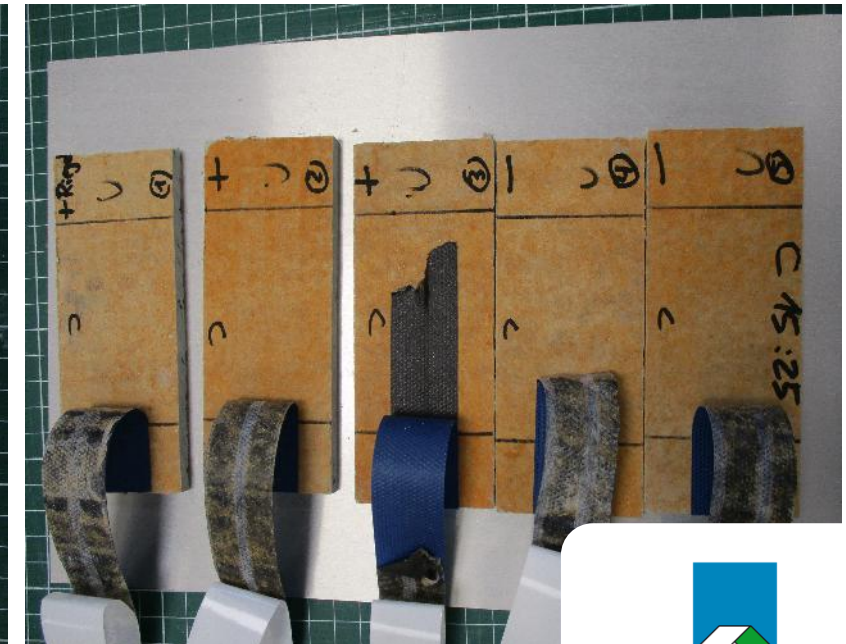
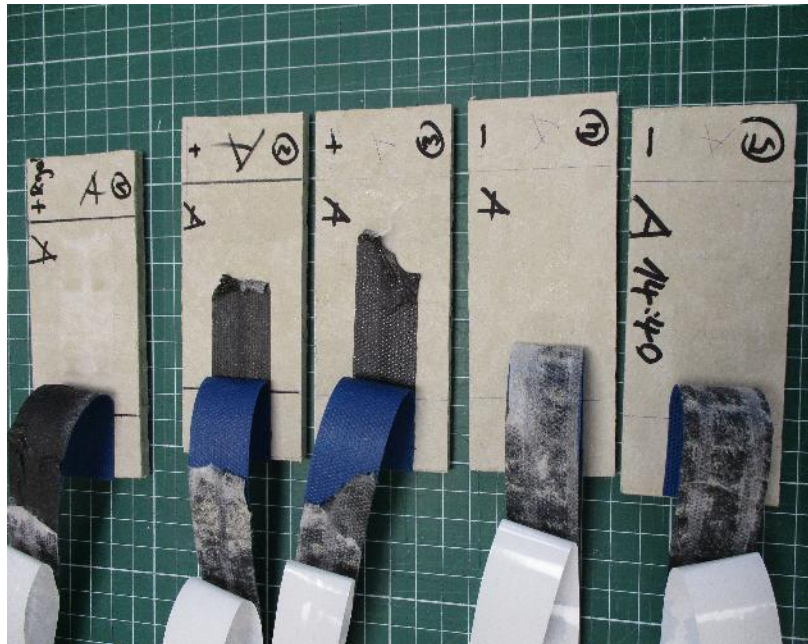
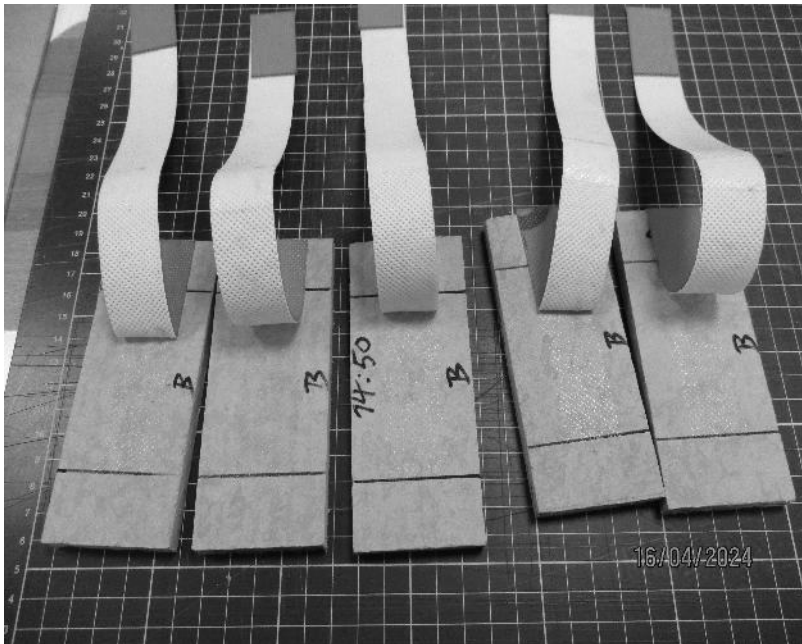
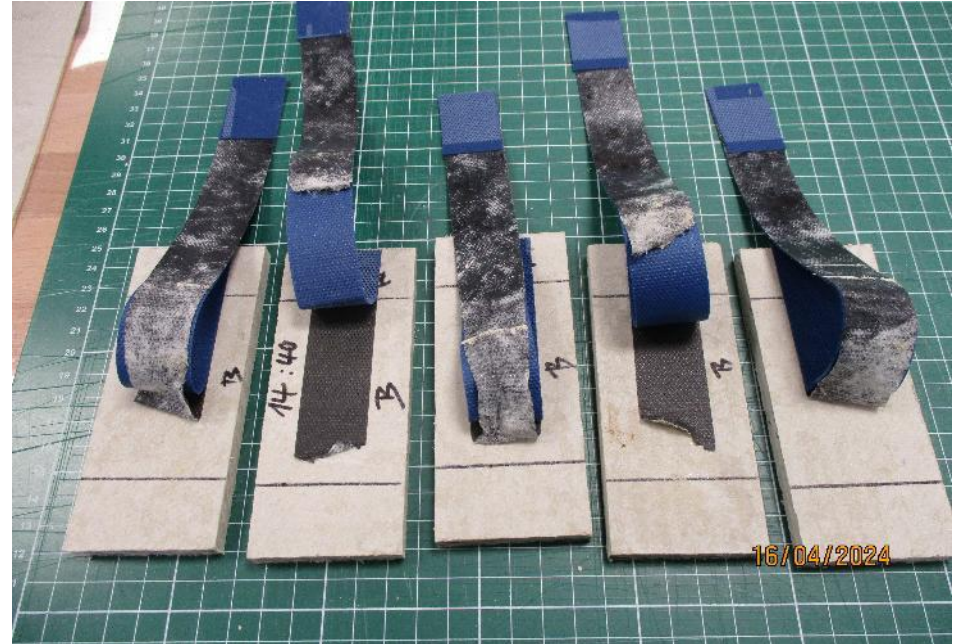
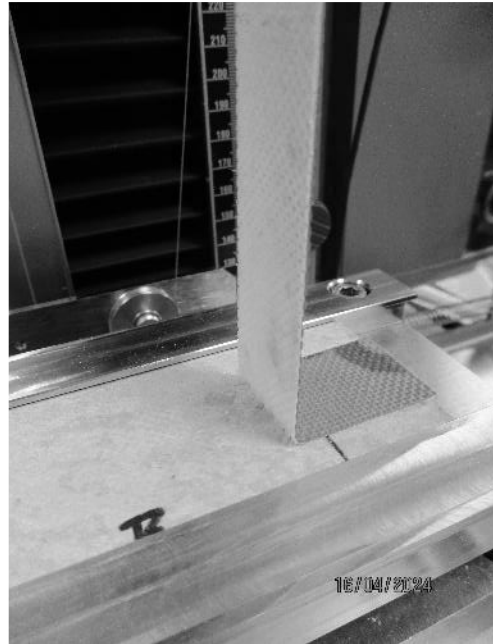
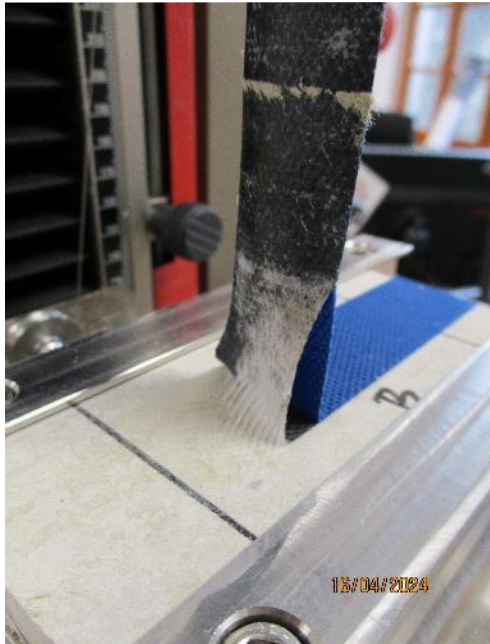
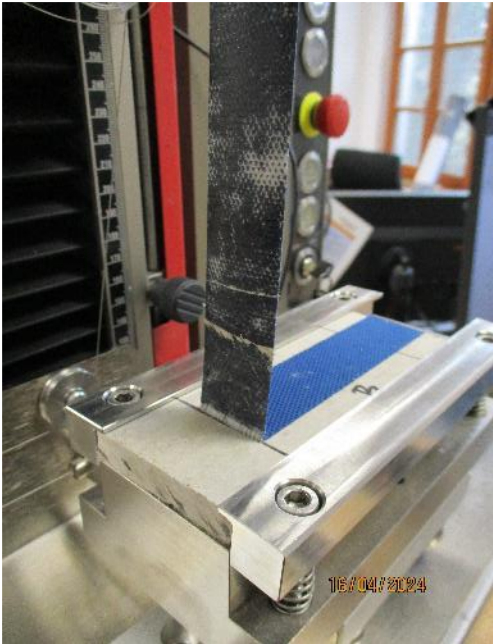
SOLITEX ADHERO® FC utilises pro climas SOLID adhesive with **permavap**® technology to ensure maximum adhesion under strong wind loading and maximise the drying rate of facade and roofing systems.

