Dulux AcrateX

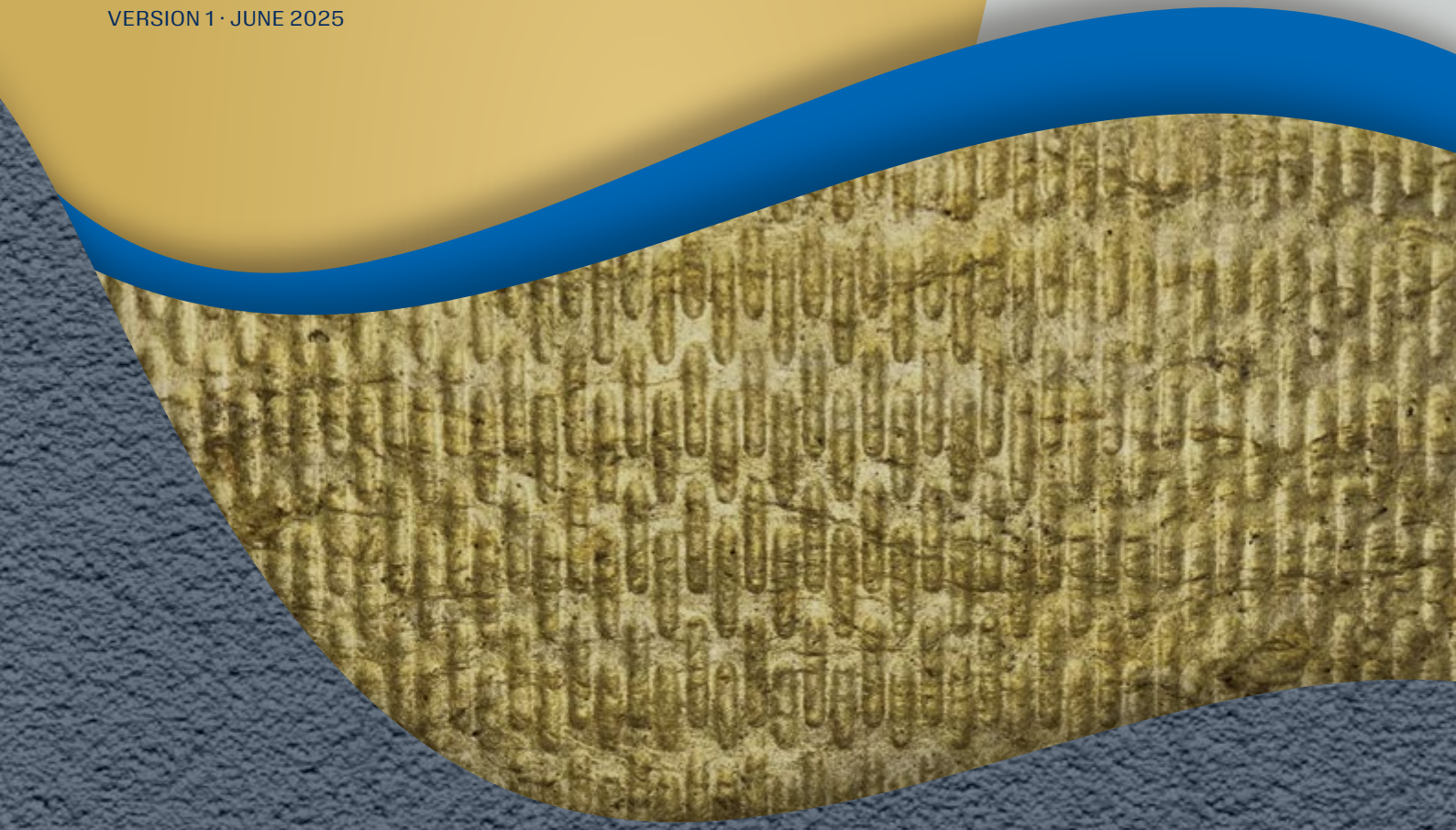
ROCKWOOL

Fletcher Insulation

StoneShield™ Cladding System

SPECIFICATION & INSTALLATION MANUAL

VERSION 1 · JUNE 2025



CodeMark Australia
Certificate CM40425

CMI CERTIFICATION

Contents

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DISCLAIMER

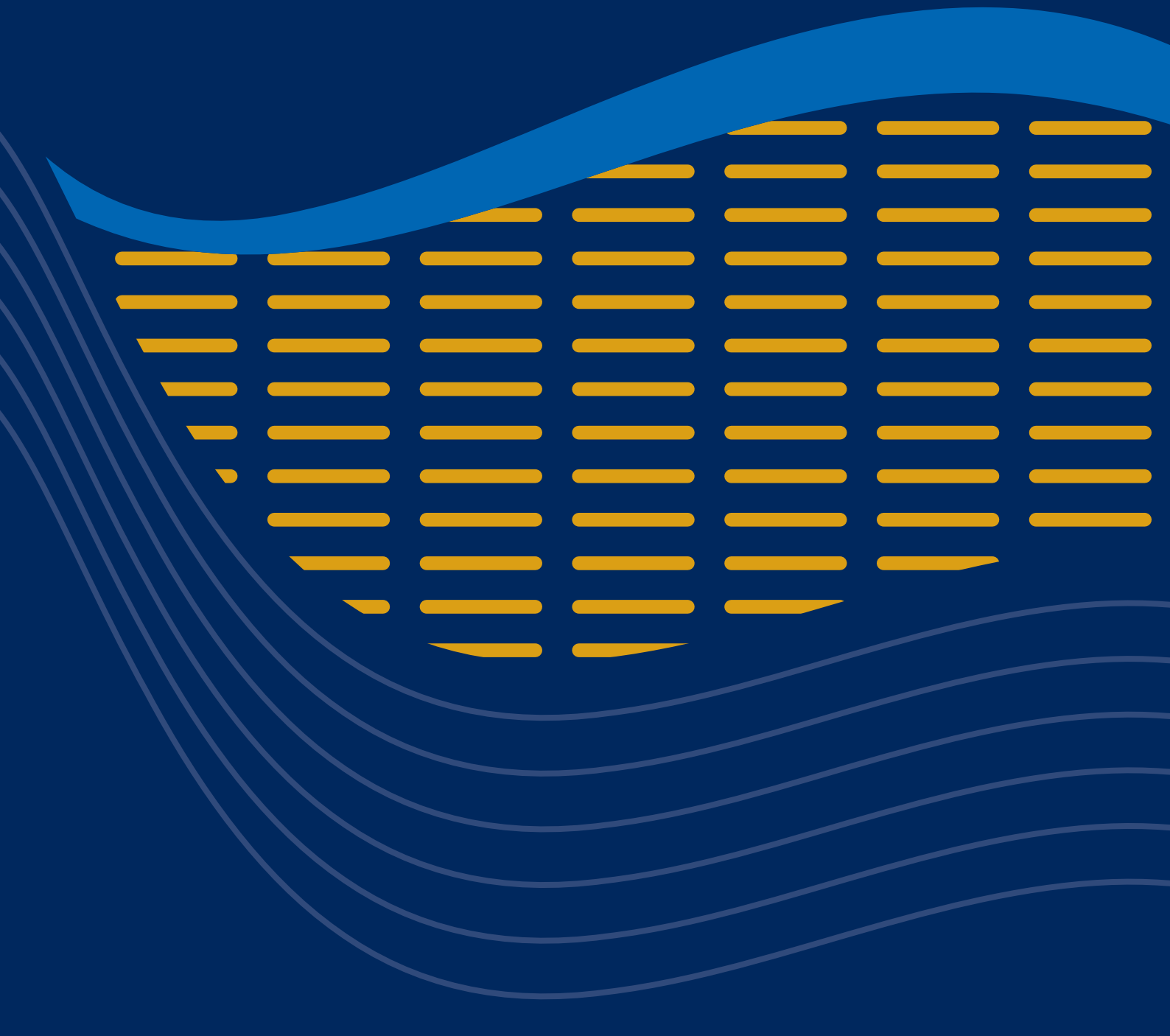
The information provided in this document has been supplied in good faith and to the best of our knowledge. All information has been checked and therefore accurate at the time of producing this document. The cladding system is tested and supported by a CodeMark but it cannot be construed to be a recommendation.

This document has suggested that specifiers, certifiers and builders reference all mandates available to determine the suitability of the StoneShield Cladding System for their project, however, it is beyond our control where this system is specified and installed. Therefore, Dulux Acratex takes no responsibility for any loss or damage caused by any person acting or refraining from action as a result of misuse of the information provided in this document.

Subject to system installation (in accordance with the CodeMark Certificate of Conformity) and the application of coatings, the integrated system will be warranted by the brand that is known and trusted Dulux Acratex. Dulux Acratex recommends that the care and maintenance program set out in this document be followed as this will significantly enhance the longevity and performance of the building facade.

SECTION 1

STONESHIELD CLADDING SYSTEM



Overview

The StoneShield Cladding System by Dulux Acratex is an alternative way to design and build.

Whether you're a developer, architect, designer, builder or cladding installer, the StoneShield Cladding System delivers an alternative walling system to traditional masonry construction. It includes lightweight panels that are easily cut and fixed to timber or steel framing, and then finished with a protective coating system.

The StoneShield Cladding System is an ETICS* system providing thermal insulation from the outside wall protecting against thermal loss.

The StoneShield Cladding System is designed as a totally integrated, multi-layered, non-load bearing lightweight cladding system for facades. Delivering a weatherproof external building envelope that provides excellent thermal performance (R-Value) with continuous insulation (CI) to reduce thermal bridging and also offers noise reduction as well as fire rated (FRL & BAL) performance.

***ETICS (External Thermal Insulation Composite System) is a compact multi-layered insulation solution designed to improve the energy efficiency of both new and existing buildings.**

Applications

The StoneShield Cladding System provides a weatherproof cladding and insulation system suitable for residential, commercial and low-rise multi-residential building applications.

COMMERCIAL CONSTRUCTION

The StoneShield Cladding System can be specified in applications for commercial and multi-residential external walls for NCC Volume One, Class 2 to 9 buildings with wind loads calculated in accordance with **AS/NZS 1170.2:2021** (Structural Design Actions, Part 2: Wind Actions).

It can be fixed and finished to either steel or timber frame construction, including for use as an FRL wall and separating walls.

RESIDENTIAL CONSTRUCTION

The StoneShield Cladding System can be specified in applications for residential external walls to NCC Volume Two, Class 1 and 10 buildings with wind loads calculated in accordance with **AS 4055:2021** (Wind loads for housing).

RETROFIT

The StoneShield Cladding System can be retrofitted to existing buildings as an external insulated finishing system (Where the previous cladding has been removed).

Partnerships

Dulux® Acratex®, ROCKWOOL™ and Fletcher Insulation® have partnered to utilise their combined capabilities to develop the StoneShield Cladding System.

DULUX ACRATEX

The StoneShield Cladding System is finished with the multi-layered Dulux Acratex Coating System, incorporating a basecoat (render), aesthetic coat and protective membrane topcoats for resistance against climatic and atmospheric conditions. Available in the full Dulux colour range.

To learn more go to SECTION 4 in this manual →

ROCKWOOL

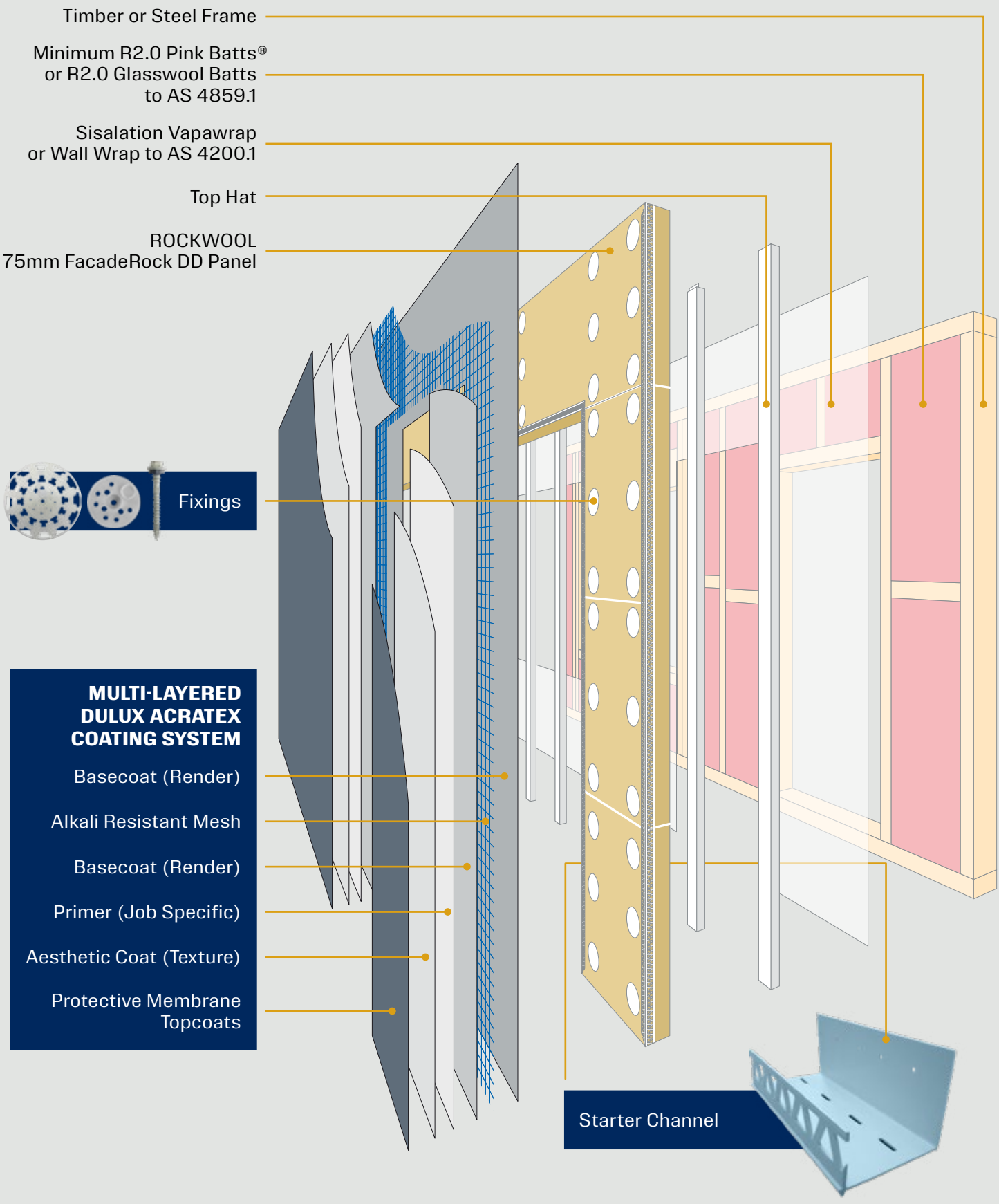
ROCKWOOL 75mm FacadeRock™ DD (dual-density) panels are made from basalt and other natural stones. Manufactured with the outer surface featuring a distinctly higher density than the underside. The high-density top layer eases basecoat (render) application, while the lower-density inner layer reduces panel weight to better adapt to frame irregularities. These features reduce installation time and provide an effective barrier against heat, sound, and moisture.

To learn more go to page 103 in this manual →

FLETCHER INSULATION

Sisalation® Vapawrap® breathable wall wrap by Fletcher Insulation complies with the requirements of **AS 4200.1:2017** as a water barrier and vapour permeable membrane.

Typical Configuration Drawing



Benefits of the StoneShield Cladding System

CODEMARK CERTIFIED

The StoneShield Cladding System is CodeMark® certified as a fully integrated lightweight cladding system in compliance with the Building Code of Australia (BCA) and NCC Volume 1 and Volume 2.

DUAL-DENSITY LIGHTWEIGHT PANEL

ROCKWOOL 75mm FacadeRock DD dual-density panels have a high-density top layer for easy basecoat (render) application and a low-density inner layer, to better adapt to frame irregularities.

FIRE RATED

The StoneShield Cladding System has been tested to **AS 1530.4: 2014** and is approved for FRL and up to BAL-FZ zones; subject to system specification and in accordance to with assessment reports.

THERMAL EFFICIENCY

The StoneShield Cladding System has a thermal performance R-Value of R3.88 to R4.96 (subject to frame type and wall insulation), delivering continuous insulation. The StoneShield Cladding System complies with **AS/NZS 4859.1:2018** and **AS/NZS 4859.2:2018**.

COATING SOLUTIONS

The integrated multi-layered Dulux Acratex Coating System, incorporates a basecoat (render), aesthetic coat and protective membrane topcoats providing protection against environmental and climatic conditions.

EASE OF HANDLING

One ROCKWOOL 75mm FacadeRock DD panel is 1.32m^2 and weighs 12kg making it easy to handle and install.

THERMAL BRIDGING

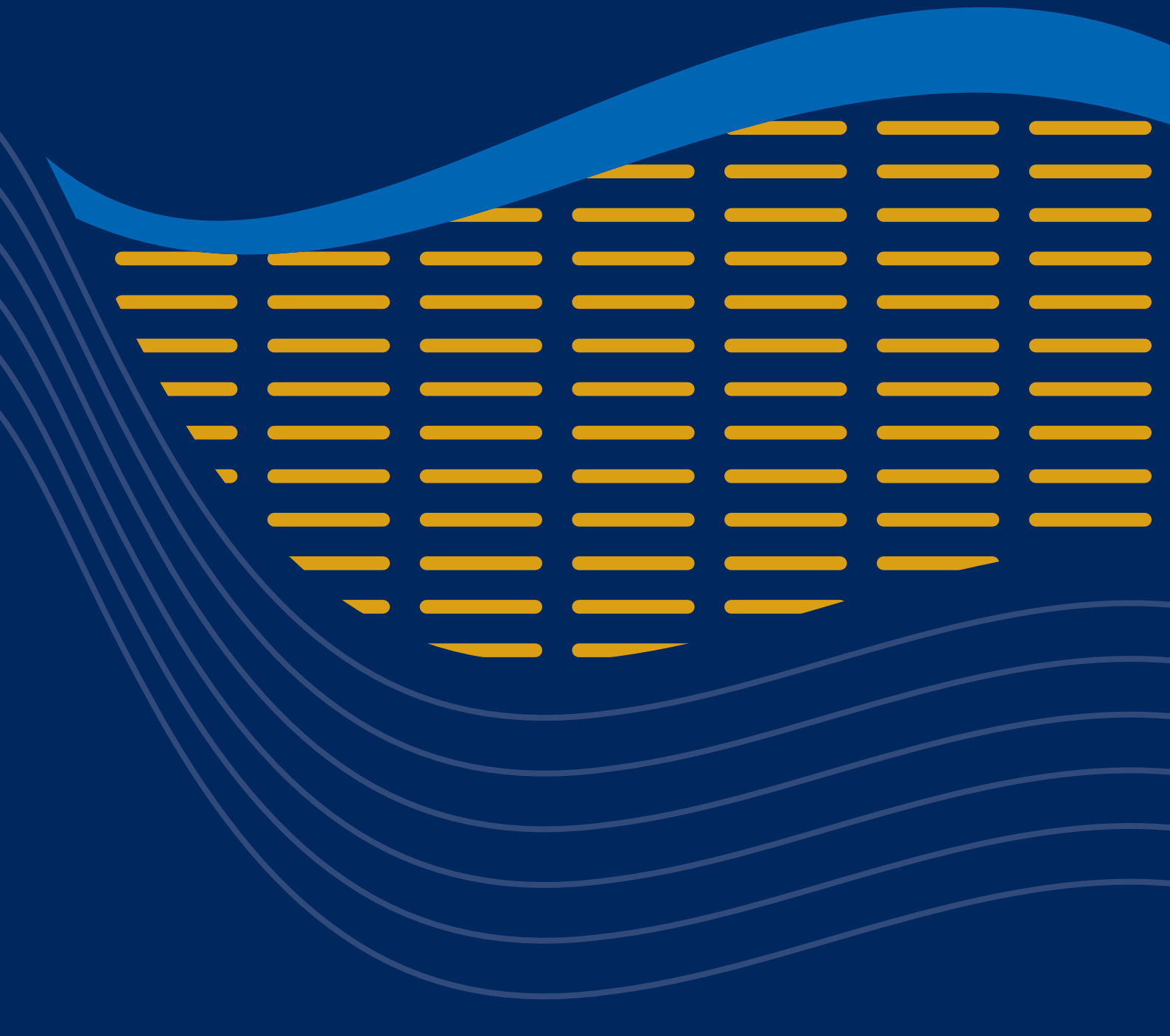
The StoneShield Cladding System's continuous insulation mitigates thermal bridging by minimising transfer of heat between interior and exterior environments.

NOISE REDUCTION

The StoneShield Cladding System achieves an Rw-value of up to Rw=50±2dB. Subject to system specification.

SECTION 2

SPECIFICATION CONSIDERATIONS



Considerations for End Users

A multi-layered insulated cladding solution for specifiers, installers & builders.

This Specification & Installation Manual is designed to provide installation guidelines for both timber and steel frame construction and as an integrated lightweight cladding system that has been tested and CodeMark certified.

The Relevant Building Surveyor or Principal Certifier is to make themselves familiar with the CodeMark and to review the information as provided prior to assessing projects. Sign-off can be provided once satisfied that the building conforms to the CodeMark plus the relevant National Construction Code (NCC) criteria and specific job requirements. The assessment should be as part of the overall building approval and sign-off, prior to installation commencement or job start. The Construction Compliance Certificates or Statements of Compliance*, is typically provided by either Relevant Building Surveyors or Principal Certifiers upon job completion and confirmation that the installation of the StoneShield Cladding System is as per CodeMark.

***Subject to State and Territory requirements and/or in accordance with project program/sign-off.**

IF YOU ARE AN INSTALLER

In all circumstances, installers must understand the method of installation and be a trade qualified person and/or appropriately licensed to install cladding relative to the governing State and Territory Building Authority. Each state and territory has different licensing and registration requirements, and it is important that you understand the requirements that apply to you as an individual and hold the appropriate license or registration.

In conjunction with the approved & stamped construction drawings for the project, ensure you follow the full StoneShield Cladding System Specification & Installation Manual that itemises components that **are approved and supplied only by Dulux Acratex**.

The StoneShield Cladding System Warranty can be issued only when the StoneShield Cladding System Certificate of Installation is completed and signed with proof of purchase and payment.

Go to Certificate of Installation form on page 58 in this manual →

Any system design and/or installation variation that is not in accordance with this manual and/or CodeMark Certificate will be deemed non-compliant and voids any product warranty claim issued by Dulux Acratex.

IF YOU ARE A BUILDER

Ensure the appointed installer understands the method of cladding system installation and is suitably qualified and/or licensed to install cladding relative to the governing State and Territory Building Authority. Each state and territory has different licensing and registration requirements. It is important that you, as a builder, comply with the applicable requirements, including those related to contractual obligations and cladding installation.

The StoneShield Cladding System is a CodeMark CodeMark Certified System, ensuring that when installed according to the full StoneShield Cladding System Specification & Installation Manual, it meets CodeMark compliance and can be claimed for the project intent.

Any system design and/or installation variation that is not in accordance with this manual and/or CodeMark Certificate will be deemed non-compliant.

IF YOU ARE A SPECIFIER

Ensure the information in this specification & installation manual is appropriate for the application you are planning. All design building details and specifications for a project that you undertake need to comply with the mandatory requirements of the relevant State and Territory Building Authority, the current National Construction Code (NCC) Volume One and Volume Two and associated Australian Standards. The design and documentation is to be in accordance with all legislative requirements including any design or areas which fall outside the scope of the StoneShield Cladding System specification.

The StoneShield Cladding System does not contribute to the structural integrity of the frame.

CodeMark Certification

CODEMARK Australia
Certificate CM40425
CMI CERTIFICATION

The StoneShield Cladding System by Dulux Acratex is CodeMark Certified. The installation must strictly comply with the CodeMark Certificate of Conformity and meet the Building Code requirements specific to the building's classification and construction type for the purposes of achieving compliance and warranty.