Pressure & Performance



Pressure & Performance

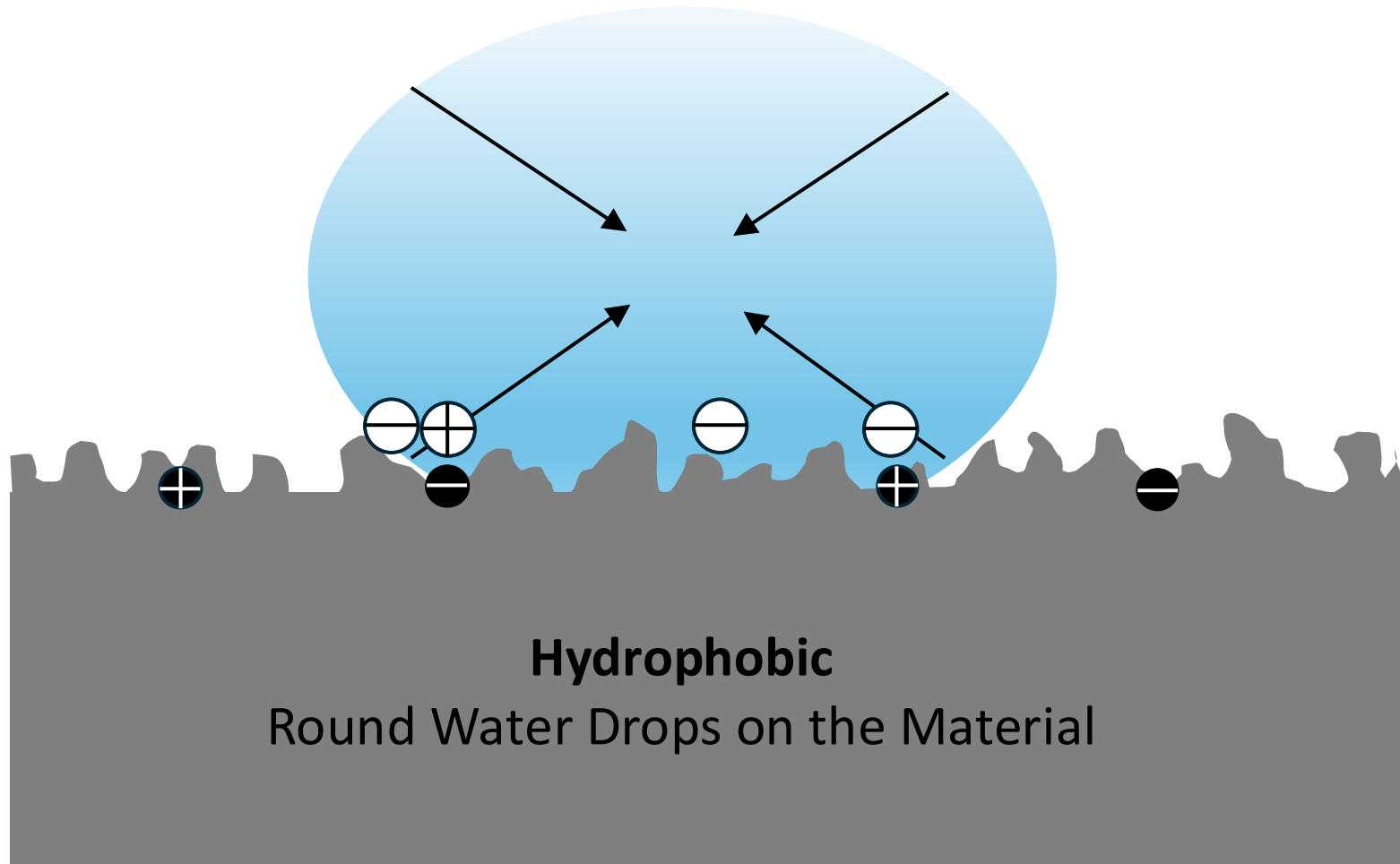




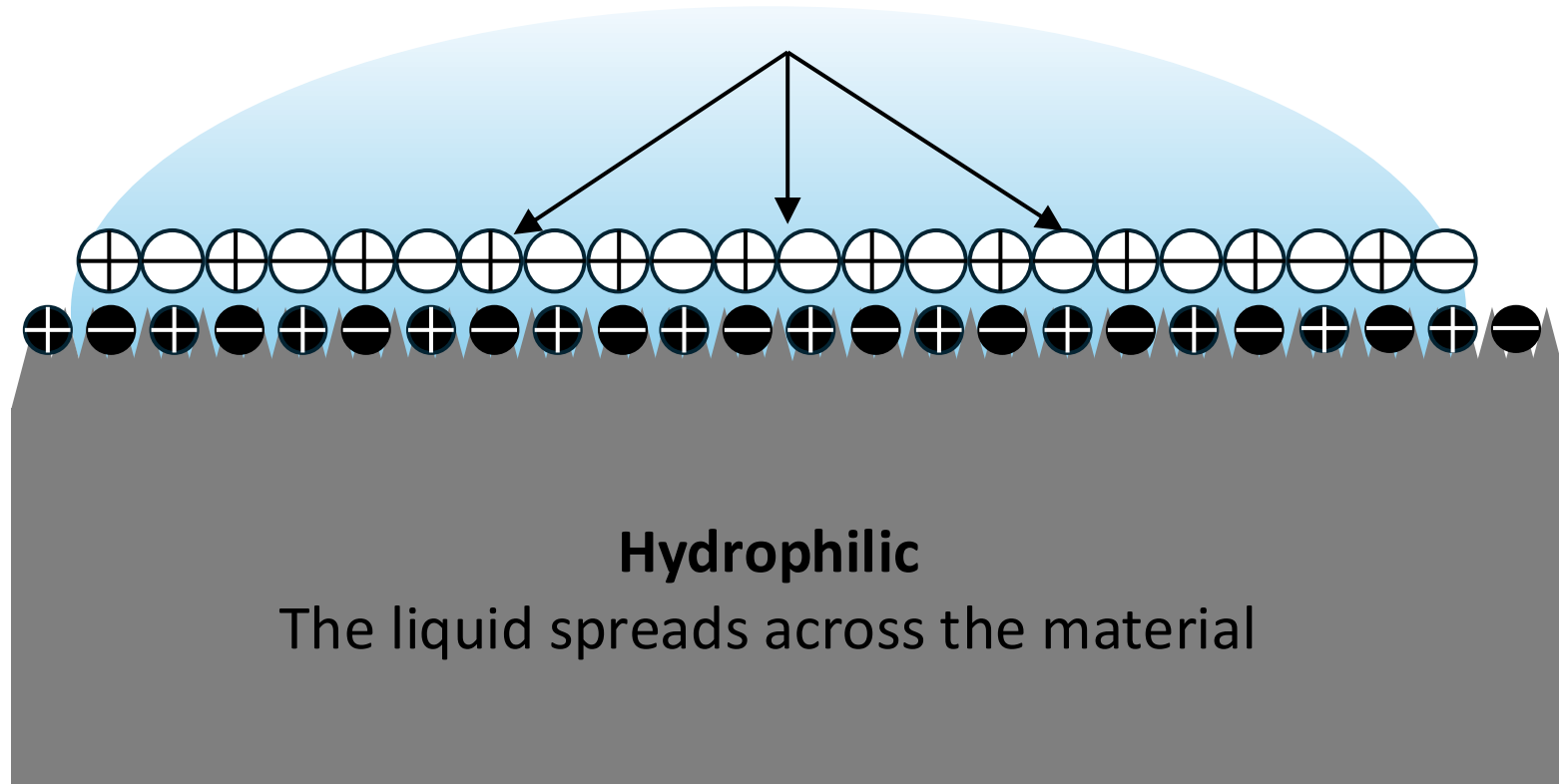
Peel adhesion testing ASTM D 3330 Method F





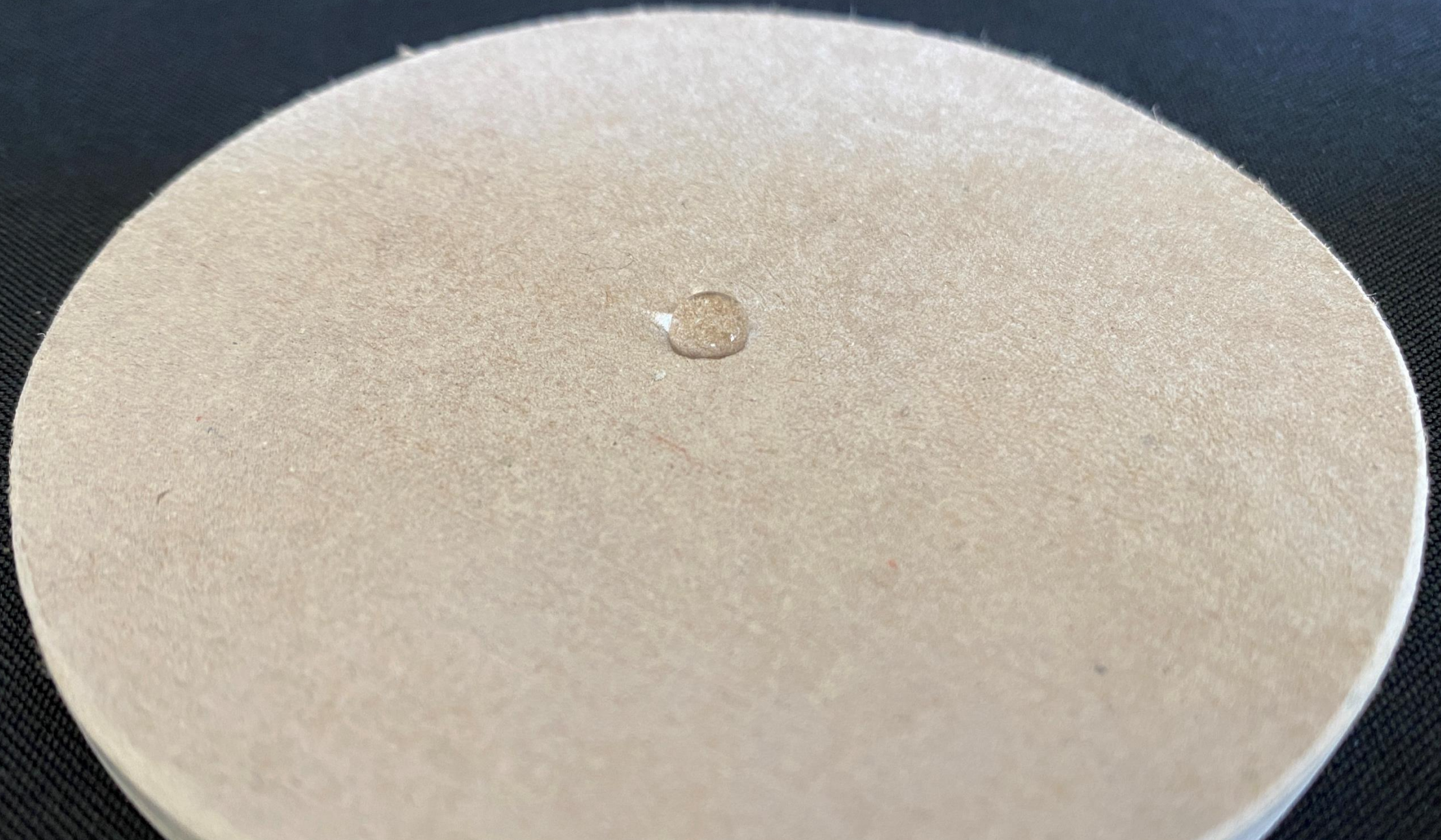


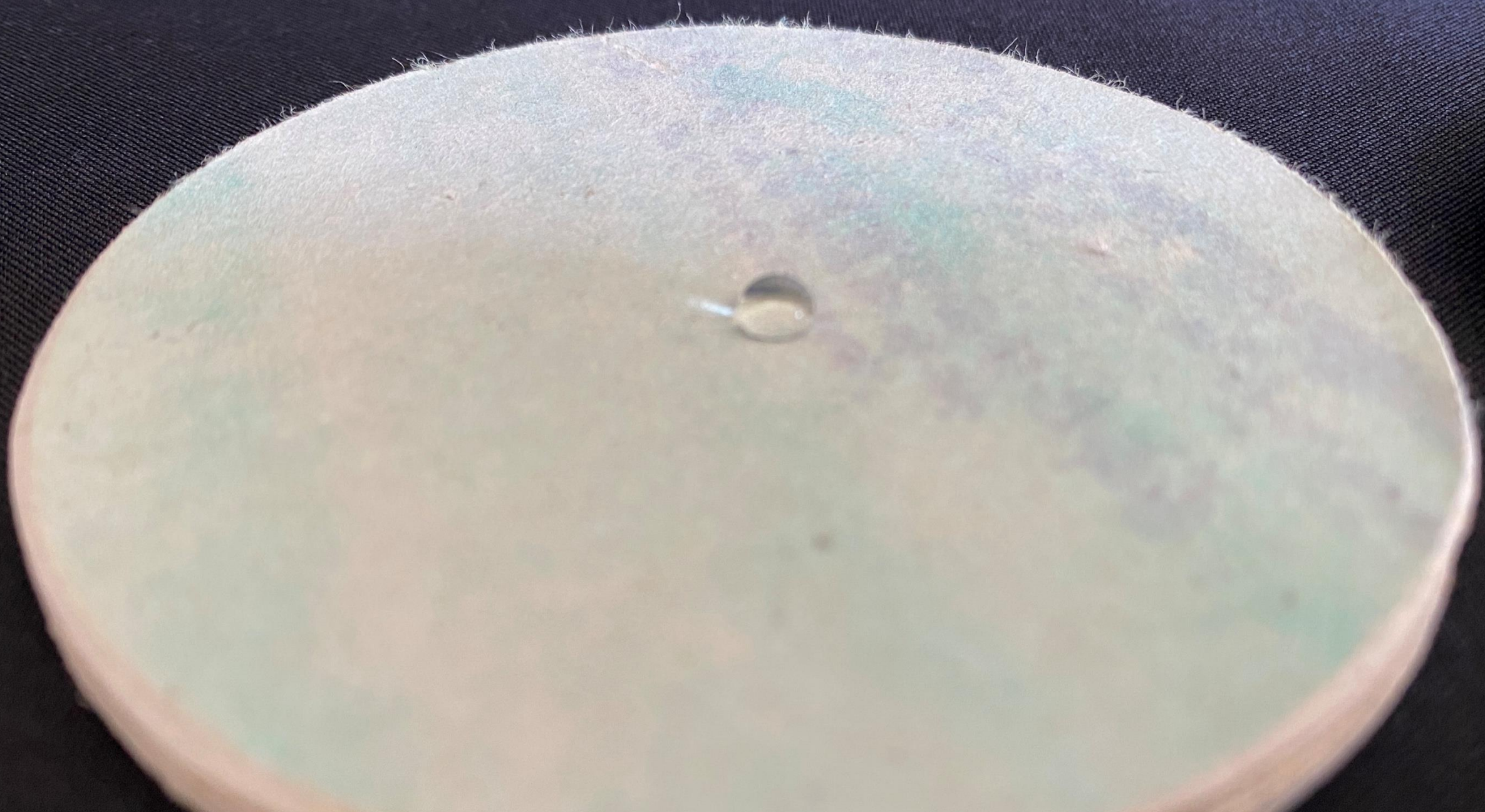
Low-energy surface has few attachment points and a low surface tension.
It cannot pull the water drop out of its shape.



The more attachment points there are, the more energy the surface has and the more the water drop will be pulled out of its round shape as a result.
The liquid spreads across the material with a high-energy surface.