Where the system has NOT been installed strictly in accordance with the CodeMark Certificate of Conformity and this specification & installation manual, the CodeMark Certification will be deemed void and non-compliant, and the following will need to be considered:

- The installed system will need to be reassessed by the relevant project parties and will require an alternative solution to demonstrate compliance to the National Construction Code (NCC). This will need to be assessed using a 'Performance Solution' assessment method in accordance with the NCC, which must be approved by a qualified engineer and/or building surveyor.
- The CodeMark Certificate of Conformity will be withdrawn from that specific job site under the NCC CodeMark requirements.
- In such circumstances Dulux Acratex accepts no responsibility for system specifications that are installed outside the StoneShield Cladding System CodeMark Certified system. Compliance can only be met by a performance solution which is the responsibility of the installer and/or builder to pursue.

View the CodeMark Certificate →

Design & Detailing Considerations

The StoneShield Cladding System is a **"non-load bearing"** walling system designed to be installed to a "load bearing" timber or steel frame with 600mm and/or 450mm stud spacings for use in low-rise buildings.

Incorporating the StoneShield Cladding System into any project will require many different types of considerations.

Where building design elements fall outside the standard construction details that are not included in this manual (such as curved walls, arches, domed soffits, etc), these details can be considered as project-specific, whereby radii are considered and Engineer details outlining fixing points and details are reviewed. Contact Dulux Acratex for review.

The information provided in this section, is not exhaustive and end users will be required to check against all relevant legislation and jurisdictions to make sure all levels of compliance have been met. Implementing Good Building Practice may assist with potential gaps within regulations but may also apply additional measures that add to increased performance to the building itself; for example: selecting a dark colour but increasing the number of control joints to cater for increased movement caused by thermal stress.

It is recommended that Dulux Acratex be consulted during Design and Documentation Stage to assist with suitability and detailing of the StoneShield Cladding System for project specific application.

Compliance Considerations

The Architect and/or Building Engineer must provide construction drawings and specifications that align with the StoneShield Cladding System CodeMark along with NCC performance requirements and associated Australian Standards. Therefore, all Structural Provisions, loadings, etc., need to be addressed as part of the design and documentation of the building. This manual does itemise some key Performance Requirements but does not exhaust all related requirements.

The StoneShield Cladding System by Dulux Acratex is tested to meet the National Construction Code (NCC) performance criteria for:

- Structural Provisions
- Fire Safety Considerations
  - BAL
  - FRL
- Insulation
  - Thermal Performance
  - Energy Performance
- Acoustics
- Weatherproofing
- Durability

Structural Provisions

STRUCTURAL COMPLIANCE TO NCC 2022

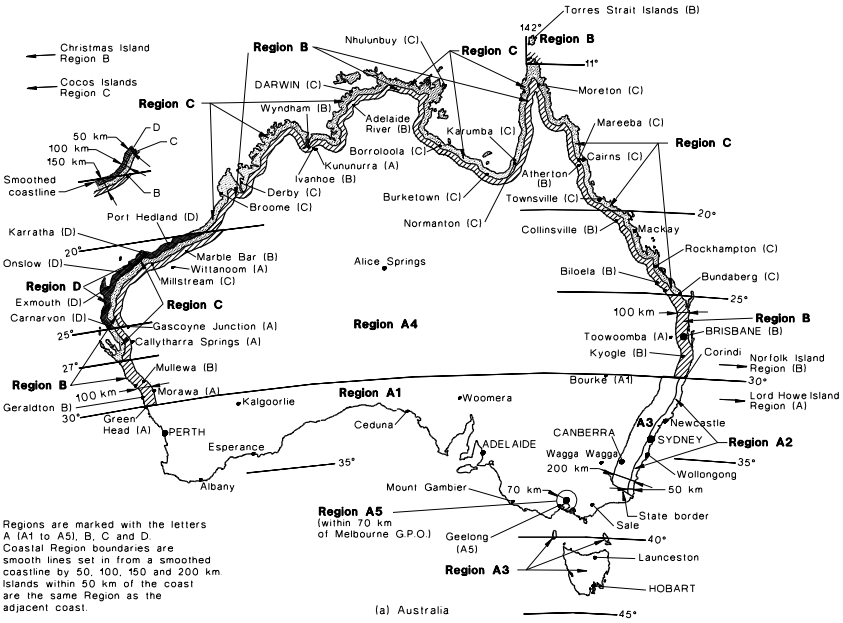
The StoneShield Cladding System complies with NCC performance requirements B1P1 and H1P1 for Structure verified by testing in accordance with **AS 4040.2:1992 (R2016)** by an Accredited Testing Laboratory and a report by a professional engineer. (Refer to Wind Pressure Fixing Requirements tables in accordance with **AS/NZS 1170.2:2021** and **AS 4055:2021**.)

WIND PRESSURES AND FIXING REQUIREMENTS

The effects of wind load around corners are considered in the design and information provided in this manual and take into account factors such as site wind speed, direction, terrain, height, shielding and topography. These project specific considerations should be conducted and approved by a qualified engineer at design stage and documented into the construction drawings to ensure that the final system design is fit for purpose and specific to the project and complies to Australian Standards **AS/NZS 1170.2:2021** or **AS 4055:2021** for wind loading requirements.

The StoneShield Cladding System complies with the NCC requirements for use in wind zones limited:

- Up to 4.4(kPa) in accordance with **AS/NZS 1170.2:2021** (non-cyclonic)
- Up to N4 in accordance with **AS 4055:2021**
- Not tested nor suitable for use in Cyclone regions



NCC VOLUME ONE CLASS 2 TO 9: COMMERCIAL MULTI-RESIDENTIAL CONSTRUCTION

Compliance and calculations for wind pressures for Class 2 to 9 buildings need to be in accordance with **AS/NZS 1170.2:2021** (Structural Design Actions - Part 2 Wind Actions) and as per the Wind Pressure Fixing Requirements tables in this manual.

NCC VOLUME TWO CLASS 1 AND 10: RESIDENTIAL HOUSING CONSTRUCTION

Compliance to wind loads is as per **AS 4055:2021** (Wind Loads for Housing) and as per the Wind Pressure Fixing Requirements tables in this manual.

A building engineer will apply the limitations outlined in all relevant sections of the Australian Standard to achieve compliance and determine suitability of building products, fixings, structural resistance, etc. against the topography and site location of the building.

Go to the Wind Pressure Fixing Requirements tables on page 23 in this manual →

TIMBER FRAMING

Design: Timber framing design in accordance with **AS 1720.1** - Design of timber structures.

Construction: Residential timber-framed construction - non-cyclonic areas: **AS 1684.2** or **AS 1684.4**.

NOTE: The timber used in the project must be of sufficient standard in terms of durability to meet the local conditions to which the timber will be exposed, such as moisture or insect attack. The force applied to the panels by the wind loading is transferred into the stud frame. The frame must meet the requirements of the relevant Australian Standard. All bracing and hold down requirements should be met by the frame design.

STEEL FRAMING

Design: Cold-formed structural steel sections designed and constructed in accordance with **AS/NZS 4600** - Cold-formed steel structures.

Construction: Residential and low-rise steel framing - NASH Standard "Residential and Low-Rise Steel Framing" Parts 1 & 2.

NOTE: Structural bracing is to be part of the integral wall frame. The StoneShield Cladding System doesn't contribute to the structural integrity of the frame.

SLAB AND FOOTINGS

Slab and footings on which the framing is supported must either be designed and certified by a qualified Structural Engineer and that it complies to **AS 2870** "Residential slabs and footings" and any other relevant **AS 2870** supplementary standards, or an Engineer may reference **AS 3600** "Concrete Structures" as required.

NOTE: A 75mm minimum clearance between the base of the panel and the finished ground level must be maintained to avoid contact of the panels with the soil. The slab edge rebate shall not be rendered as this may cause soils to leach through the slab edge render and rise into the panel.

Fire Safety Considerations

The NCC requires building materials to be tested according to specific standards subject to class of building and construction type. The following itemises the different **AS 1530** tests that are required for Class 1 and 2 buildings that the StoneShield Cladding System by Dulux Acratex has been tested to and certified.

NON-COMBUSTIBILITY

ROCKWOOL 75mm FacadeRock DD panels have been tested to **AS 1530.1:1999** and are deemed as non-combustible.*

*For AS 1530.1:1999 test assessments contact Dulux Acratex on 13 23 77.

FIRE HAZARD PROPERTIES

When tested to **AS 1530.3:1999**, ROCKWOOL 75mm FacadeRock DD panels conform to the "Spread of Flame" and "Smoke Developed" requirements.*

*For AS 1530.3:1999 test assessments contact Dulux Acratex on 13 23 77.

FIRE RESISTANCE LEVEL (FRL)

The StoneShield Cladding System has been tested for the Fire Resistance Level (FRL) to **AS 1530.4: 2014**.

Frame Type	Frame loading	Considerations	Achieves FRL
Steel	Load Bearing	Must have structural design	90/90/90
		Must comply with framing code	
		Min. 10mm Plasterboard to internal facing	
	Non-Load Bearing	Frames in accordance to NASH or **AS 4600**	-/60/60 Class 1 & 2
Timber	Load Bearing	Must have structural design	90/90/90
		Frames in accordance with **AS 1684**	
	Non-Load Bearing	Frames in accordance with **AS 1684**	-/60/60 Class 1 & 2

System installation requires that it is to be installed in accordance with the relevant FRL System Test Certificate of Assessment and the StoneShield Cladding System Specification & Installation Manual; Dulux Acratex does not approve nor endorse the use of any non-standard or non-approved FRL tested specified system components. Dulux Acratex will not be responsible for the FRL system performance with non-standard or non-approved components that are substituted with alternative components. The use of any non-standard or non-approved components will be deemed as a non-compliant FRL walling system.*

*For FRL reports and certificates contact Dulux Acratex on 13 23 77.

BUSHFIRE ATTACK LEVEL (BAL)

The StoneShield Cladding System is compliant to **AS 3959** for use as an external wall cladding in bushfire prone areas designated with a BAL from Low to FZ as it is tested to be non-combustible (BAL 12.5 to 40) and exceeds the FRL of -/30/30 (BAL FZ).

Installation of the StoneShield Cladding System must be in accordance with the design and installation manual and all other external wall components must meet the requirements of **AS 3959** Section 3 and wall clauses in the relevant BAL sections of the Standard.

Thermal Efficiency

The StoneShield Cladding System complies with **AS/NZS 4859.1 2018** and meets the requirements of NCC 2022 Volume One & Volume Two, and state & territory prescribed variations.

Go to Thermal R-Value Ratings tables on page 25 in this manual →

Acoustics

The Rw (Weighted Sound Reduction Index) is a single number index used to rate the sound insulation of a partition, against noises such as speech. The index given is the expected performance in a laboratory which tests to ISO 10140-2 "Acoustics – Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation", and determined according to the procedure in AS ISO 717.1 "Acoustics - Rating of Sound Insulation Buildings and of Building Elements – Airborne Sound Insulation". The rating obtained on a building site, called the Weighted Apparent Sound Reduction Index (R'w) may differ from the laboratory results.

Ctr is an adaptation term which when applied to the Rw value results in a single number index that provides a more reliable indicator of the ability of the partition to isolate against road traffic noise and other sources containing low frequency components. Refer also to AS ISO 717.1 "Acoustics - Rating of Sound Insulation Buildings and of Building Elements – Airborne Sound Insulation". The expected tolerance is ±2dB for Rw and ±3dB for Rw + Ctr. This allows for variations in the test method, the difference between laboratories and the accuracy of the estimating techniques.

The Rw+Ctr can be expressed either as the Rw index with the spectrum adaptation term in brackets e.g. Rw(Ctr) = 45(-2) dB or as a single figure number, e.g. Rw+Ctr = 43 dB.

The opinions are based on the partition being of good construction and assume the face joints finished, the perimeters acoustically caulked and that there are no acoustical weaknesses in the system.