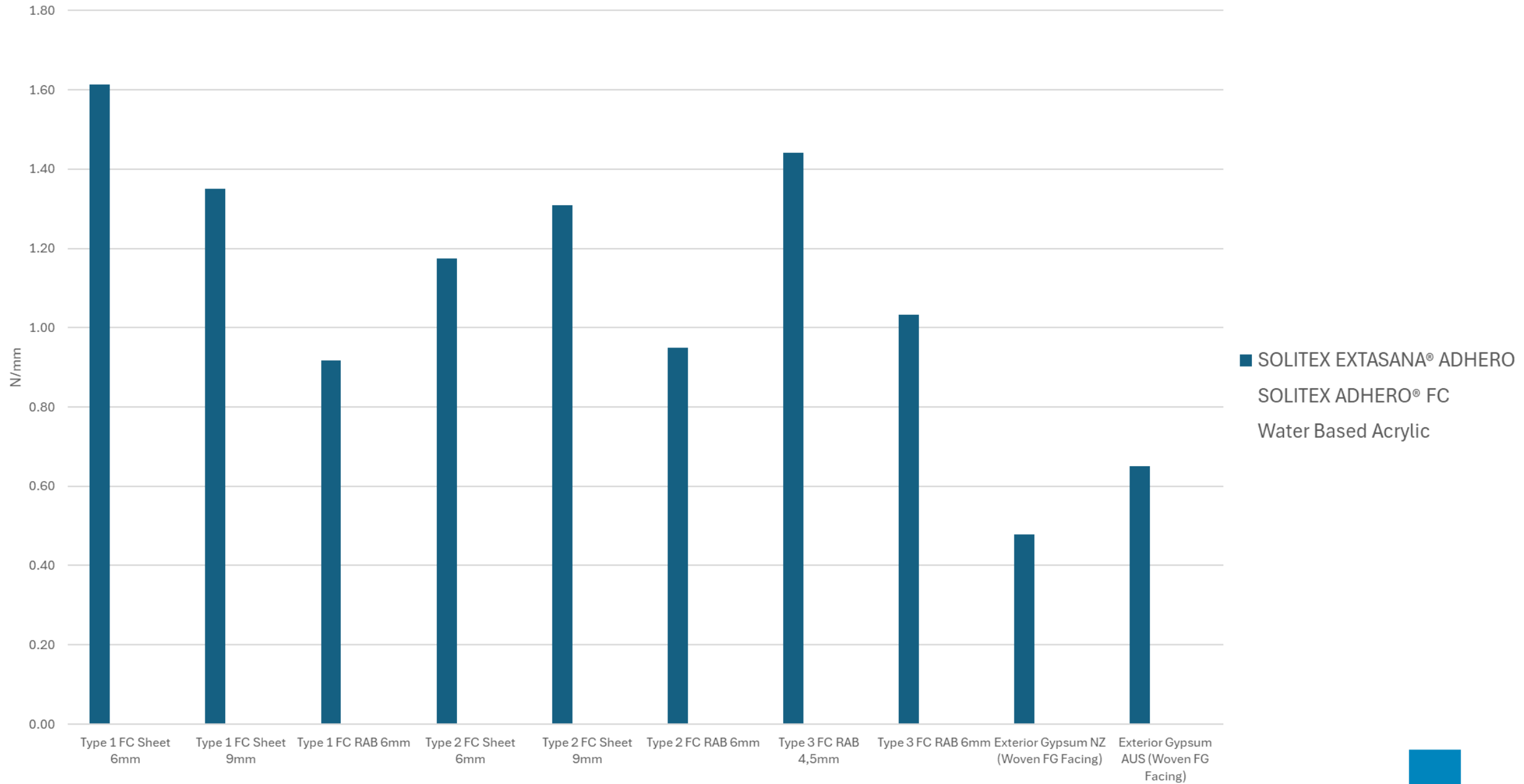




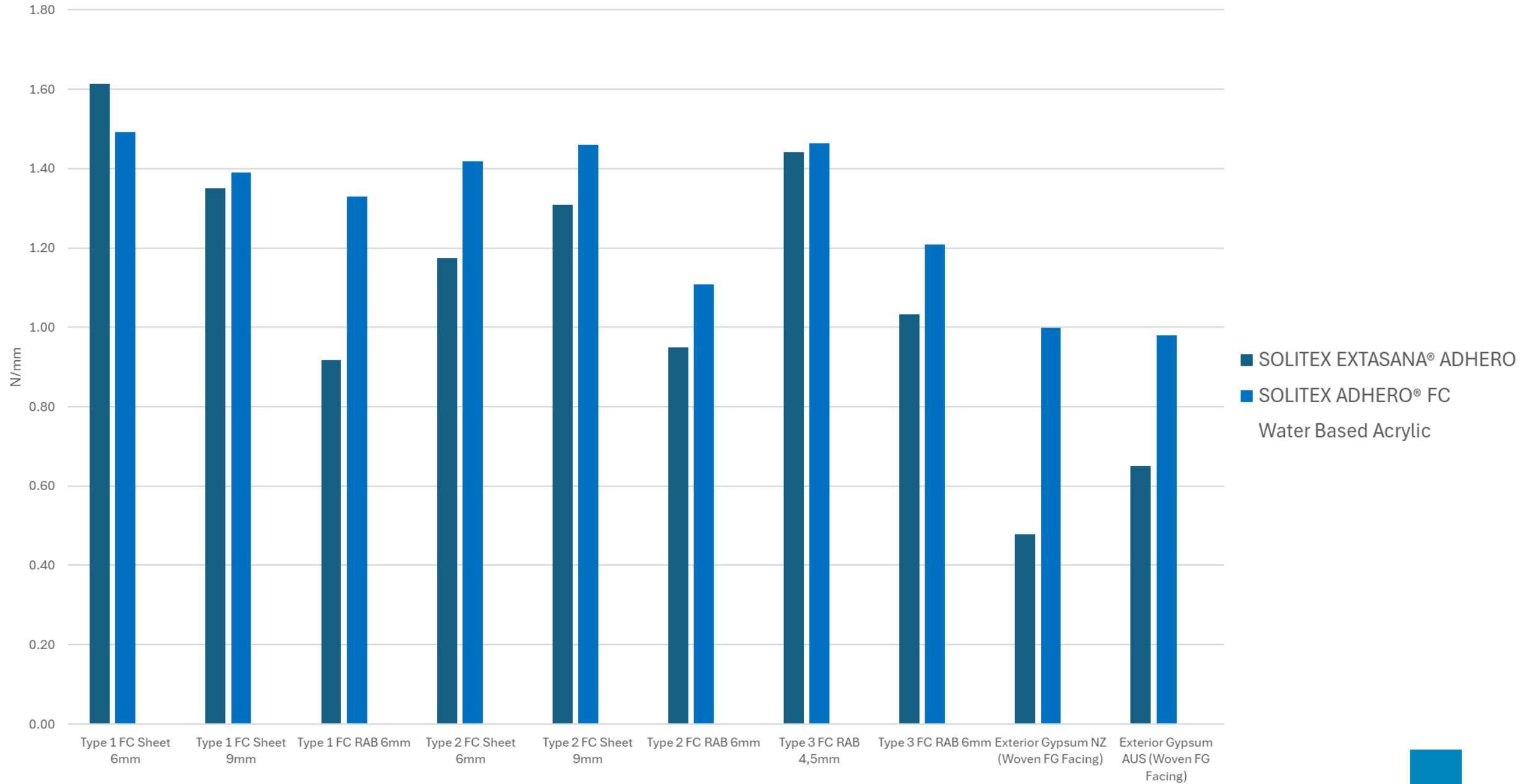
Maximum Peel Force



Maximum Peel Force

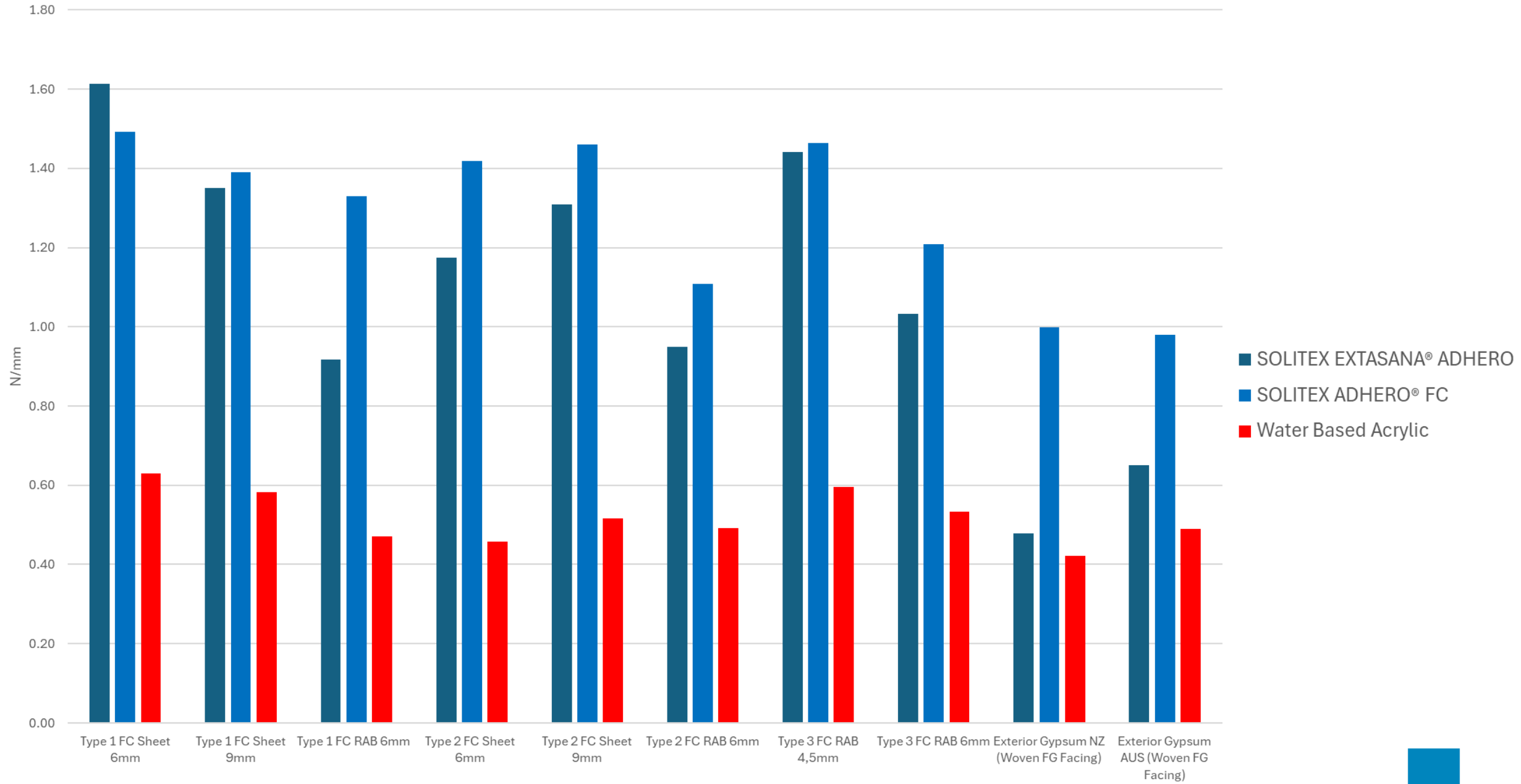


Maximum Peel Force



■ SOLITEX EXTASANA® ADHERO
■ SOLITEX ADHERO® FC
Water Based Acrylic

Maximum Peel Force





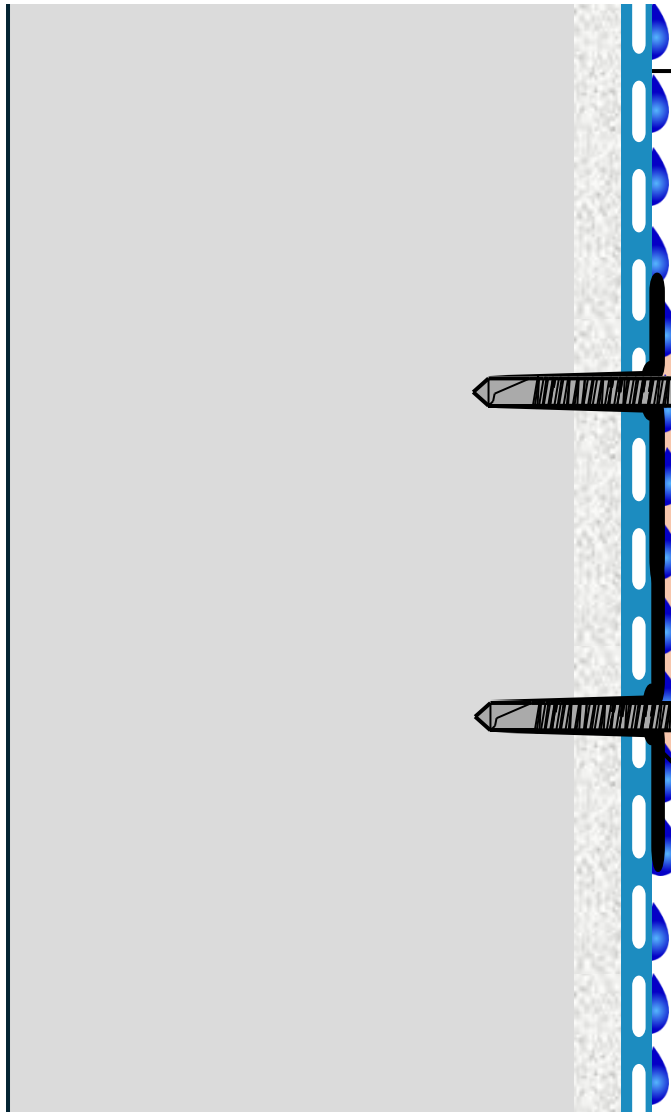
Facades

8

Screw It

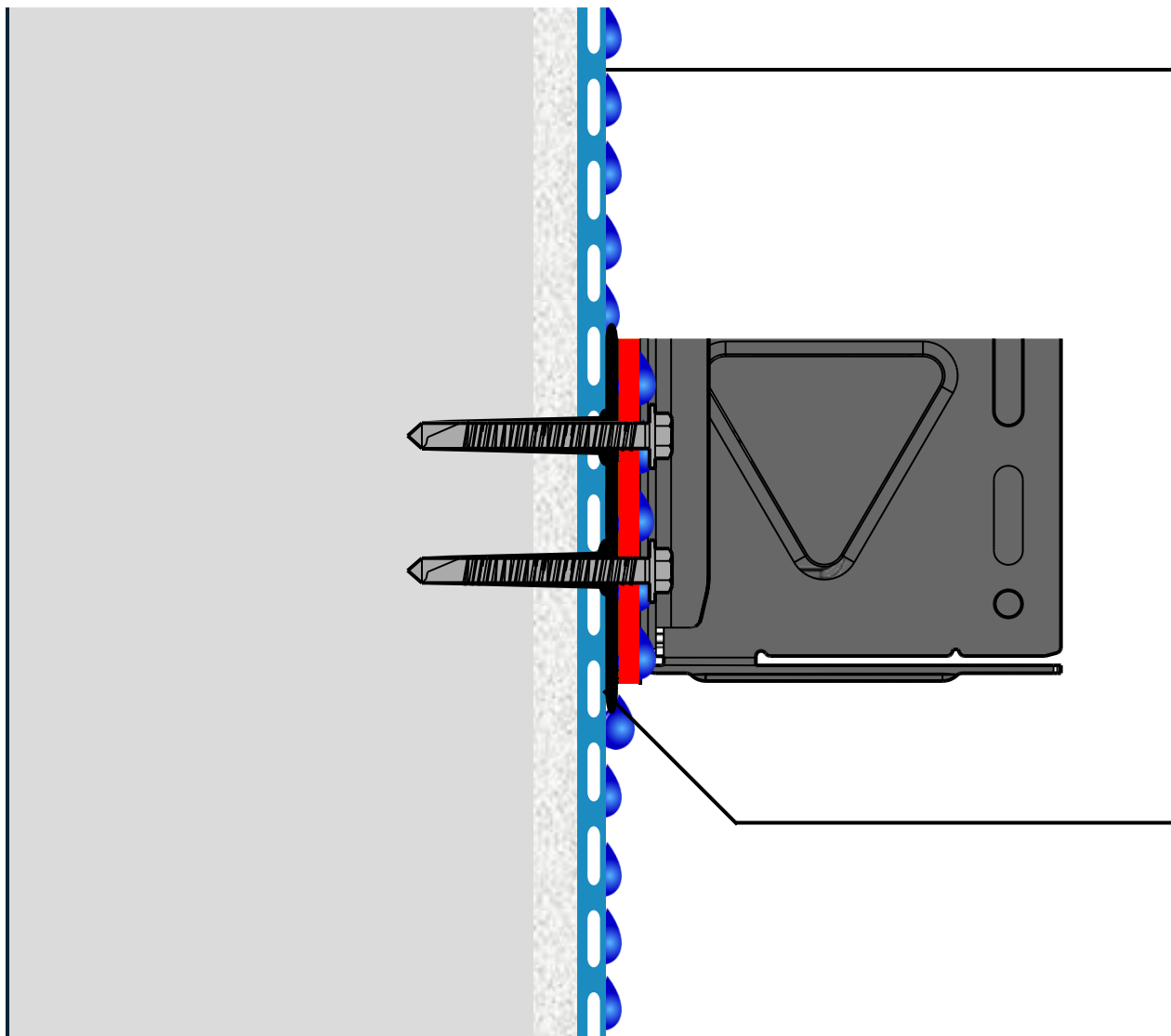