Go to Acoustic Performance tables on page 27 in this manual →

Weatherproofing & Rising Damp

WEATHERPROOFING

The StoneShield Cladding System complies with NCC performance requirements F3P1 and H2P2 for Weatherproofing verified by testing in accordance with F3V1 and H2V1 by an Accredited Testing Laboratory and a report by a professional engineer. (Refer to Weatherproofing and Rising Damp for **AS 4055:2021** Wind Classification up to N4 and **AS/NZS 1170.2:2021** Design Serviceability Wind Pressures of +0.83 kPa and -1.23 kPa.)

NOTE: Refer to DPC at the bottom of this page for extra information.

TERMITE MANAGEMENT

It is the builder's responsibility to ensure that all council regulations and NCC requirements are fully adhered to regarding the design of the house for preventing termite attack and are to follow **AS 3660.1:2014**, **AS 3660.2:2017** & **AS 3660.3:2014** for Termite management as applicable..

The installation of the Termite treatment is the responsibility of the builder, and the Termite Management System materials are to be installed by a licensed contractor prior to commencing the installation of the StoneShield Cladding System.

DAMP-PROOF COURSE (DPC)

Damp-Proof Course prevents moisture from rising, through a process called rising damp. DPC's are installed in critical locations to protect the buildings integrity and maintain healthy conditions for occupants to live in.

The DPC is normally installed prior to the installation of walls and just above the foundations. The DPC is a protective barrier that prevents moisture from rising and being absorbed into the walls, and into the building which leads to timber rot, crumbling brickwork and other damage such as mould.

DPC's are made from materials that water cannot pass through. The various water-resistant materials that may be used as a Damp-Proof Course, include corrosion resistant metal, such as aluminium, copper or zinc, and impact resistant plastics like polyethylene. Refer to the Australian Standard for suitability of material and location.

The DPC is the responsibility of the builder, and the Damp-Proof Course materials are to be installed by a licensed contractor prior to commencing the installation of the StoneShield Cladding System.

The Australian Standard for Damp-Proof Course and Flashings is **AS/NZS 2904:1995**.

Durability

APPROACH TO WEATHERPROOFING, MOISTURE MANAGEMENT AND DRAINAGE

Compliance on weatherproofing is achieved at the Dulux Acratex multi-layered coating system which incorporates a protective weatherproof membrane (tested to **AS 4548.5:1999**).
The multi-layered coating system includes basecoat (render) followed by an aesthetic coat (texture) that is a texture product and final protective membrane topcoats that provides the weatherproofing element while providing opportunity for colour.

Go to SECTION 4: Acratex Coating System Specification in this manual →

In terms of moisture management and drainage, the StoneShield Cladding System has been tested to the requirements of the NCC using the test methods of **AS/NZS 4284**.

In addition, the StoneShield Cladding System has been designed and tested using a 'cavity' system as a secondary line of defence for the management of condensation and moisture, based on the principal of "Good Building Practice".

BENEFITS OF HAVING A DRAINED CAVITY SYSTEM

In principle, the drainage cavity separates the panel from the frame, creating a second layer of defence that allows air flow to dry out any condensation or moisture that may form in the wall or behind the panel. The drainage cavity is created by installing Top Hats thus allowing any moisture/ condensation to drain down the back of the panel and out through the bottom of the wall. Any remaining condensation or moisture within the cavity can then dry through ventilation provided along the bottom of the cavity and the breathable vapour permeable wall wrap.

To learn more go to page 18 in this manual →

OTHER CONSIDERATIONS

To reduce the risk of water entry, the following construction options should be considered as part of the build process:

Install flashings at the head, jamb and sill of all openings to drain water to the outside face of the cladding.

A. The use of flashings/membranes at all junctions

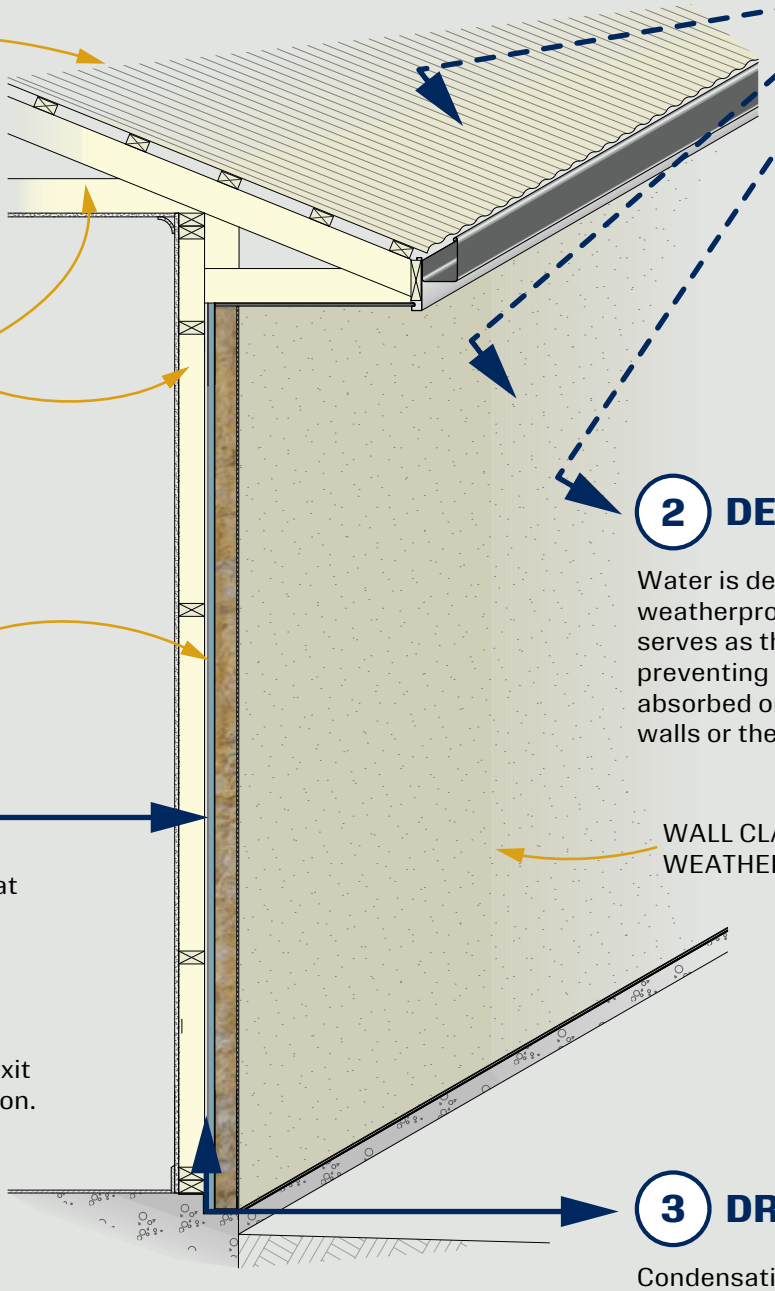
B. Maintain clearance where the bottom of the cladding terminates at slab edge, over any roof sections, deck or apron/soaker flashing.

C. Install air seals between window reveals and framing to reduce the risk of air leakage that can carry water past the cladding into the wall framing.

D. The cavity is not intended to be the primary drainage path. All pliable membranes and flashing must be designed to drain the water to the outside of the cladding.

Principles of a Cavity System

The THREE key principles guiding weatherproofing and drainage that assists with durability for all cladding systems, are:



1 DRAINAGE

Any condensation or water that penetrates should drain down inside the cavity behind the cladding. The drainage cavity acts as a secondary defence, allowing any buildup or leaks behind the facade system to exit at the bottom of the wall section.

2 DEFLECTION

Water is deflected by eaves and weatherproof wall cladding. This serves as the first line of defence, preventing moisture from being absorbed or entering through walls or the roof.

3 DRYING

Condensation should dry through ventilation, and any remaining moisture should escape through the structure. The cavity enables airflow from the bottom, allowing residual moisture to be absorbed by the vapour permeable wall wrap and gradually dry out.

Architectural and Engineer detailing should prevent water entry in the first instance but should also make provision for the draining or drying out of any water that may penetrate under extreme weather conditions.

Good Building Practices

CONTROL JOINTS

During the life of a building, the building and materials that it is constructed from, will move. This movement is due to many factors such as settlement, structural movement, thermal expansion and contraction and differential movement between materials. This kind of movement(s) will impart added stress to building weak points, adjacent to windows, doors and any other openings.

Change in substrate material that have been coated over with render, texture or elastomeric paint, can move and lead to cracking to the coating system. To accommodate for such building movement and reduce the risk of cracking, control joints between change in substrate material must be installed & not rendered over.

NOTE: At all control joints - the Top Hat should be discontinuous to allow for the effective movement of the building at these locations.

NOTE: Good Building Practice provides for expansion joints at 3m (max) height and 6m (max) wide intervals and at all building weak points and/or where potential cracking may occur e.g. in line with openings such as (windows / doors), horizontally between floor levels and at all interfaces of different building construction materials.

These control joints should defined and provided by the Architect/Builder/Project Engineer. The placement and correct installation of control joints is the responsibility of the Building Engineer/Builder in determining the placement and number of control joints to accommodate any anticipated movement.

NOTE: When considering dark colours additional movement joints to building weak points should be considered to accommodate for the thermal absorption.

Allow for control joints between the StoneShield Cladding System and other adjacent substrates or structures.

CONTROL JOINTS AND FIRE RATING REQUIREMENTS

Fire Resistance Level (FRL): Whereby a fire rated wall is required (such as a boundary wall, separating wall, etc.), it must be done in accordance with the FRL system specification that includes a non-combustible backing rod and fire rated sealant.

NOTE: Contact Dulux Acratex for the relevant FRL test certificates of assessment. Reference all relevant standards for FRL and BAL for compliance requirements.

For FRL Installation Requirements go to page 44 in this manual →

BUILDING PENETRATIONS AND EXTERNAL SERVICES

Relevant Australian Standards and Good Building Practice should be followed for the installation of services into the building. In general, services should be installed within the framework and cavity of the building structure. However, all penetrations through the StoneShield Cladding System must allow for differential movement between the installed system and the services.

As all penetrations are a potential source of water ingress, they are required to be sealed with a Dulux Acratex approved paintable polyurethane sealant. A qualified Engineer needs to check if penetration requires fire rated sealant and backing rod. Back blocking should be installed for items such as downpipe brackets, outside taps, light fittings and other building services to the appropriate locations and apply flashing tape to these area before panel installation.

Go to SECTION 7: Detailed Drawings in this manual →

WASTE MANAGEMENT AND RECYCLING

The ROCKWOOL 75mm FacadeRock DD panel is a lightweight material that is easily dispersed in windy conditions. All waste and off-cuts should be stored in plastic bags, secured and disposed of in accordance with local regulations. Good frame design will minimise the amount of waste generated during the construction process.

Recycling Options VIC only (other states TBC):

Bagged waste can be returned to the following Dulux Trade Centres:

- Dandenong South: 169 Logis Blvd, Dandenong South, VIC 3175
- Epping: Gate 1/122 Gateway Blvd, Epping, VIC 3076

Alternately, collection of bagged waste can be arranged on site, for a fee.

To arrange collection, contact Dulux Trade Centre Keilor Park on (03) 9916 6205

GROUND CLEARANCE

Install the StoneShield Cladding System with a minimum 75mm clearance from finishing ground level; this includes pavement and garden, etc. All falls to run away from the building foundation and the StoneShield Cladding System; for example: typically a minimum slope of 50mm over the first metre. Refer NCC Vol 2. clause 7.5.7.

COLOUR CONSIDERATIONS

For Class 1 buildings, the function of Energy Efficiency Requirements is to mitigate the impact of extreme hot or cold weather conditions and its affect on external building envelope. The "Housing Energy Efficiency Calculator"* helps to calculate the thermal bridging between wall type and insulation which also includes colour and glazing elements. The same principles can be applied to Class 2. Darker colours absorbing more heat is well known and a factor to be considered in any building application.

The impact a colour may have on any walling element is heavily influenced by other factors such as the site location, design, placement of control joints, orientations, thermal breaks, insulation, etc.. Please reference the NCC Energy Efficiency requirements for additional requirements.

***Housing Energy Efficiency Calculator" is available to download from the resource library in the ABCB website. Alternatively, contact a NATHERS accredited assessor or consultant.**

DARK COLOURS

When using composite lightweight panelised cladding systems (such as the StoneShield Cladding System), there are several factors that should be considered – particularly when selecting dark to very dark colours. Industry best practice suggests that dark to very dark colours will significantly increase external wall surface temperatures (hot to very hot); this results in an increase in thermal stress to both the coating and cladding material to which the coating system is applied. When choosing colours, it is important to also consider the location and orientation of the building, the materials being used and any manufacturers specification for design and installation. Engineering solutions should also be considered and may include (but not be limited to) the location and/or number of control or expansion joints as well as building aspects and processes over minimum requirements set by material manufacturers or the NCC.

COASTAL AREAS RECOMMENDATION

In coastal areas located within 1km of the shoreline or areas where there is a high exposure to salt air & atmospheric pollutants, these locations will require regular or 12 monthly inspections for the build up of contamination & pollutants. Dulux Acratex recommends that the coating surface should be regularly washed accordingly (subject to the exposure conditions) to help maintain its long-term integrity and performance.

Go to SECTION 4: Acratex Coating System Specification in this manual →

Summary of Specification Considerations

For System Design and Installation in accordance with the NCC:

- Building Classification
- Location – coastal or inland
- Identify NCC performance requirements and any additional project specific needs
- Wind design criteria relevant to the specific job site including around building corners
- Self-draining cavity to allow drainage of any moisture ingress or condensation
- Wall wrap – Vapour permeable for condensation control and weatherproofing
- Thermal (R-Value) – energy efficiency
- Building Height
- Bushfire Attack Level (BAL)
- Acoustics (Rw Ctr values)
- Frame type, layout, design, stud spacing (steel or timber)
- Fixing criteria based on wind design pressure and stud spacings
- Colour selection – Available in all Dulux colours
- Additional wall insulation to improve energy efficiency
- Control joint locations and installation Penetrations and External Fixings
- All building projects are subject to fire safety requirements within the NCC, and all project designs for Class 2 to 9 buildings should be assessed by a Fire Engineer
- Fire Resistance Level (FRL)

Wind Pressure Fixing Requirements

FOR WIND CLASSIFICATION IN ACCORDANCE WITH AS 4055:2021

Fixing specification with stud spacings up to a maximum of 600mm centres

Wind Classification (AS 4055: 2021)	Frame Type	Panel Thickness	Min. Fixing Placement From Panel Edge	Max. Fixing Spacings	Fixing Disk Diameter	Screw Type	Screw Length	Vertical Installed Top Hat (0.75bmt)	Starter Channel
N1-N2	Timber	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		130mm	35mm	110mm
N3-N4	Timber	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		130mm	35mm	110mm

Fixing specification with stud spacings up to a maximum of 450mm centres

Wind Classification (AS 4055: 2021)	Frame Type	Panel Thickness	Min. Fixing Placement From Panel Edge	Max. Fixing Spacings	Fixing Disk Diameter	Screw Type	Screw Length	Vertical Installed Top Hat (0.75bmt)	Starter Channel
N1-N3	Timber	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		130mm	35mm	110mm
N4	Timber	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		130mm	35mm	110mm

***When a 130mm fixing disk is required, the 65mm fixing disk is inserted into the 130mm disk prior to screw fixing into the panel. Refer to image.**

Wind Pressure Fixing Requirements (continued)

DESIGN MAXIMUM FIXING SPACINGS WITH ULTIMATE WIND PRESSURES IN ACCORDANCE WITH AS/NZS 1170.2:2021

Fixing specification with stud spacings up to a maximum of 600mm centres

Design Ultimate Wind Pressure in Accordance AS/NZS 1170.2:2021 (kPa)	Frame Type	Panel Thickness	Min. Fixing Placement From Panel Edge	Max. Fixing Spacings	Fixing Disk Diameter	Screw Type	Screw Length	Vertical Installed Top Hat (0.75bmt)	Starter Channel
Up to 1.84 kPa	Timber	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		130mm	35mm	110mm
From 1.84 kPa to a maximum 3.3 kPa	Timber	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		130mm	35mm	110mm

Fixing specification with stud spacings up to a maximum of 450mm centres

Design Ultimate Wind Pressure in Accordance AS/NZS 1170.2:2021 (kPa)	Frame Type	Panel Thickness	Min. Fixing Placement From Panel Edge	Max. Fixing Spacings	Fixing Disk Diameter	Screw Type	Screw Length	Vertical Installed Top Hat (0.75bmt)	Starter Channel
Up to 2.45 kPa	Timber	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	65mm	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	65mm		130mm	35mm	110mm
From 2.45 kPa to a maximum 4.4 kPa	Timber	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		150mm	35mm	110mm
	Steel up to 0.75bmt	75mm	50mm	250mm	130mm*	Multi use needle point	130mm	25mm	100mm
		75mm	50mm	250mm	130mm*		130mm	35mm	110mm

*When a 130mm fixing disk is required, the 65mm fixing disk is inserted into the 130mm disk prior to screw fixing into the panel. Refer to image.

Thermal R-Value Ratings

CALCULATED WITH VAPAWRAP RESIDENTIAL WALL WRAP AND PINK BATTS

Timber Frame Construction - Cavity System

Panel Thickness	Vertical Installed Top Hat (0.75bmt)	R-Value with R2.0 Pink Batts Wall Insulation		R-Value with R2.7 Pink Batts Wall Insulation		R-Value without Wall Insulation	
		Summer	Winter	Summer	Winter	Summer	Winter
75mm	25mm	4.04	4.39	4.62	4.96	2.47	2.68
	35mm						

The StoneShield Cladding System Total R-values to satisfy NCC 2022 Volume One J4D3(1) & J4D6(4) and Volume Two H6D2(1) & 13.2.5 in accordance with **AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018** incorporating the effects of thermal bridging.

Calculations based on system components including: Acratex Coating System, ROCKWOOL FacadeRock DD 75mm/ 120kg/m^3 Panel, Steel Top Hat on stud, Vapawrap Residential Wall Wrap, Pink Batts Wall Insulation, 10mm plasterboard lining, timber framing.

*Thermal Calculation Reports can be provided upon request.

Steel Frame Construction - Cavity System

Panel Thickness	Vertical Installed Top Hat (0.75bmt)	R-Value with R2.0 Pink Batts Wall Insulation		R-Value with R2.7 Pink Batts Wall Insulation		R-Value without Wall Insulation	
		Summer	Winter	Summer	Winter	Summer	Winter
75mm	25mm	3.88	4.22	4.41	4.75	2.41	2.62
	35mm						

The StoneShield Cladding System Total R-values to satisfy NCC 2022 Volume One J4D3(1) & J4D6(4) and Volume Two H6D2(1) & 13.2.5 in accordance with **AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018** incorporating the effects of thermal bridging.

Calculations based on system components including: Acratex Coating System, ROCKWOOL FacadeRock DD 75mm/ 120kg/m^3 Panel, Steel Top Hat on stud, Vapawrap Residential Wall Wrap, Pink Batts Wall Insulation, 10mm plasterboard lining, steel framing.

*Thermal Calculation Reports can be provided upon request.

Thermal R-Value Ratings (continued)

CALCULATED WITH WALL WRAP TO AS 4200.1:2017 AND GLASSWOOL WALL BATT INSULATION

Timber Frame Construction - Cavity System

Panel Thickness	Vertical Installed Top Hat (0.75bmt)	R-Value with R2.0 Glasswool Wall Insulation		R-Value with R2.7 Glasswool Wall Insulation		R-Value without Wall Insulation	
		Summer	Winter	Summer	Winter	Summer	Winter
75mm	25mm	4.04	4.39	4.62	4.96	2.47	2.68
	35mm						

The StoneShield Cladding System Total R-values to satisfy NCC 2022 Volume One J4D3(1) & J4D6(4) and Volume Two H6D2(1) & 13.2.5 in accordance with **AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018** incorporating the effects of thermal bridging.

Calculations based on system components including: Acratex Coating System, ROCKWOOL FacadeRock DD 75mm/ 120kg/m^3 Panel, Steel Top Hat on stud, **AS 4200.1:2017** compliant wall wrap, Glasswool Wall Batts, 10mm plasterboard lining, timber framing.

*Thermal Calculation Reports can be provided upon request.

Steel Frame Construction - Cavity System

Panel Thickness	Vertical Installed Top Hat (0.75bmt)	R-Value with R2.0 Glasswool Wall Insulation		R-Value with R2.7 Glasswool Wall Insulation		R-Value without Wall Insulation	
		Summer	Winter	Summer	Winter	Summer	Winter
75mm	25mm	3.88	4.22	4.41	4.75	2.41	2.62
	35mm						

The StoneShield Cladding System Total R-values to satisfy NCC 2022 Volume One J4D3(1) & J4D6(4) and Volume Two H6D2(1) & 13.2.5 in accordance with **AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018** incorporating the effects of thermal bridging.

Calculations based on system components including: Acratex Coating System, ROCKWOOL FacadeRock DD 75mm/ 120kg/m^3 Panel, Steel Top Hat on stud, **AS 4200.1:2017** compliant wall wrap, Glasswool Wall Batts, 10mm plasterboard lining, steel framing.

*Thermal Calculation Reports can be provided upon request.

Acoustic Performance

Timber Frame Construction - 90mm & 70mm Studs

System 1T

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Timber Frame Studs @ 600 centres	90
R2 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**206**
Rw(Ctr)	**46(-10)**
Rw	**46±2dB**
Rw+Ctr	**36±3dB**

System 2T

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Timber Frame Studs @ 600 centres	90
R2.5 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**206**
Rw(Ctr)	**47(-9)**
Rw	**47±2dB**
Rw+Ctr	**38±3dB**

System 3T

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Timber Frame Studs @ 600 centres	70
R2 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**186**
Rw(Ctr)	**45(-10)**
Rw	**45±2dB**
Rw+Ctr	**35±3dB**

System 4T

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Timber Frame Studs @ 600 centres	70
R2.5 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**186**
Rw(Ctr)	**46(-10)**
Rw	**46±2dB**
Rw+Ctr	**36±3dB**

Acoustic Performance (continued)

Steel Frame Construction - 92mm & 64mm Studs

System 1S

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Steel Frame Studs 0.55bmt @ 600 centres	92
R2 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**208**
Rw(Ctr)	**49(-12)**
Rw	**49±2dB**
Rw+Ctr	**37±3dB**

System 2S

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Steel Frame Studs 0.55bmt @ 600 centres	92
R2.5 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**208**
Rw(Ctr)	**50(-12)**
Rw	**50±2dB**
Rw+Ctr	**38±3dB**

System 3S

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Steel Frame Studs 0.55bmt @ 600 centres	64
R2 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**180**
Rw(Ctr)	**47(-12)**
Rw	**47±2dB**
Rw+Ctr	**35±3dB**

System 4S

System Components	Thickness (mm)
Standard Grade Internal Plasterboard	10
Steel Frame Studs 0.55bmt @ 600 centres	64
R2.5 Pink Batts Wall Insulation	[90]
Vapawrap Residential Wall Wrap	-
Metal Top Hats 0.75bmt	25
ROCKWOOL FacadeRock DD Panel	75
Acratex Coating System	6
Total System Thickness	**180**
Rw(Ctr)	**48(-12)**
Rw	**48±2dB**
Rw+Ctr	**36±3dB**

SECTION 3

INSTALLATION

Pre-Installation Site Check

The StoneShield Cladding System by Dulux Acratex offers a robust solution, but it is essential to follow specific guidelines to achieve optimal performance and meet compliance.

Prior to any system installation, ensure that:

- Key System Considerations are selected (Refer to diagram on this page).
- All design and detailing considerations that fall outside standard construction details are itemised in Engineers reports and in the construction drawings (i.e. curved walls, back blocking for pipes, etc)
- All planning and building approvals have been obtained.
- Building Design has been detailed and meets all relevant areas of compliance.
- The builder and installer understand the requirements of the StoneShield Cladding System CodeMark Certificate of Conformity to be installed.
- Each state and territory have different licensing and registration requirements, and it is important that the installation is carried out by suitably licensed installers. This is outside the control of Dulux Acratex and as such Builders and Installers must ensure they are appropriately licensed and/or qualified to carry out the proposed specified work.