It doesn't even matter

Fixings sealing is critical



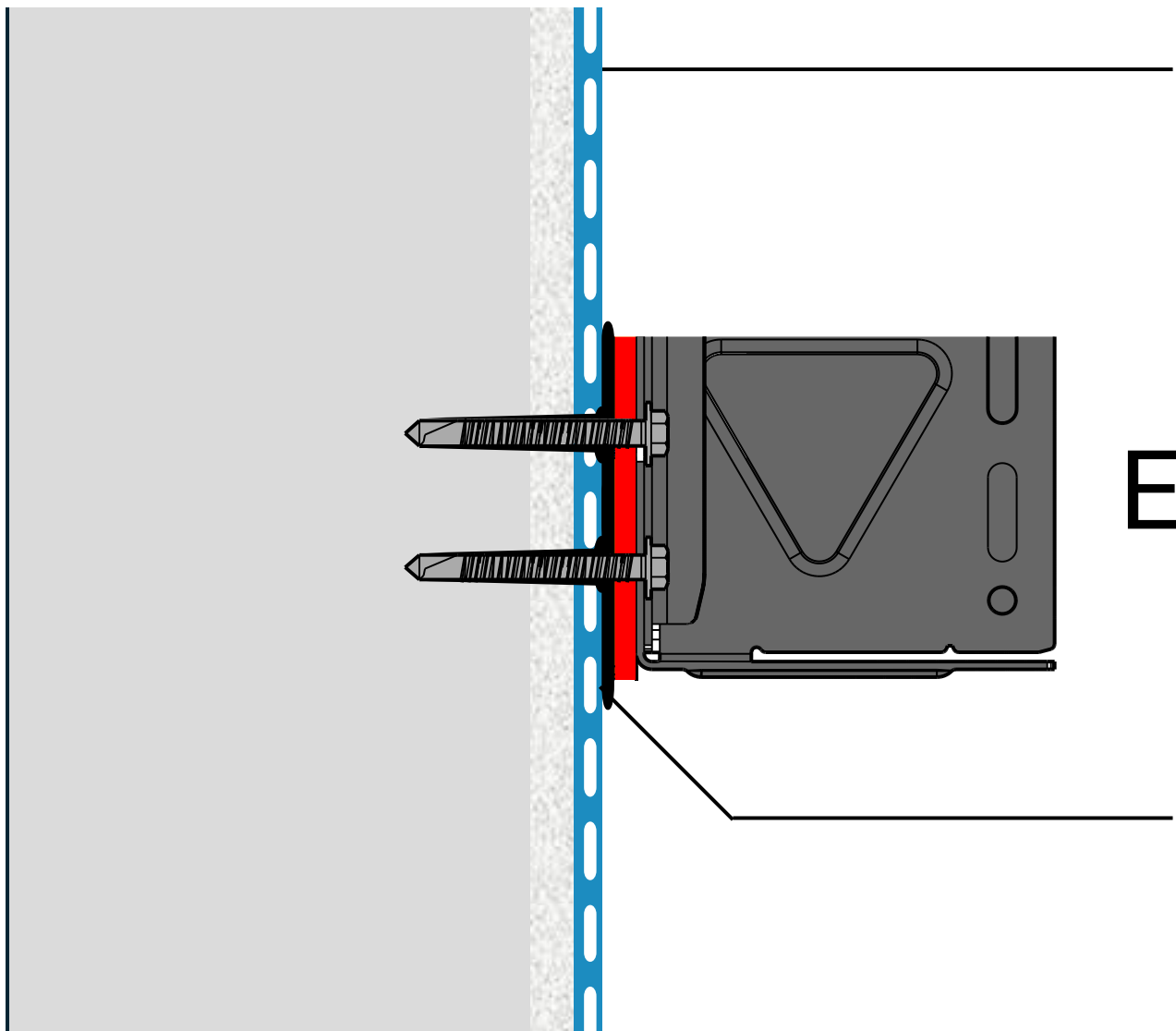
SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

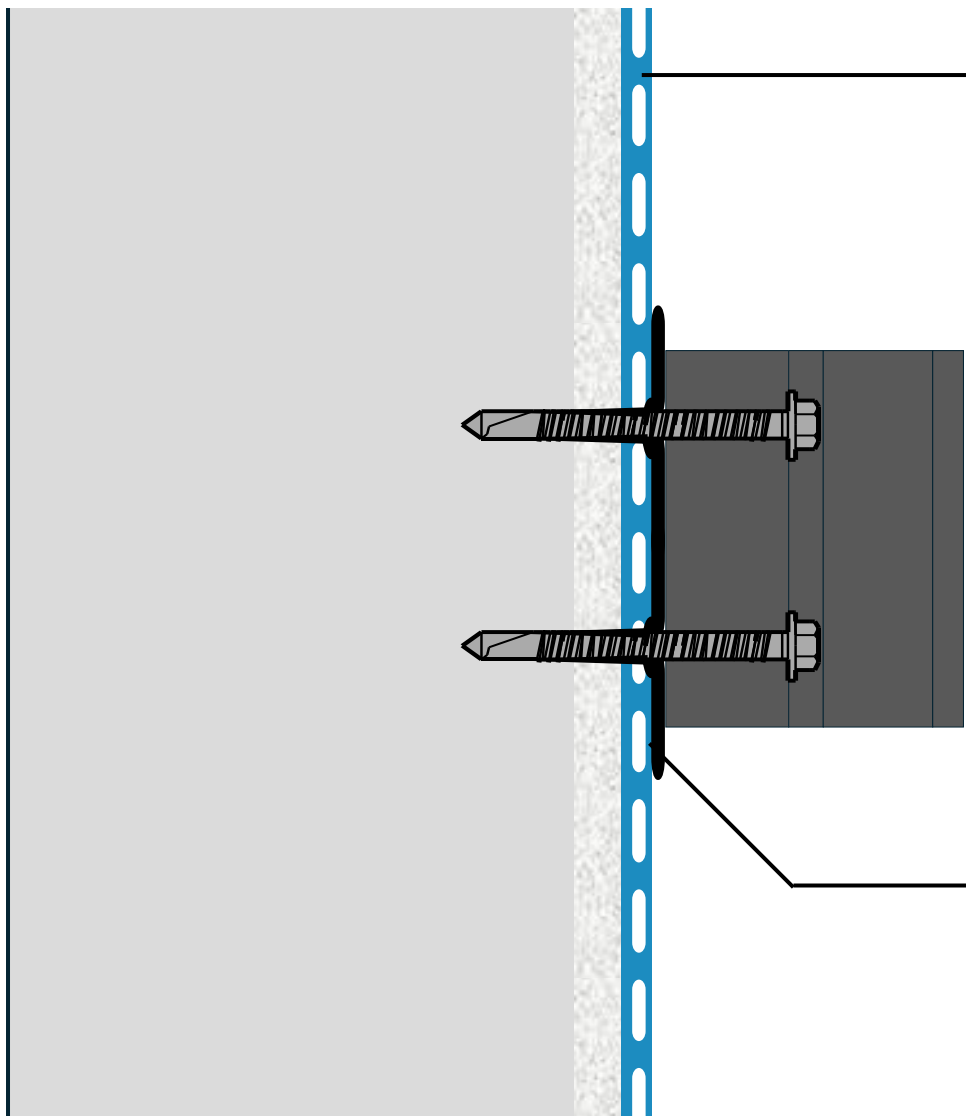
TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

EJOT

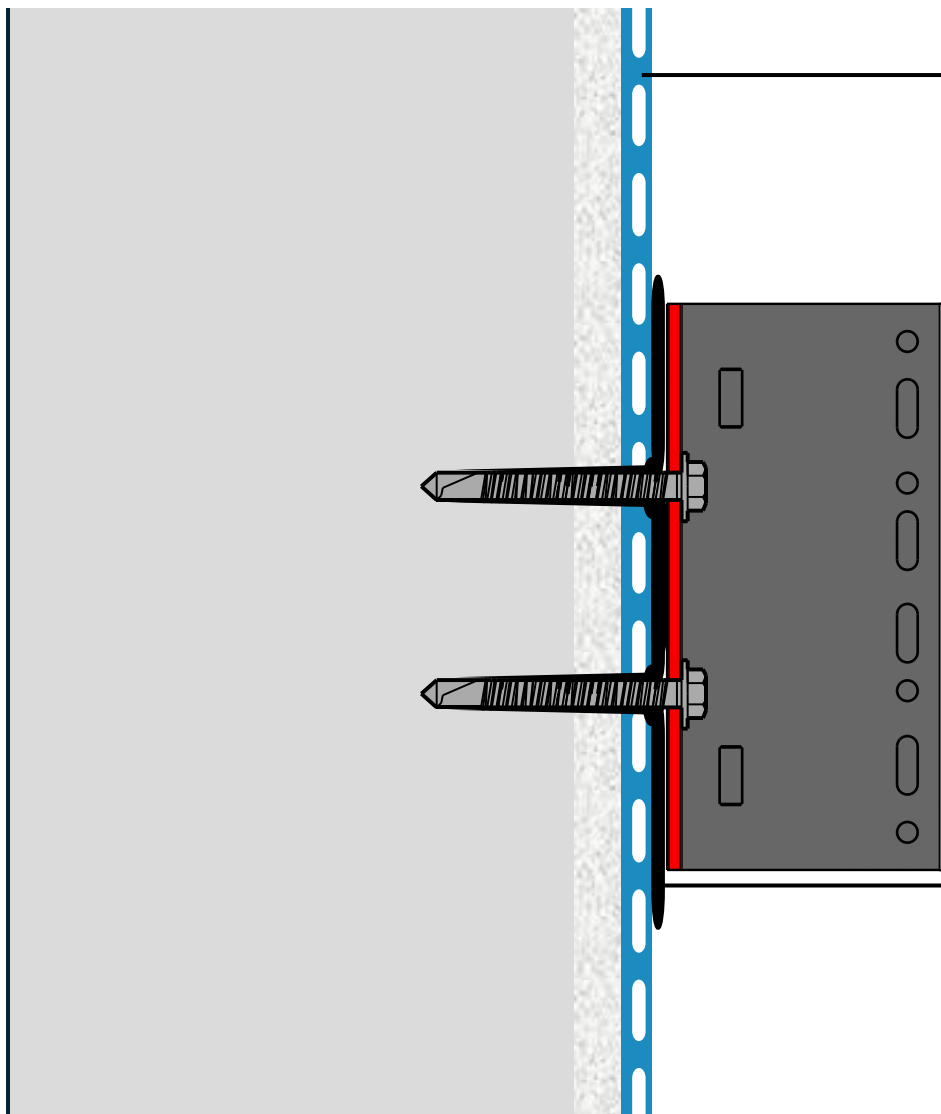
TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