KEY SYSTEM CONSIDERATIONS

Subject to design and site specific requirements

DETERMINE BUILDING CLASSIFICATION

- For Class 1 and 10 buildings
- For Class 2 to 9 buildings

SELECT FRAMING TYPE

- Timber frame
- Metal frame

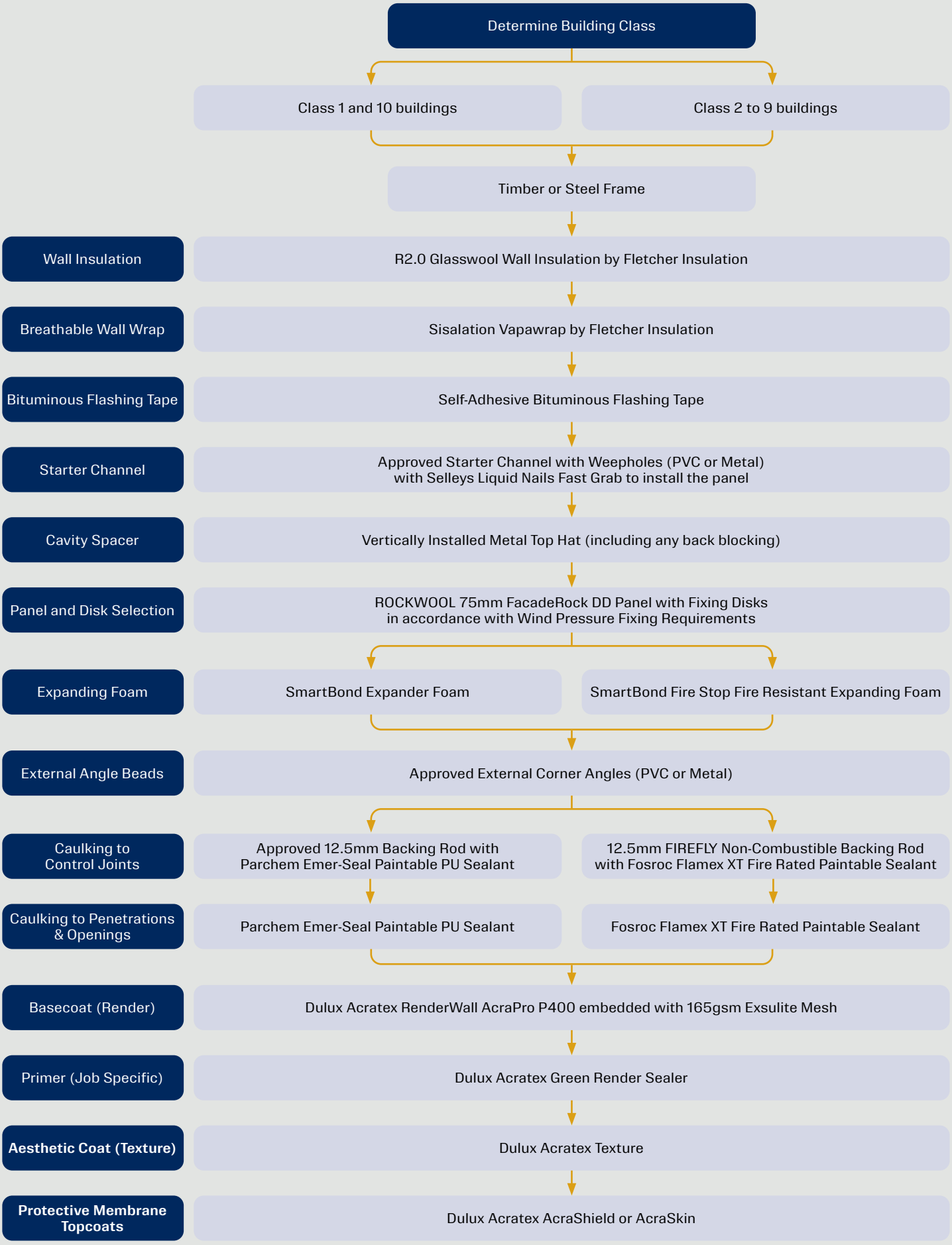
DETERMINE STUD SPACING

- To a maximum 600mm centres
- Wind design ultimate pressure – site specific
- Engineered project specific

FIRE RESISTANCE LEVELS

- Fire Rated Walls
- Bushfire Attack Levels (BAL)
  - BAL-Low
  - BAL-12.5
  - BAL-19
  - BAL-29
  - BAL-40
  - BAL-FZ

System Components & Process



Before You Start

STATE AND TERRITORY BUILDING AUTHORITY LICENSING

Each state and territory has different licensing and registration requirements and it is important that the installation is carried out by suitably licensed installers. This is outside the control of Dulux Acratex and as such Builders and Installers must ensure they are appropriately licensed to carry out or contract all specified work.

INSTALLER QUALIFICATIONS

In all cases, installation must be carried out by a qualified and licensed tradesperson to install cladding relative to the governing State and Territory Building Authority.

The Certificate of Installation should be issued confirming installation in accordance with the defined systems. This is issued to the builder and forms part of the Builders Project Certification processes.

Design and installation of any non-standard or non-approved the StoneShield Cladding System components will not be the responsibility of Dulux Acratex and will be a non-conforming system and voids any product warranty provided in relation to product / system performance.

QUALITY CONTROL

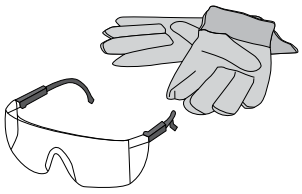
The StoneShield Cladding System Warranty can be issued only when the StoneShield Cladding System Certificate of Installation is completed and signed confirming that the system installation has been installed in accordance with the CodeMark Certificate of Conformity. Project Warranty will only be issued when the relevant Certificate of Installation is completed and signed by the installer.

HANDLING AND STORAGE

The StoneShield Cladding System components should be stored elevated, under cover and laid flat. Edges and corners are to be always protected. Dulux Acratex recommends that the specified finishing system be applied to the panels as soon as possible according to this specification.* UV rays don't have an adverse effect on the performance of the StoneWool panel during typical construction timeframes however, if installation is interrupted for any extended periods of time with the possibility of inclement weather, the surface of all panels should be covered to provide them with protection.

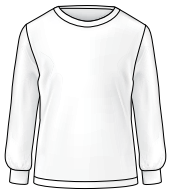
***Upon the installation of FacadeRock DD panels that are of a horizontal detail &/or are to be capped (i.e. balustrades, parapets, etc), they will require protection from any potential water ingress until the installation of the capping &/or waterproofing system is installed and completed.**

Tool Requirements

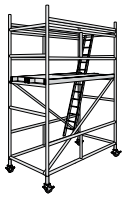


Safety Gloves
& Safety Glasses

Dust Mask

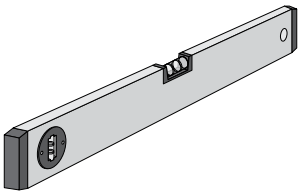


Long Sleeves

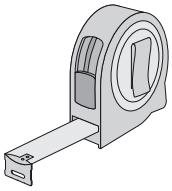


Scaffold

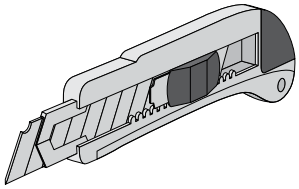
Portable Work Bench



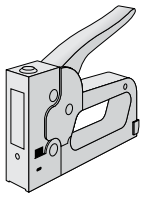
Spirit Level



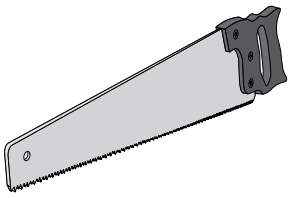
Tape Measure



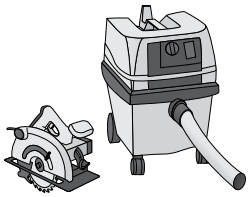
Sharp Blade Knife



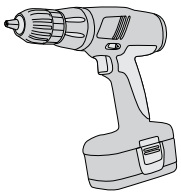
Staple Gun



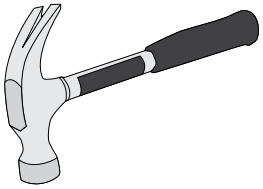
Hand Saw



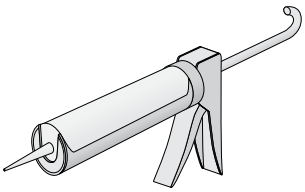
Electric Saw
with diamond tip blade,
fitted with a vacuum extraction
appliance where possible



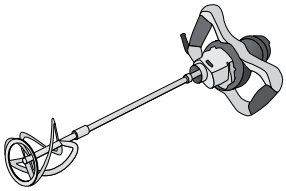
Cordless Drill



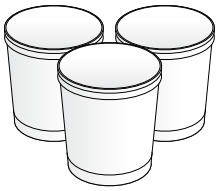
Hammer



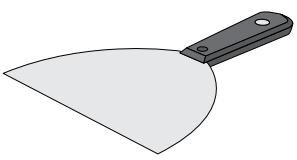
Caulking Gun



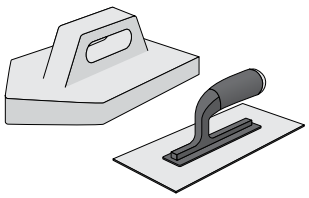
Mixing Drill



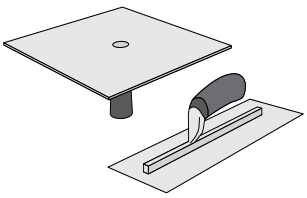
Empty Pails



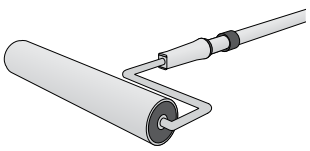
Spatula



Floats –
Plastic & Foam



Hawk & Trowel



Roller

Components

*All components marked with an asterisk, have been tested as part of the StoneShield Cladding System CodeMark Certification. Therefore no substitution can be made. Please contact your Dulux Acratex Representative or Dulux Trade Centre for more details.

WEATHERTIGHTNESS

Damp-Proof Course
Size: 300mm x 30m

Minimum R2.0
Pink Batts or R2.0
Glasswool Batts as
per **AS 4859.1**

Vapawrap or
wall wrap to
AS 4200.1:2017

CAVITY PROVISION

*Self-Adhesive
Bituminous
Flashing Tape

Rondo Top Hat
0.75 bmt
M525 for 25mm &
M535 for 35mm

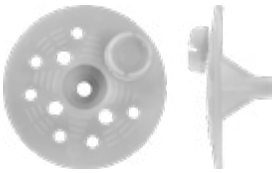
FIXINGS

*Type 17 35mm
12 GAUGE Hex Head
Screw with a Triguard
Coating

*10 GAUGE Multifix
Triguard Coated Screw
Lengths: 130mm &
150mm

* 25mm Metal
Self-Drilling Screw for
fixing Starter Channel

FIXING DISKS

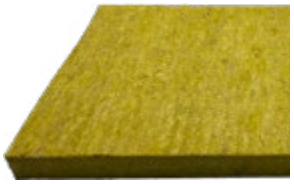


*65mm Panel Fixing
Disks with Protective
Plug

*130mm Fixing Disk
Base Plate

PANEL AND ADHESIVE

Selleys® Liquid Nails®
Fast Grab



*ROCKWOOL
FacadeRock DD Panel
Size: 600 x 2200 x 75mm

SEALANTS

*Parchem® Emer-Seal®
Paintable PU sealant or
Dulux Acratex Approved
Sealant

*Fosroc® Flamex® XT
Fire Rated Paintable
Sealant for a Fire
Resistance Level (FRL)
Wall

EXPANDING FOAM

*SmartBond
Expander Foam

*SmartBond Fire Stop
Fire Resistant
Expanding Foam

Components (continued)

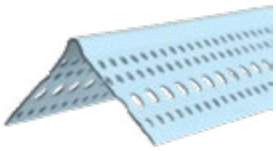
*All components marked with an asterisk, have been tested as part of the StoneShield Cladding System CodeMark Certification. Therefore no substitution can be made. Please contact your Dulux Acratex Representative or Dulux Trade Centre for more details.