TECHNOFORM

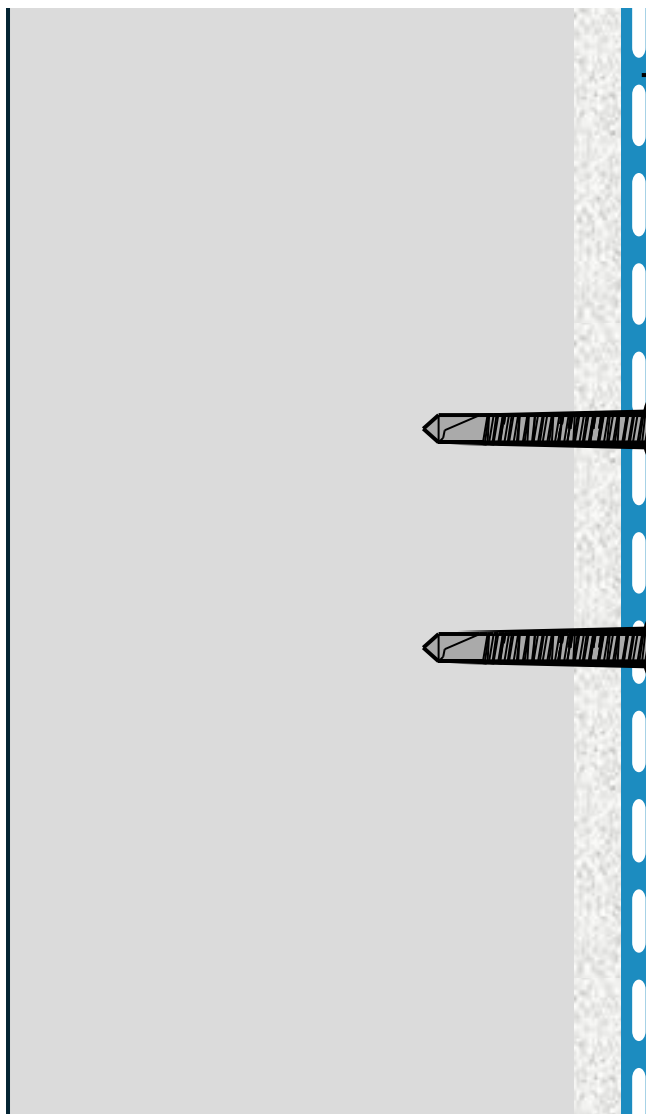
TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

HILTI

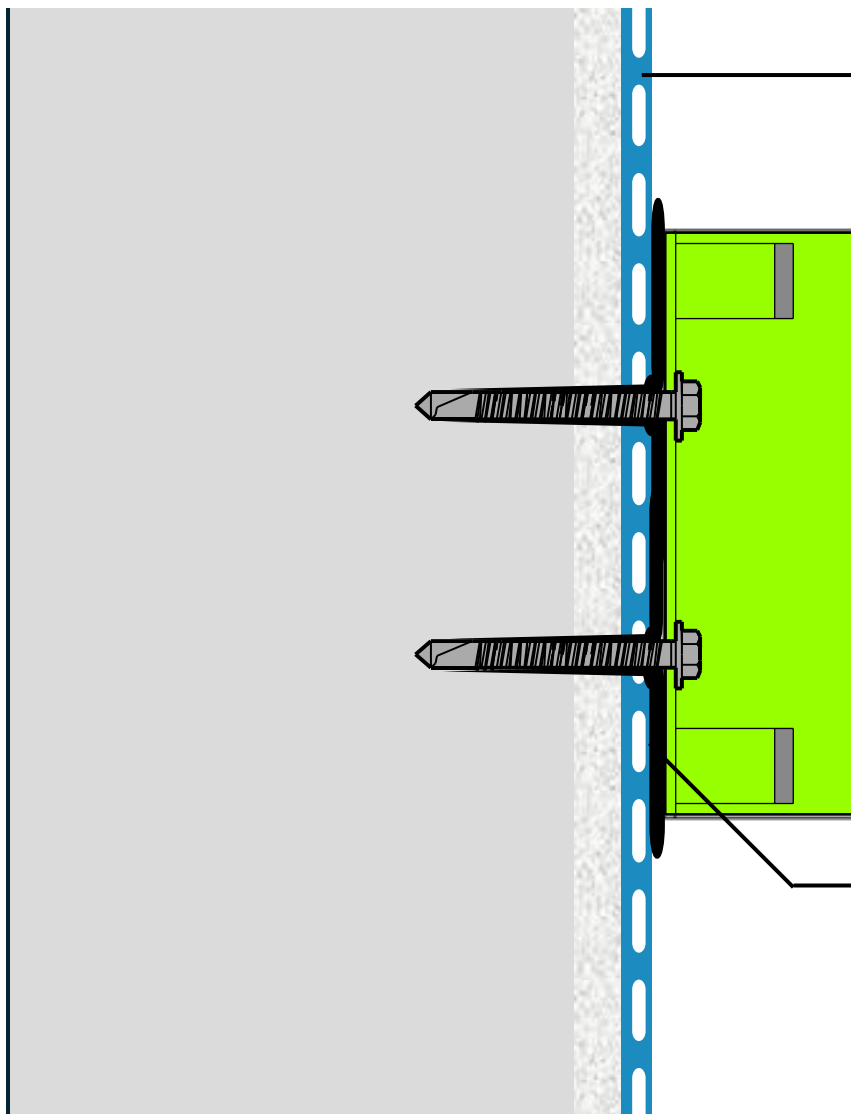
TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

SCULPTFORM

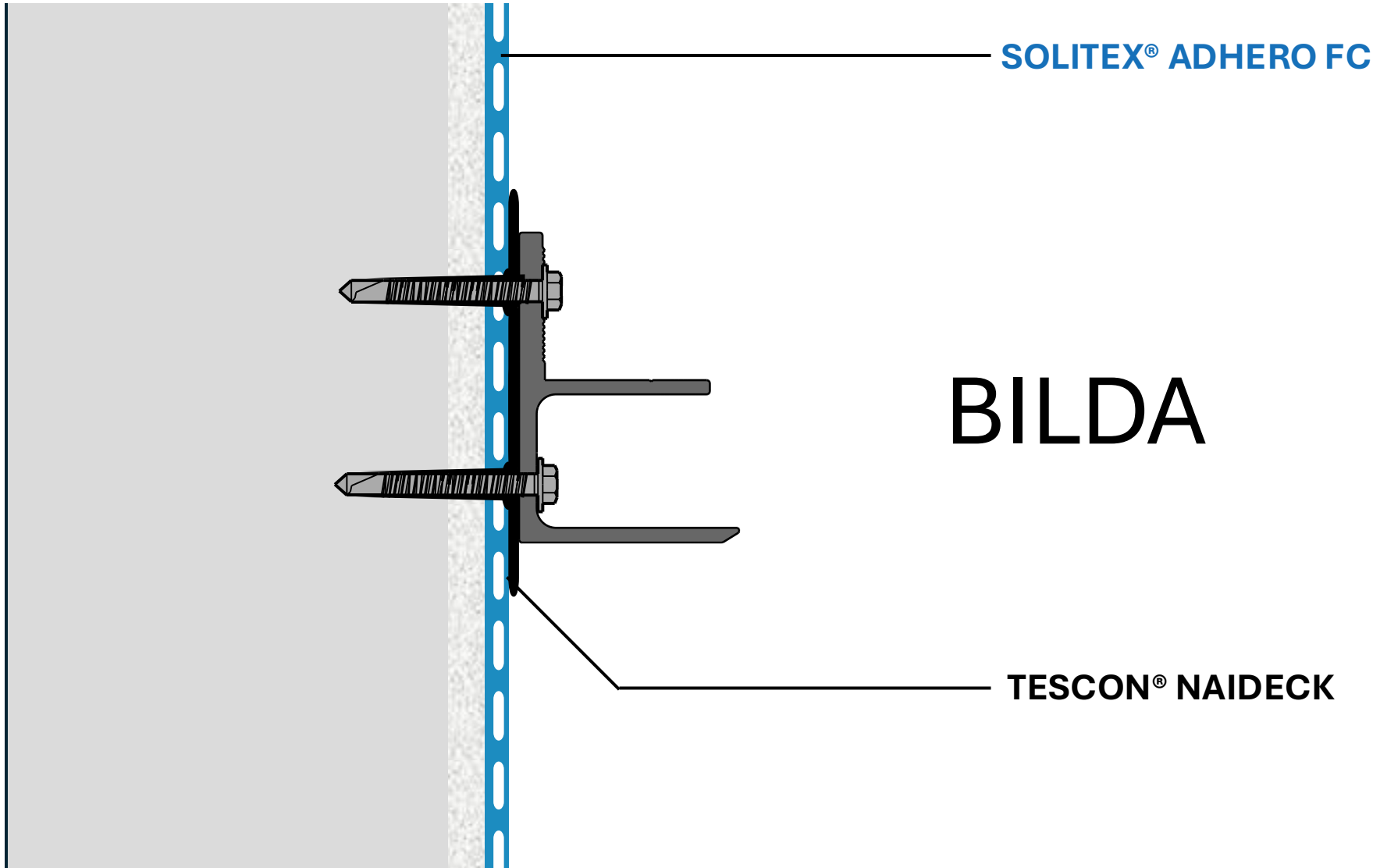
TESCON® NAIDECK



SOLITEX® ADHERO FC
or
SOLITEX EXTASANA ADHERO®

GREENGIRT

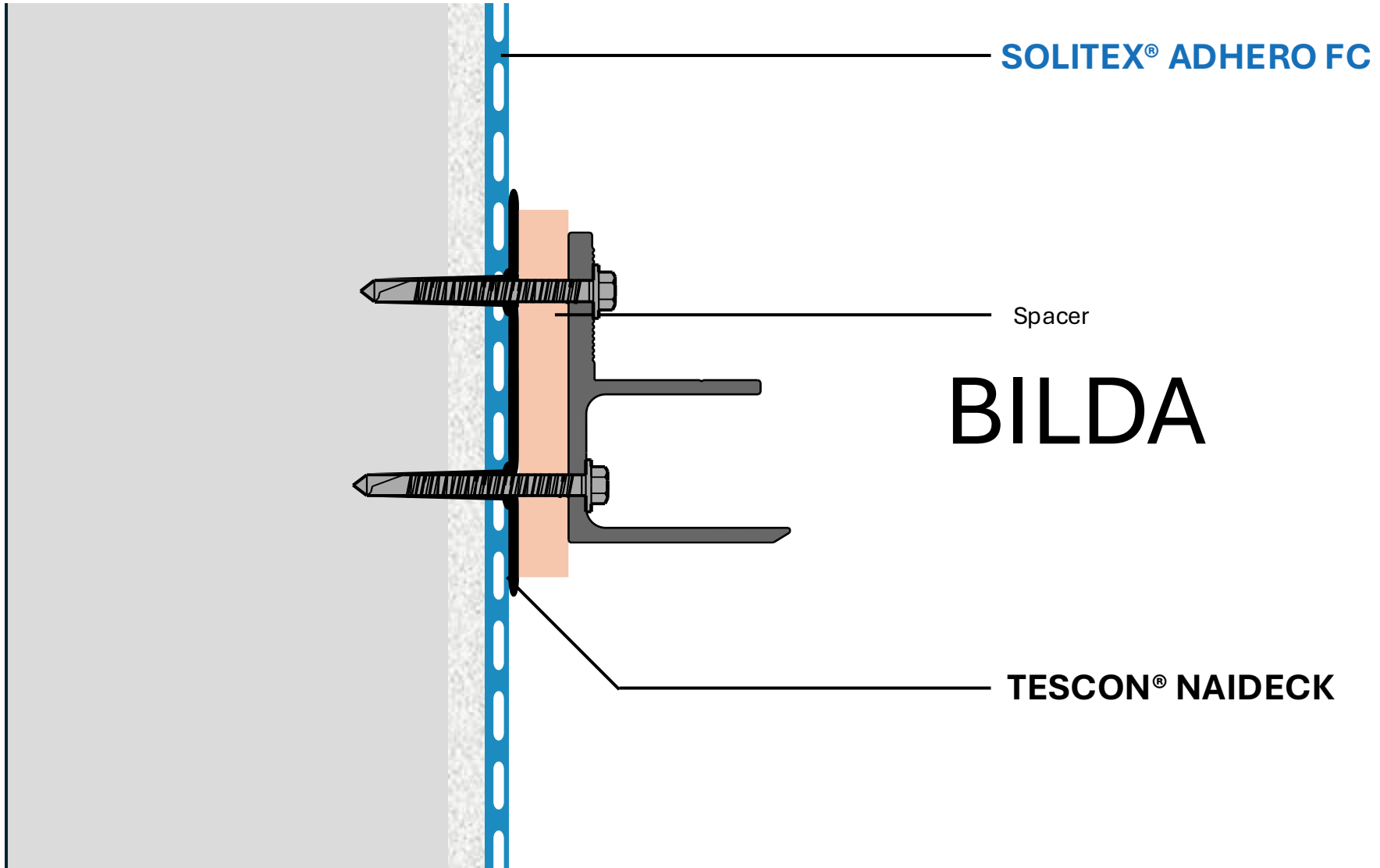
TESCON® NAIDECK

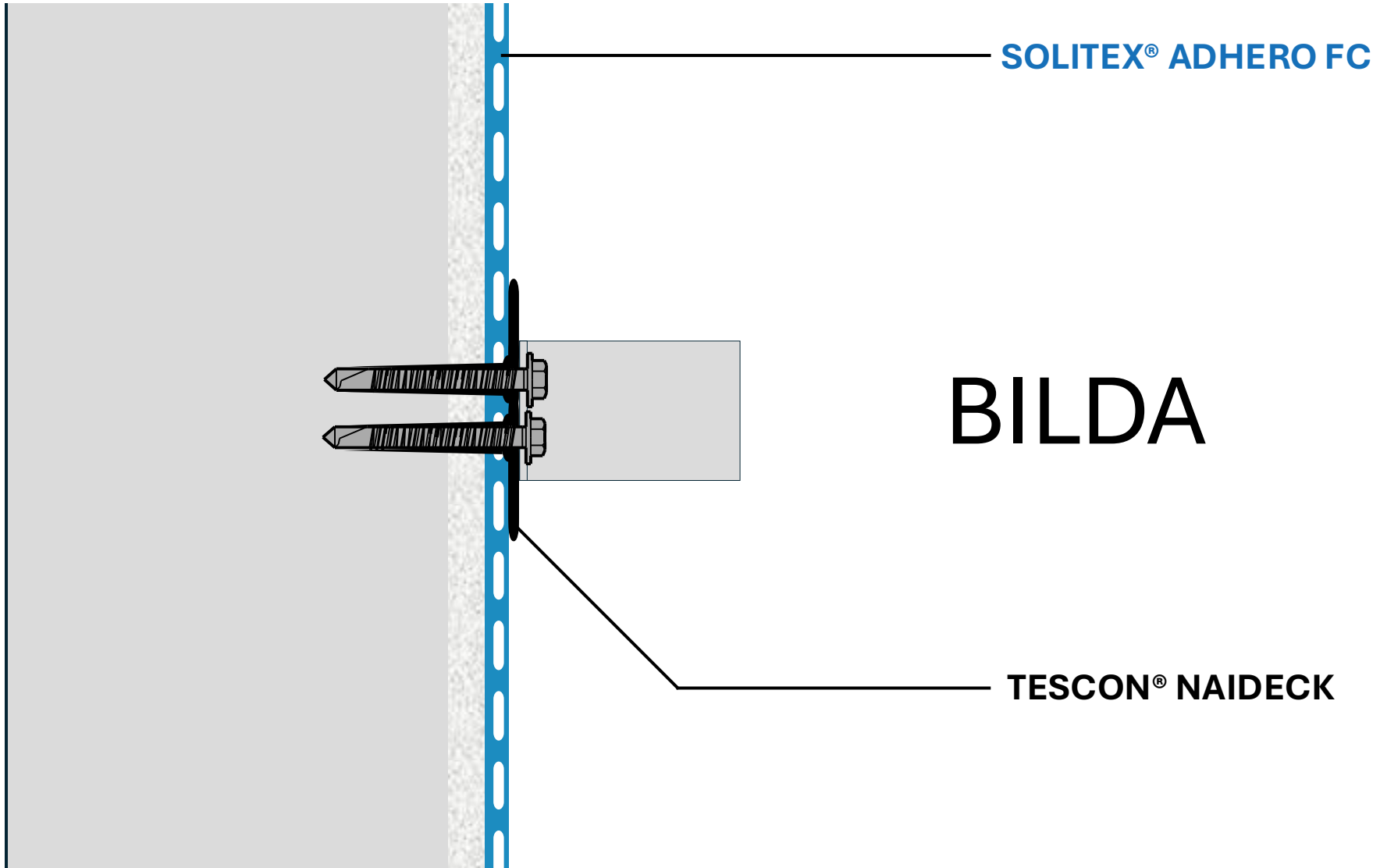


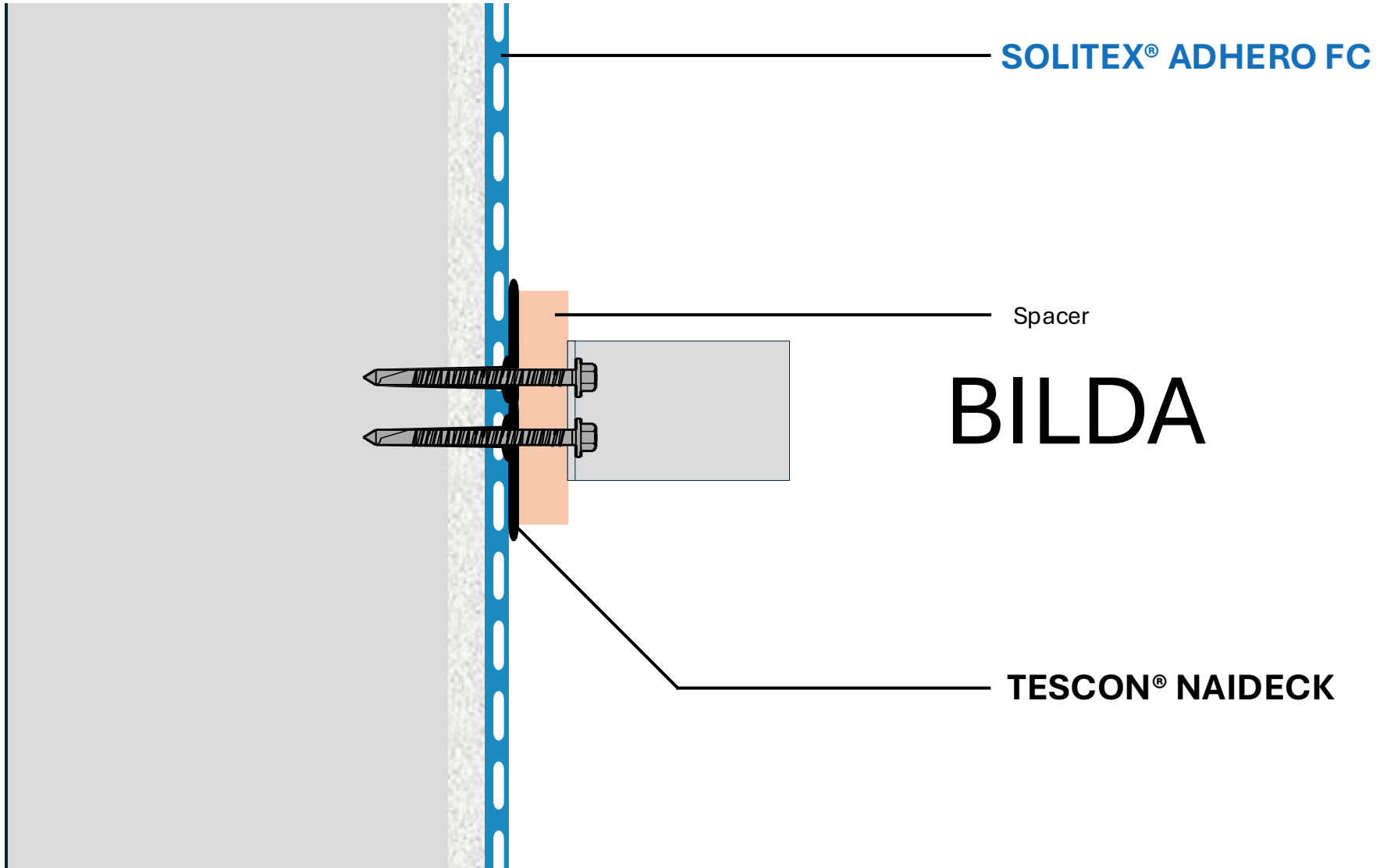
SOLITEX® ADHERO FC

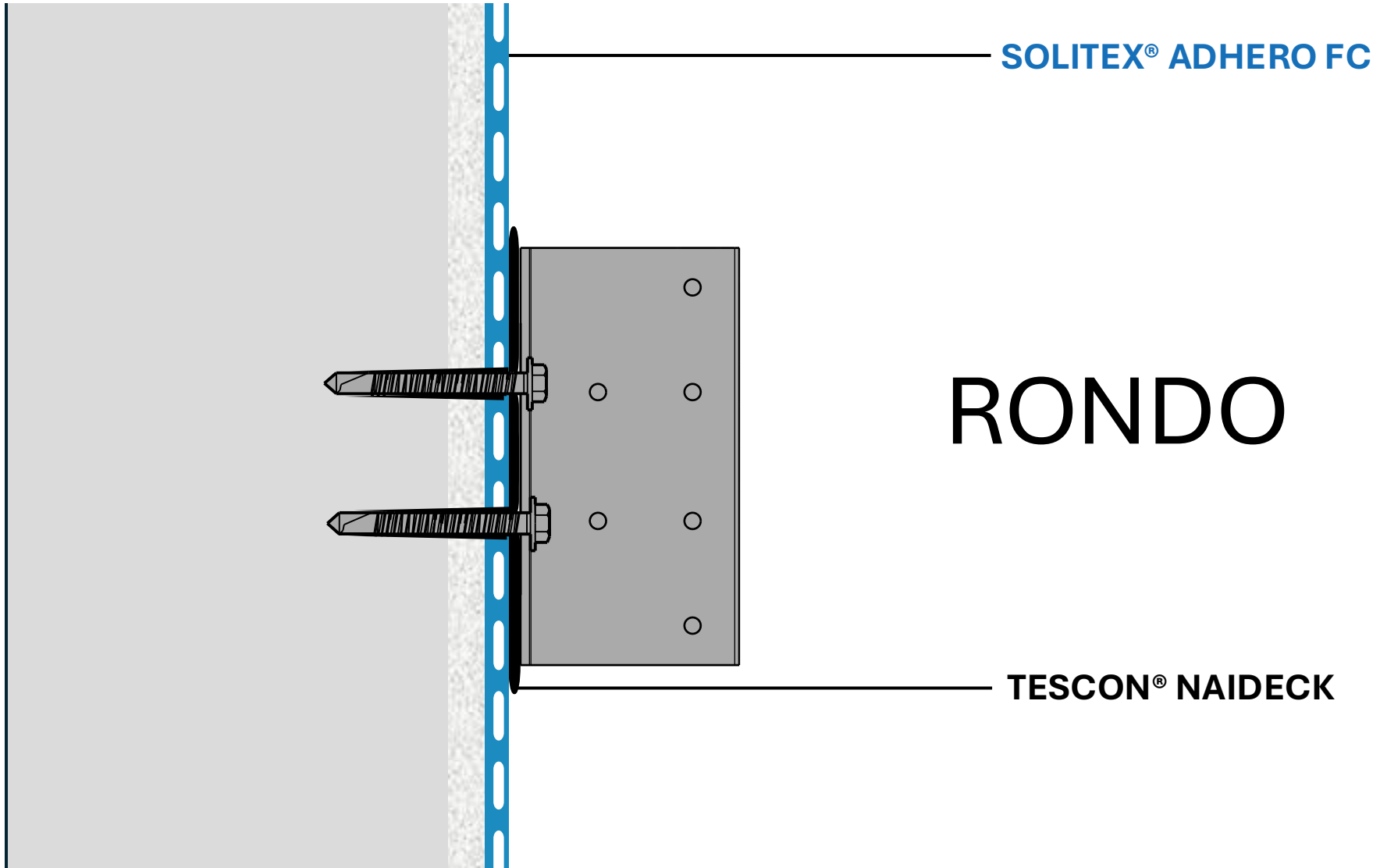
BILDA

TESCON® NAIDECK





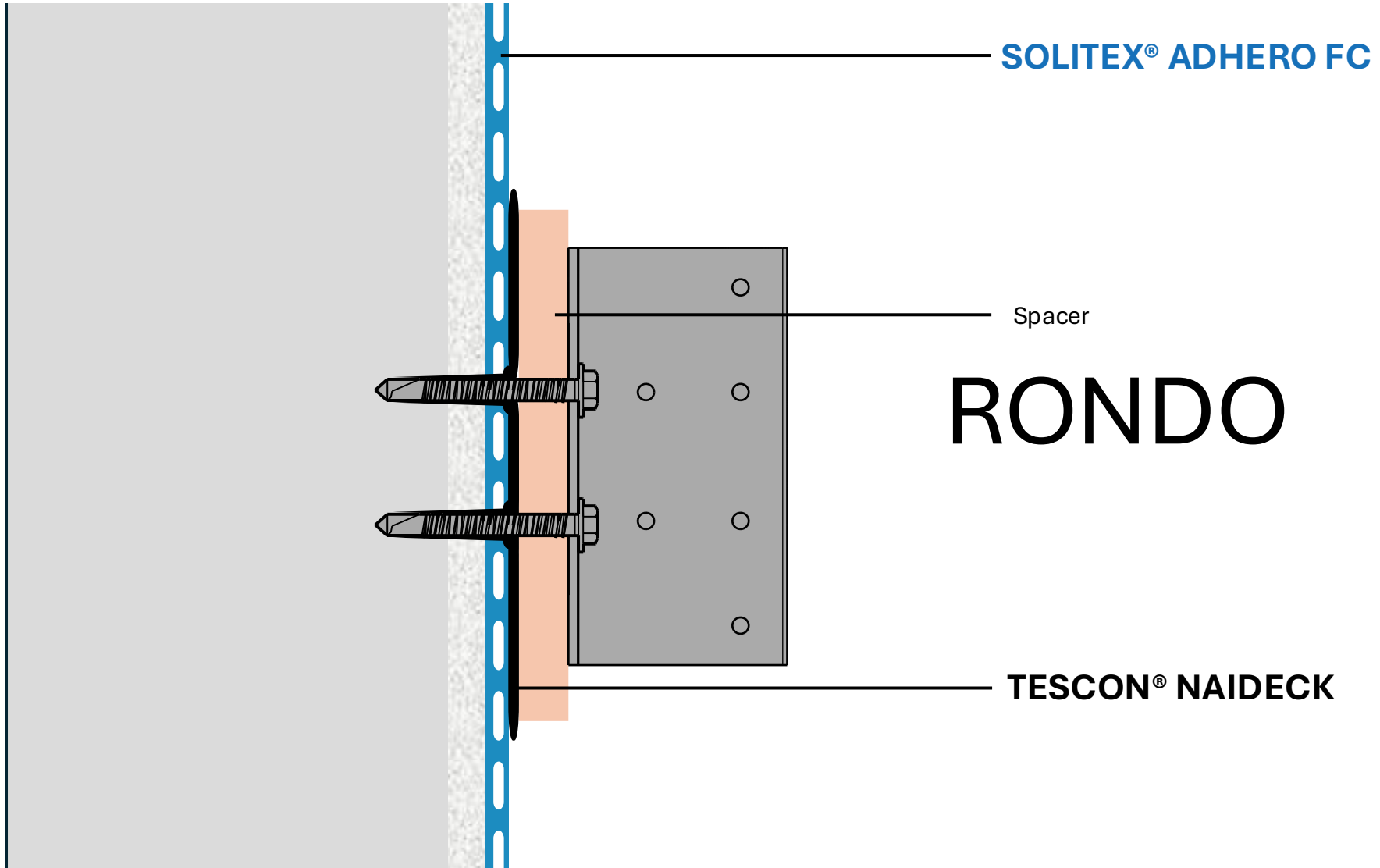




SOLITEX® ADHERO FC

RONDO

TESCON® NAIDECK





AS/NZS 4284

**SLS
±3.5 kPa
±20mm**

pro clima
**Tested to
AS/NZS 4284**
WITHOUT ANY CLADDING

IAN BENNIE & ASSOCIATES

Testing of Building Facades
By the Method of AS/NZS4284:2008
For:
pro clima Adhesive Weather Resistive Barriers
over rigid substrate

Test Report No. 2023-016-S1-03
Date: October 2023
Revision: 3
Client: Pro Clima Australia Pty Ltd

NATA
Accredited Laboratory No. 1711
Accredited for compliance with ISO/IEC 17025 - Testing



Facades

7