BACKING RODS

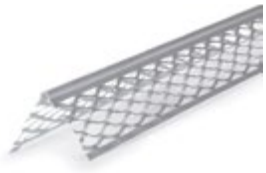
*12.5mm Backing Rod

*12.5mm FIREFLY® Non-Combustible Backing Rod for a Fire Resistance Level (FRL) Wall

CORNER ANGLES

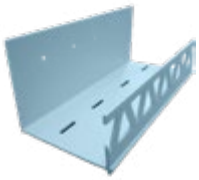


*PVC Corner Angles



*Aluminium Corner Angles

STARTER CHANNELS



*PVC Starter Channel with Weepholes

*Aluminium Starter Channel with Weepholes 90°

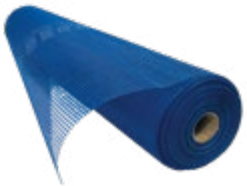
*Aluminium Starter Channel with Weepholes 25°

*Aluminium Channel Cavity Closer

NOTE: Aluminium Starter Channels are available in 100mm & 110mm for standard installations & 75mm for alternate rectification detail.

COATING SYSTEM PRODUCTS

*Dulux Acratex RenderWall® Plus AcraPro® P400 (Basecoat)



*165gsm Exsulite® Alkali Resistant Mesh

*Dulux Acratex Approved Texture (Aesthetic Coat)

*Dulux Acratex AcraShield® or AcraSkin® (Protective Membrane Topcoat)

Stage 1: Pre-Start

PRE JOB CHECK SHOULD INCLUDE BUT NOT BE LIMITED TO:

As the StoneShield Cladding System does not contribute to the structural integrity of the frame, all studs and noggins must be checked with a long straight edge for line and face accuracy to ensure the stud wall has a true and accurate outside face. As a guide, check if the wall deviates in horizontal or vertical by more than 4mm in any 2m length. If the wall deviates past the guide, the wall frames could potentially be considered as defective.

Where the installer is not satisfied with the frame and Damp-Proof Course standard they are to advise the head contractor prior to commencement of work of these concerns. **Installation should not commence until all defects have been rectified, and approved by all project parties.**

NOTE: The panel will not straighten any misaligned or defective frames, these defects may be visible at job completion.

- Check that the frame conforms to the relevant Australian Standards.
- Check that the stud spacing and fixings are in accordance with approved & stamped construction drawings and wind load tables.

Go to the Wind Pressure Fixing Requirements tables on page 23 in this manual →

- Check with builder for areas where structural support is required and install back-block for any wall mounted services as it is imperative that this is done prior to panel installation.
- Ensure that all preparation work prior to commencement of system installation has been completed by the relevant trades. This includes installation of flashings to brickwork, window and door openings and penetrations.
- Check that all eaves and flashings have been completed by the builder to the requirements of the project specification prior to commencement.
- Where the builder has installed wall wrap check that the wrap installed is breathable wall wrap complying with **AS 4200.1:2017** and **AS 4200.2:2017**, and if not, advise the builder that the wrap does not conform and will be required to be replaced with a compliant wall wrap.
- Check that correct windows with reveal sizes are fitted in accordance with the window manufacturer specification and sealed to prevent water entry.
- Check to ensure that the correct Damp-Proof Course has been installed to slab edge and termite treatment has been completed prior to installation in accordance with the Australian Standards.
- **Once installation of the StoneShield Cladding System has commenced, it is deemed that the installer has accepted the standard of the framework that it is being installed to.**
- Check that the correct insulation batts with a minimum rating of R2.0 have been installed.*

*** The StoneShield Cladding System has been tested and CodeMark Certified using R2.0 Glasswool Insulation Batts (as a minimum). Builder to confirm that minimum wall batt has been installed to meet CodeMark requirements.**

Stage 2: External Wall Installation Sequence

BREATHABLE WALL WRAP

Install Vapawrap or breathable wall wrap that complies to **AS 4200.1:2017** and install to **AS 4200.2:2017** and as per manufacturers installation instructions.

NOTE: Wall Wrap to be taped at the wall perimeter, at joints, penetrations, etc. Any tears to be taped/sealed.

Go to SECTION 7: Detailed Drawings in this manual →

STARTER CHANNEL WITH WEEPHOLES

Screw fix Starter Channel to the bottom plate/frame of building framework.

The Starter Channel must be installed 10mm to 20mm above Damp-Proof Course. Applies to Z metal flashings to upper floors. Join panels as a butt join.

- 75mm panel with 25mm Top Hat requires 100mm Starter Channel with weepholes
- 75mm panel with 35mm Top Hat requires 110mm Starter Channel with weepholes

NOTE:

- **PVC Starter Channel can be used for non FRL requirements. Aluminium Starter Channel must be used for FRL and all BAL requirements.**
- **Control joints require Starter Channels to be cut and discontinued in order accommodate movement.**

Go to SECTION 7: Detailed Drawings in this manual →

WEATHERPROOF FLASHING TAPE

Install Dulux Acratex approved self-adhesive bituminous flashing tape in accordance with manufacturer's recommendation for weatherproofing around all windows frames including sills, doors, openings, penetrations, intersections, connections, heads and jambs and Starter Channel.

The weatherproof flashing tape must cover all openings to ensure a closed weatherproof seal is achieved.

Go to SECTION 7: Detailed Drawings in this manual →

INSTALLATION OF TOP HATS

Rondo M525 (50mm (face) x 25mm (H) x 19mm (flange)) – 0.75bmt or equivalent.

Fix vertically with the 50mm face of the Top Hat being placed direct onto stud frame. Flanges will be placed to the outside.

Rondo M535 (50mm (face) x 35mm (H) x 19mm (flange)) – 0.75bmt or equivalent.

Fix Top Hats using Type 17 35mm 12 GAUGE Hex Head screw.

NOTE: At all control joints, the Top Hat should be discontinuous to allow for the effective movement of the building at these locations.

For back blocking and installing top hats horizontally, refer to panel fixing details below.

Go to SECTION 7: Detailed Drawings in this manual →

PANEL FIXING

Panel Specification					
Length (mm)	Width (mm)	Thickness (mm)	Panel Weight	Pack Size	Pack Weight
2200	600	75	10 to 12kg	4	40 to 48kg

Handling and Safety: It is recommended that all contractors on site wear personal protective equipment (PPE) including gloves, dust mask, long sleeves, and eye protection to protect from any particles that may become airborne during cutting, handling, and installation. When cutting panels, it is recommended to use a serrated knife or similar tool in an open, well-ventilated area.

Panel Installation: Starting from the Starter Channel, apply a 5mm bead of Selleys Liquid Nails Fast Grab to the centre of the Starter Channel base, in a straight line, avoiding weepholes. **Do not fill weepholes and do not apply in a zig zag pattern.**

Insert panel, leaving a 5mm gap between the two panels (at the butt join) for expansion foam to be installed.

ROCKWOOL 75mm FacadeRock DD panel is to be installed in a staggered horizontal brick pattern layout, working from the Starter Channel and going up. Remembering to keep a maximum 5mm gap between panel edges to allow expander foam to be installed.

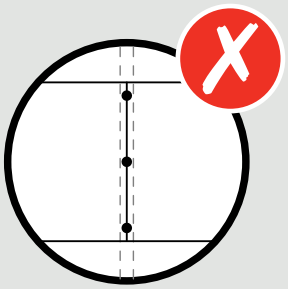
Fixing: The panel is fixed with a multifix screw installed through a fixing disk with protective cap, suitable for use in timber and steel frames up to 0.75bmt. Fixed through the Top Hat to the stud. Screws should have a minimum 25mm penetration into the timber frame stud with a minimum of 3 full screw thread penetration into metal frame stud.

NOTE: Fixing spacing can vary subject to wind pressures in accordance with AS 4055:2021 and/or AS/NZS 1170.2:2021. No substitution allowed of non-approved alternative fixings. Typical fixings should be 15 per panel subject site-specific wind classification. NOTE: Minimum infill panel width of 150mm fixed at 50mm from top and bottom of infill.

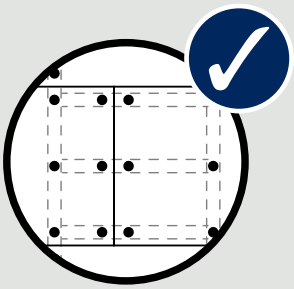
NOTE: Care should be taken to not to overdrive the screw below the face of the panel. Where this overdrive of the screw has occurred, this should be filled with expander foam prior to Dulux Acratex RenderWall Basecoat (Render) being applied to avoid cold spotting occurring post coating application.

Go to the Wind Pressure Fixing Requirements tables on page 23 in this manual →

Back Blocking: Back blocking is required when butt joins of panels are off stud.
Install 3 horizontal Top Hats, by screw fixing with type 17 screw to vertical Top Hats.



Two panels are NOT to be joined on one stud.



Install 3 horizontal Top Hats, by screw fixing with type 17 screw to vertical Top Hats.

See next page for Panel Set Out details

Expanding Foam: Expanding foam is to be applied between all panel edges during installation and be filled flush with face of panel. Allow excess to dry and remove.

Expanding Foam for FRL requirements: Fire Resistance Level (FRL) wall requires the installation of a fire rated expanding foam as specified in the StoneShield Cladding System FRL test certificate that must be used.

WINDOW, DOORS, AND OPENINGS

Allow a 5mm gap between panel edge and frame to allow caulking to be installed post texture application and prior to top coat application. Install an approved paintable polyurethane sealant.

All window sills to have a 15° fall to allow for moisture and water run-off away from frame.

NOTE: Coating application is not applied over window and door frames.