It's what's on the inside that counts

Details Drive the outcome

ROCKWOOL™ Safe n Silent
Non-combustible Mineral Wool



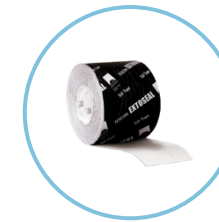
SOLITEX ADHERO® FC
SOLITEX EXTASANA ADHERO®
Adhesive WRB Membrane



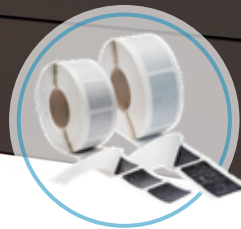
ROCKWOOL™ Rainscreen™
Non-combustible
Hydrophobic Mineral Wool



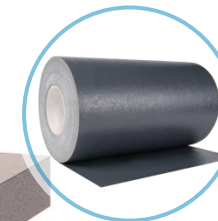
TESCON EXTOSEAL®
Sill Tape



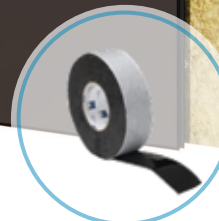
TESCON NAIDECK Patch
Self Sealing Patches



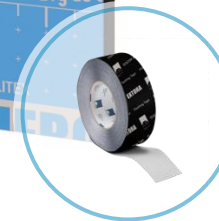
TFLEX
Façade Control
Joint Material



TESCON NAIDECK
Self Sealing Strip



TESCON EXTORA®
Weathertight
Sealing Tape





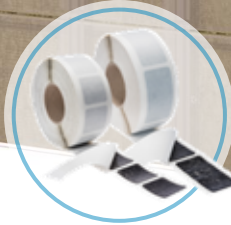
SOLITEX ADHERO® FC
SOLITEX EXTASANA ADHERO®
Adhesive WRB Membrane



ROCKWOOL™ Rainscreen™
Non-combustible
Hydrophobic Mineral Wool



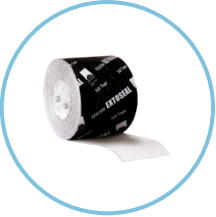
TESCON NAIDECK Patch
Self Sealing Patches



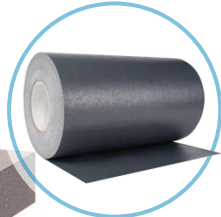
TESCON NAIDECK
Self Sealing Strip



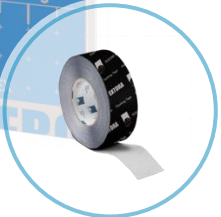
TESCON EXTONSEAL®
Sill Tape

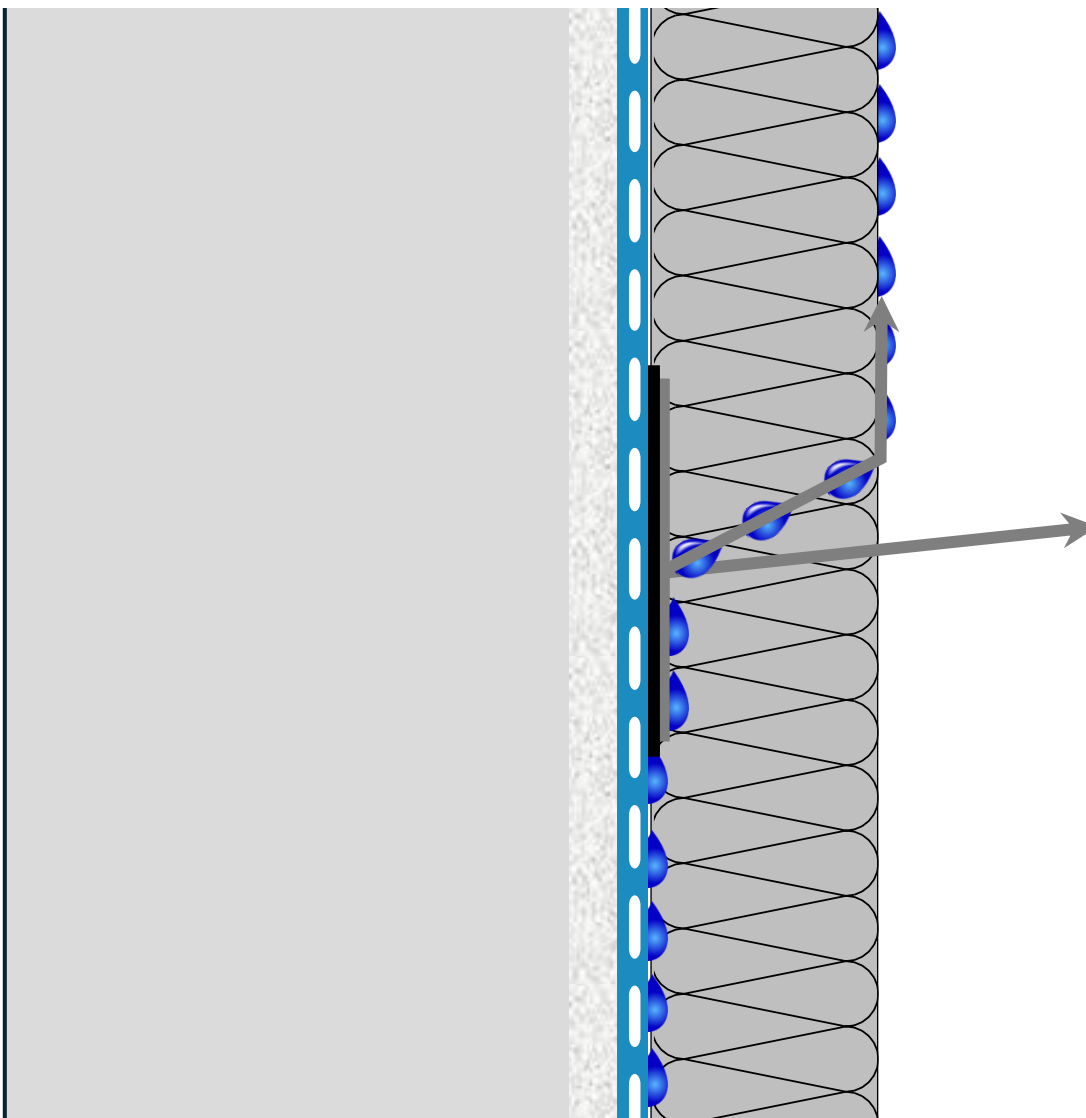


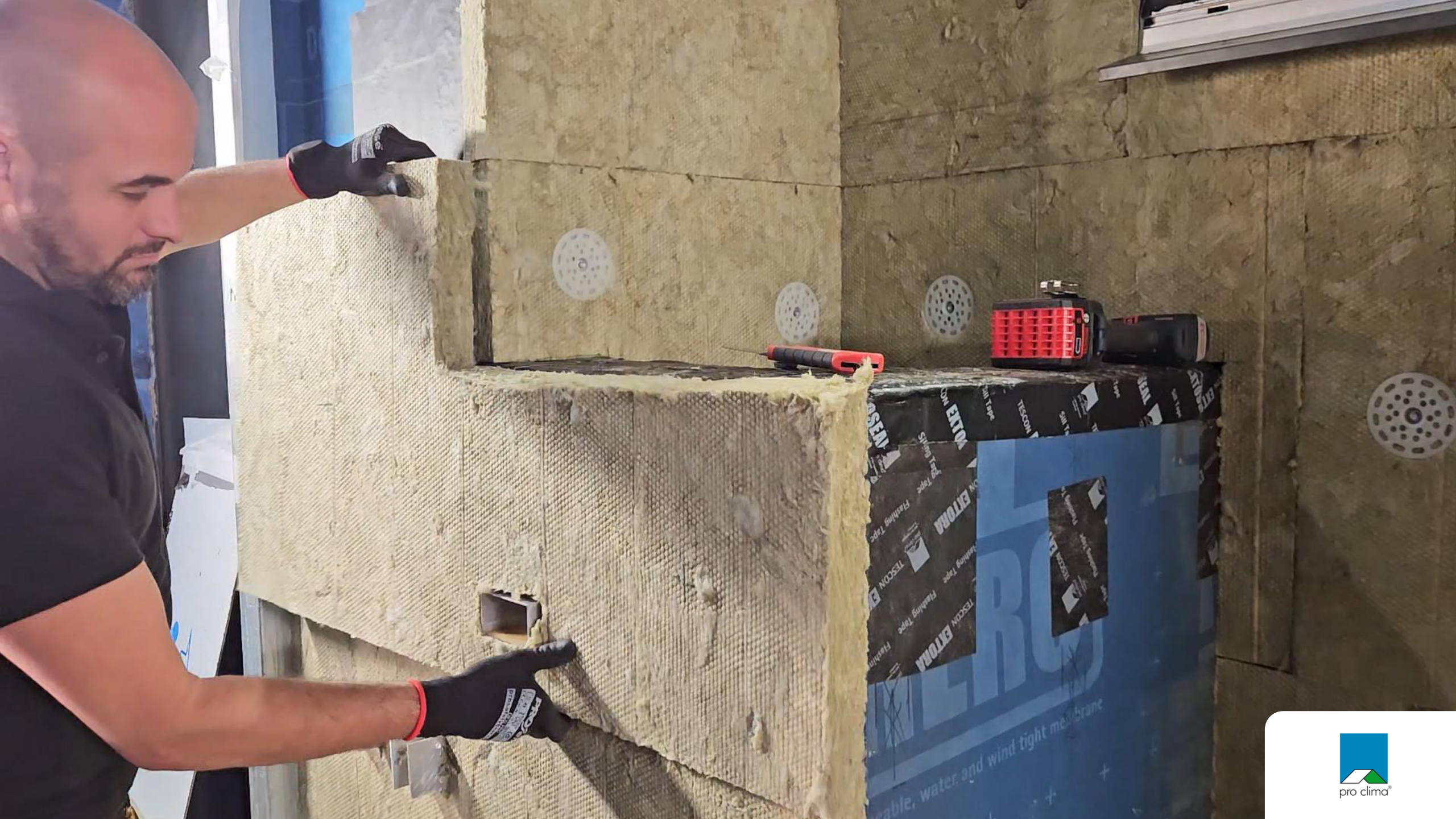
TFLEX
Façade Control
Joint Material

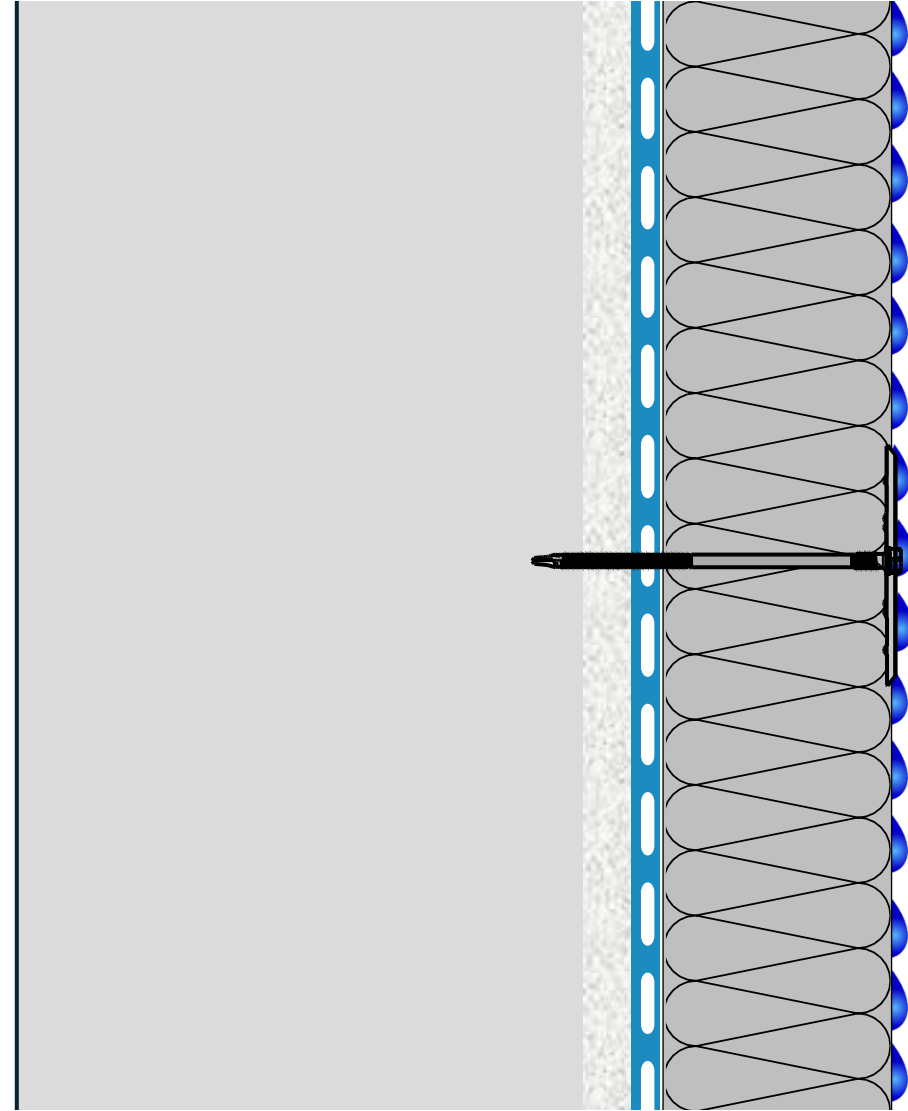


TESCON EXTORA®
Weathertight
Sealing Tape









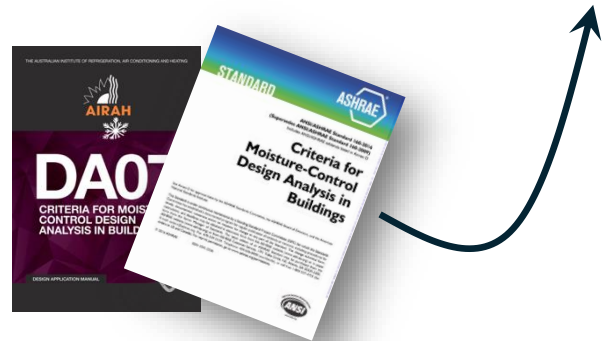
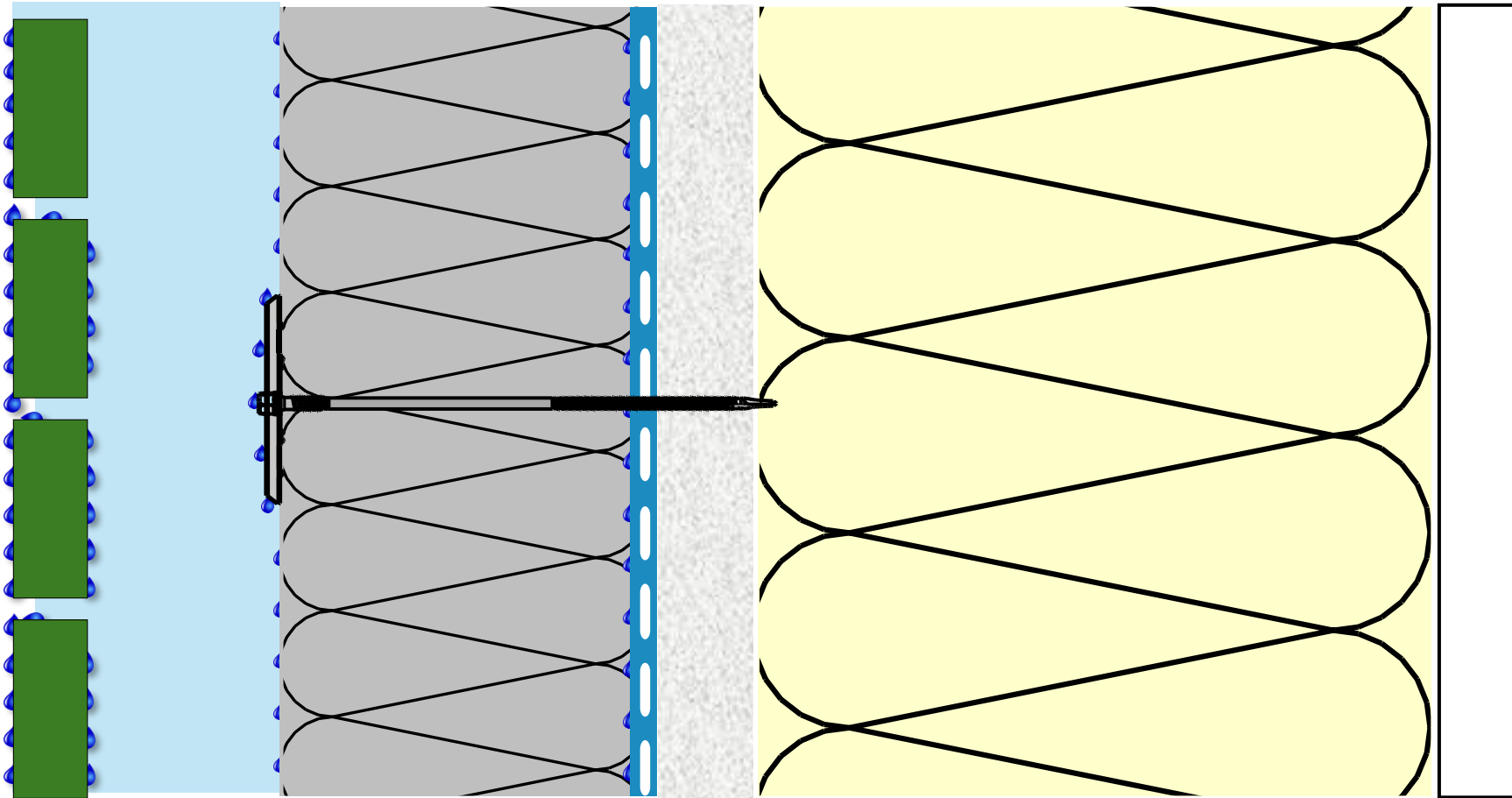
pro clima
Tested to
AS/NZS 4284
WITHOUT ANY CLADDING

Facades

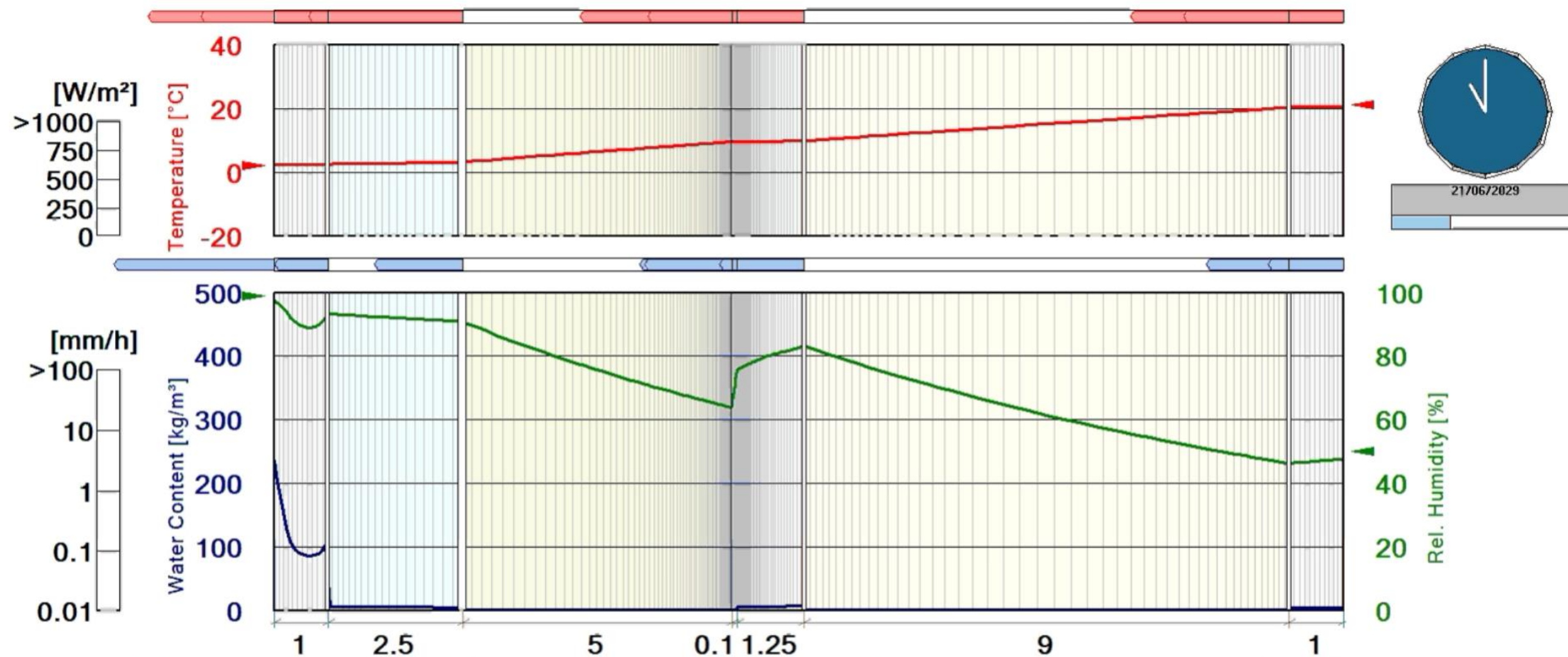
8

Let it Dry

Porous materials dry quickly



Case 3: FORTX MELIOR - Christchurch



CEDRAL Smooth - ETEX EXTERIORS ANZ ISOVER GW Integra ZKF - 035 Plasterboard
 Air Layer 25 mm pro clima SOLITEX ADHERO FC®
 Rainscreen SL950
 Siniat WEATHER DEFENCE™ - Etex Australia
Cross Section [cm]



Facades

7

Certification

Verification Reports

IAN BENNIE & ASSOCIATES

Testing of Building Facades

By the Methods of AS/NZS4284:2008

For:
**pro clima Adhesive Weather Resistive Barriers
over rigid substrate**

Test Report No. 2025-016-S1-R3
Date: October 2025
Revision: 3
Client: Pro Clima Australia Pty Ltd



IAN BENNIE & ASSOCIATES

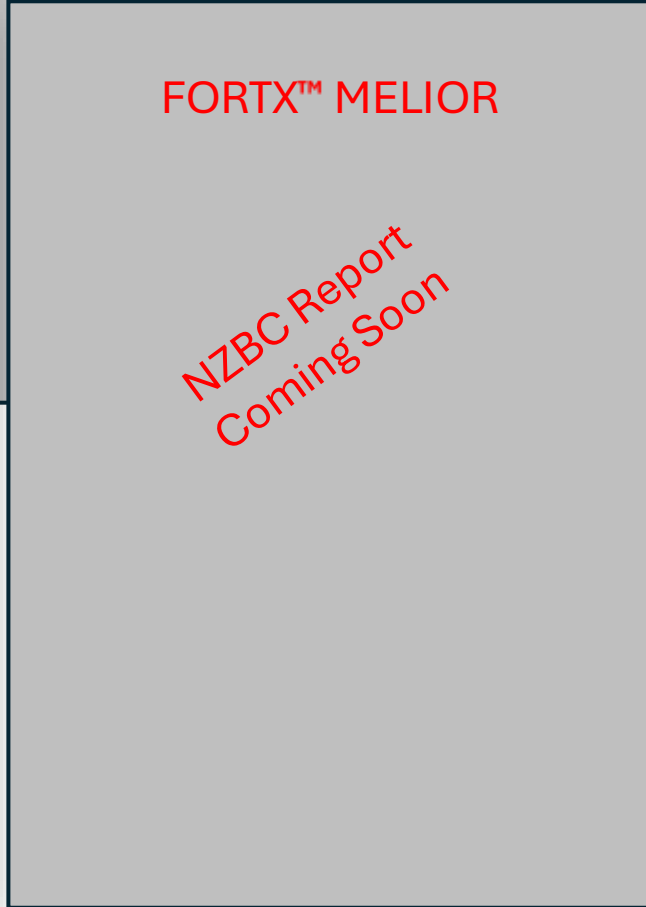
Testing of Building Facades

By the Methods of AS/NZS4284:2008

For:
**pro clima Adhesive Weather Resistive Barriers
over rigid substrate with continuous external ROCKWOOL
insulation**

Test Report No. 2025-016-S2
Date: October 2025
Revision: 0
Client: Pro Clima Australia Pty Ltd

FORTX™ Façade System With



Accredited Laboratory No. 2371
Accredited for compliance with ISO/IEC 17025 - Testing



Building Science Summit New Zealand

**Shaping the Future
of Building
Performance
& Sustainability**