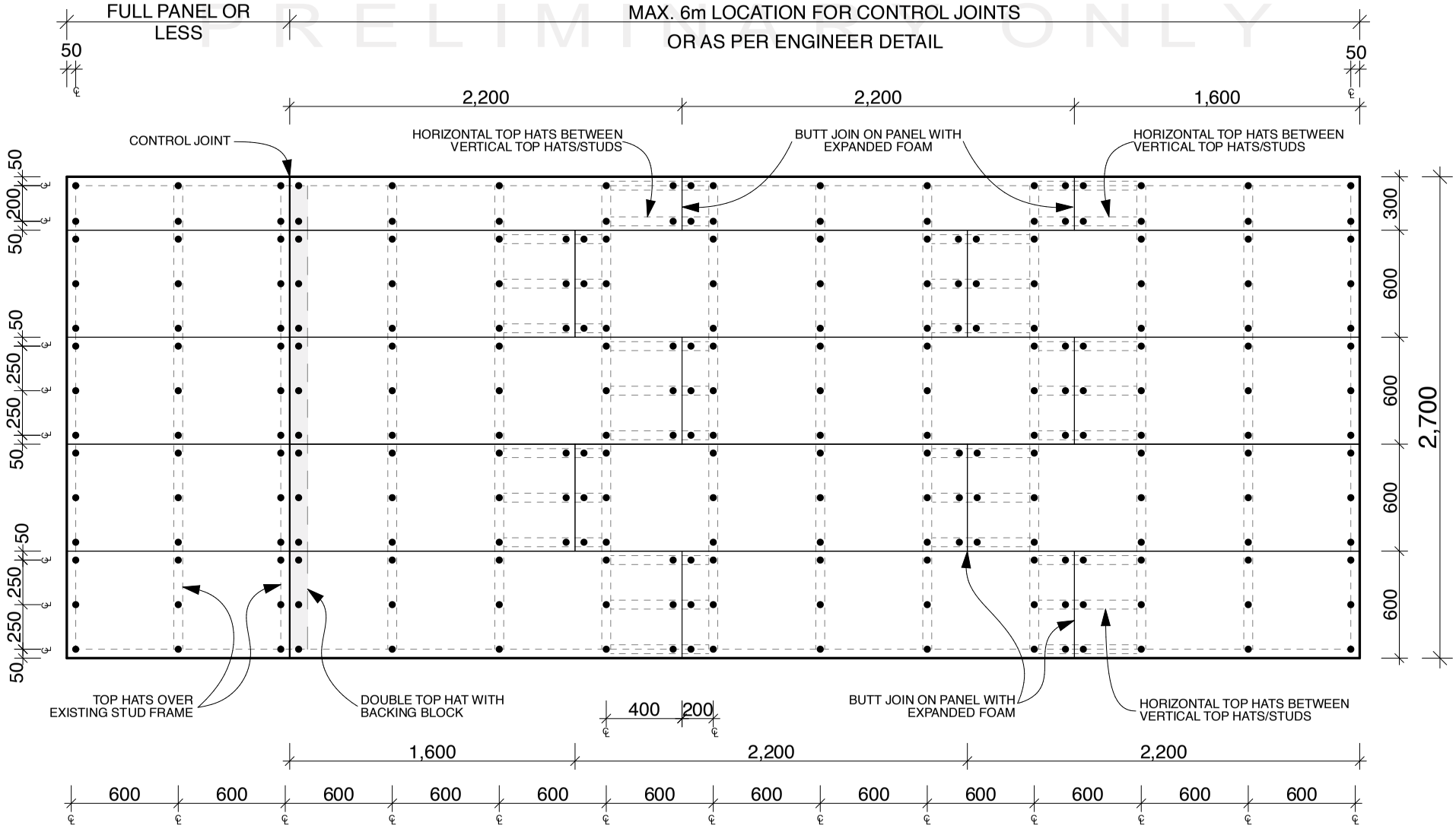
INTERNAL CORNER DETAILS

Internal corners require a vertical control joint to allow for movement.

Go to detailed drawing SW-14 INTERNAL CORNER JUNCTION in this manual →

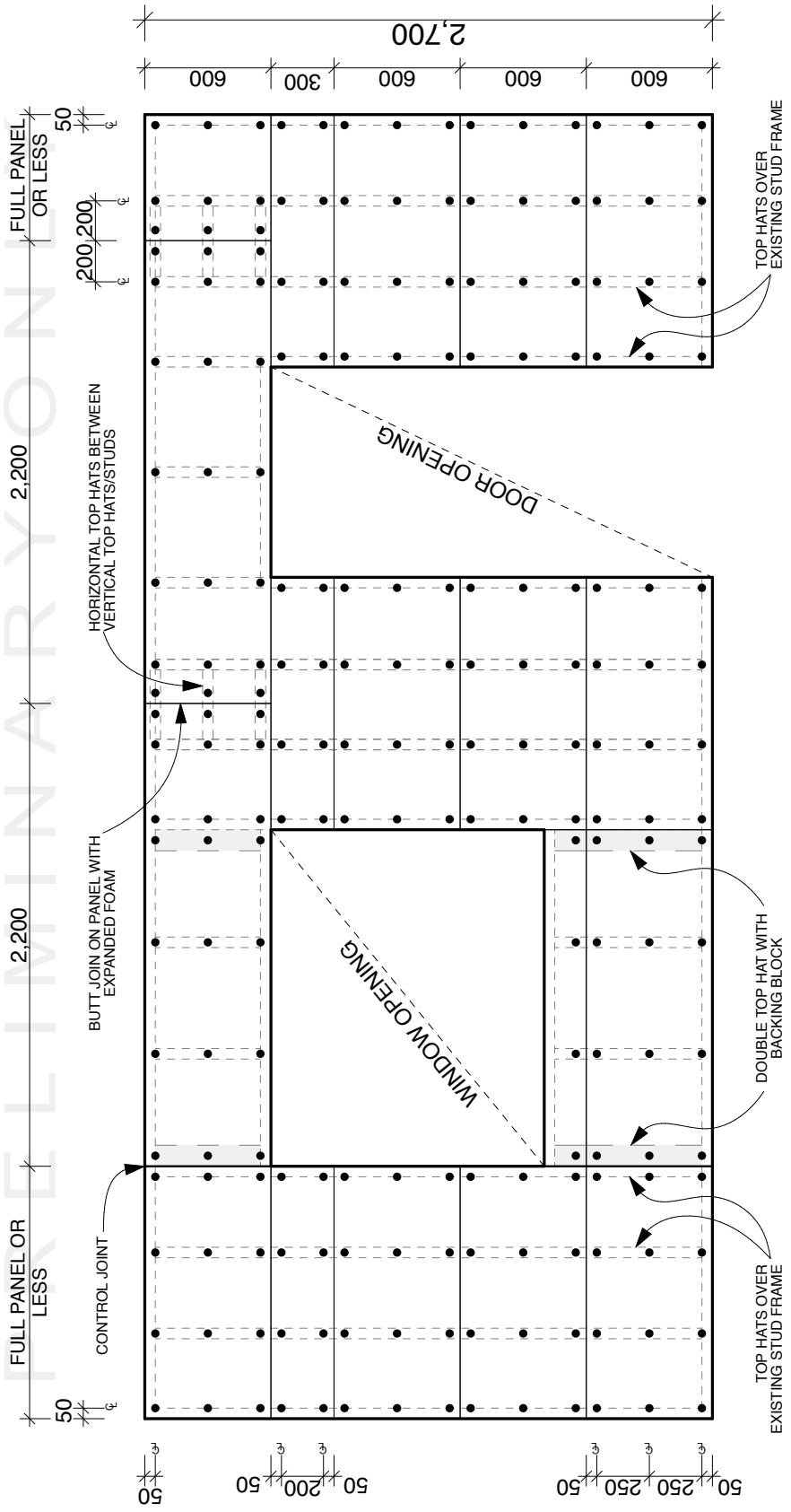
For coating application instructions go to page 48 in this manual →

GENERAL ROCKWOOL 75mm FACADEROCK DD PANEL SET OUT



WALL ELEVATION SHOWING PANEL LAYOUT -
LAYOUT MAXIMIMIZES FULL PANEL SIZE (MINIMISE WASTAGE).
GUIDE **ONLY**.
SUBJECT TO FRAME SPECIFICATION.

GENERAL ROCKWOOL 75mm FACADEROCK DD PANEL SET OUT WITH OPENINGS



WALL ELEVATION SHOWING PANEL LAYOUT -
LAYOUT MAXIMIMIZES FULL PANEL SIZE (MINIMISE WASTAGE).
GUIDE **ONLY**.
SUBJECT TO FRAME SPECIFICATION.

CONTROL JOINTS

10mm control joints are required to allow for a 12.5mm minimum backing rod to be inserted into the joint(as per detailed drawings). Control joints must be installed at all locations as per approved & stamped construction drawings and/or at building weak points in line with openings to windows and doors where movement can occur that can cause potential cracking.

Control joints are also required to be installed horizontally between floor levels and adjacent to other building substrate materials and/or as provided by the architect, engineer, or builder. The placement and correct installation of control joints is the responsibility of the Building Engineer relative to the construction design.

NOTE: Control joints are not allowed to have any basecoat (render) nor aesthetic coat (texture) applied over the joint openings as this will result in non-compliance.

Go to SECTION 7: Detailed Drawings in this manual →

PARAPET DETAIL*

Metal flashing is the preferred recommendation for waterproofing parapet details and should be in consultation with the project consultant and/or builder. Where alternative waterproofing details are required, please refer to the approved & stamped construction drawings by others, for alternative parapet finishing details.

Go to SECTION 7: Detailed Drawings in this manual →

BALCONY AND TERRACES*

Where waterproofing is required, this shall be in accordance with **AS 4654.1:2012** and **AS 4654.2:2012** and in accordance with the project specification and project principal.

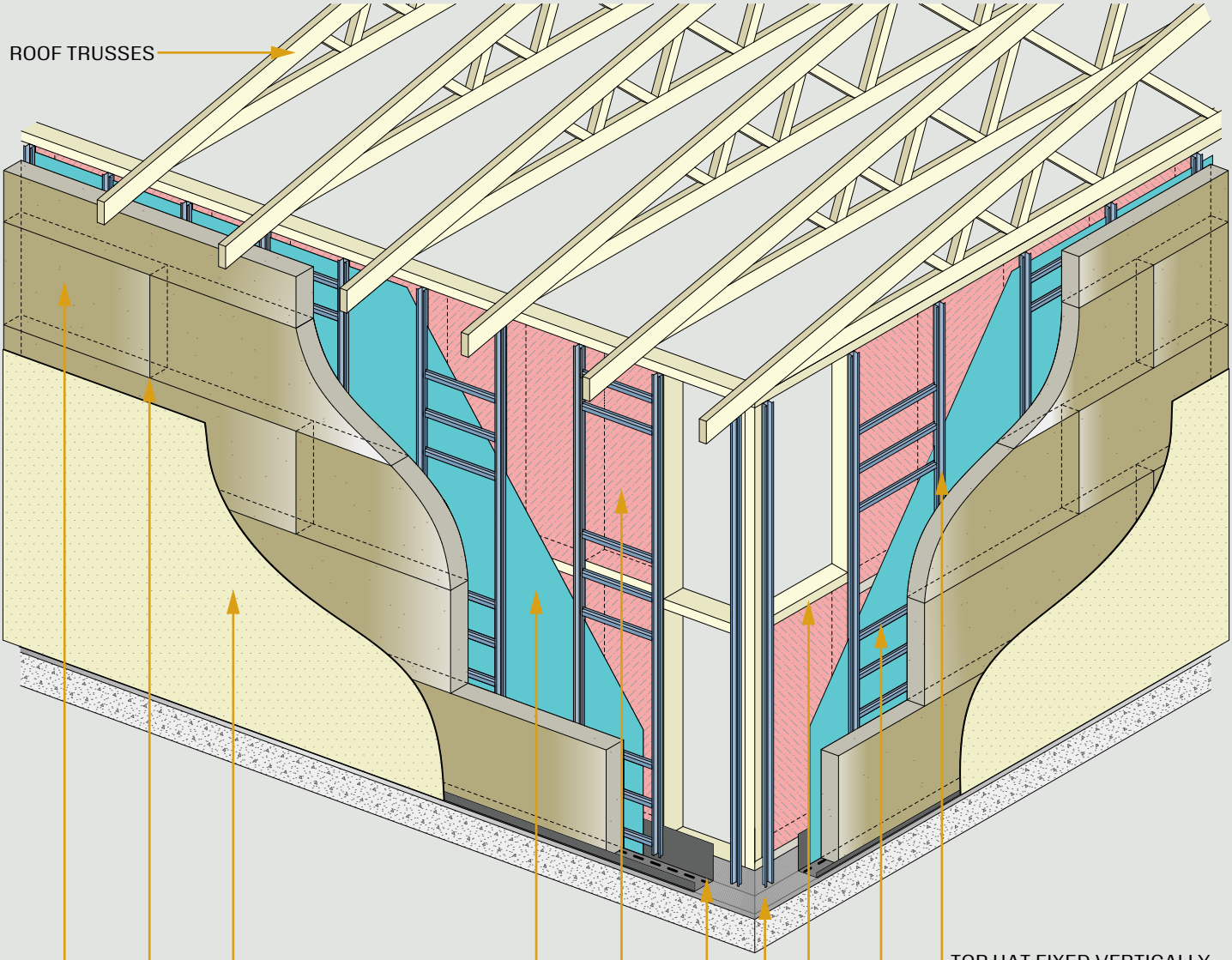
*Upon the installation of FacadeRock DD panels that are of a horizontal detail &/or are to be capped (i.e. balustrades, parapets, etc), they will require protection from any potential water ingress until the installation of the capping &/or waterproofing system is installed and completed.

EXTERNAL FIXINGS FOR FACE MOUNTED LOAD BEARING FIXTURES

Any load bearing external fitting should be planned prior to panel installation and back blocking should be installed where fixings are needed, such as a decking joist or bearer. The implementation of these items should be incorporated at design stage.

Go to Installing External Fixtures on page 54 in this manual →

StoneShield Cladding System Layout

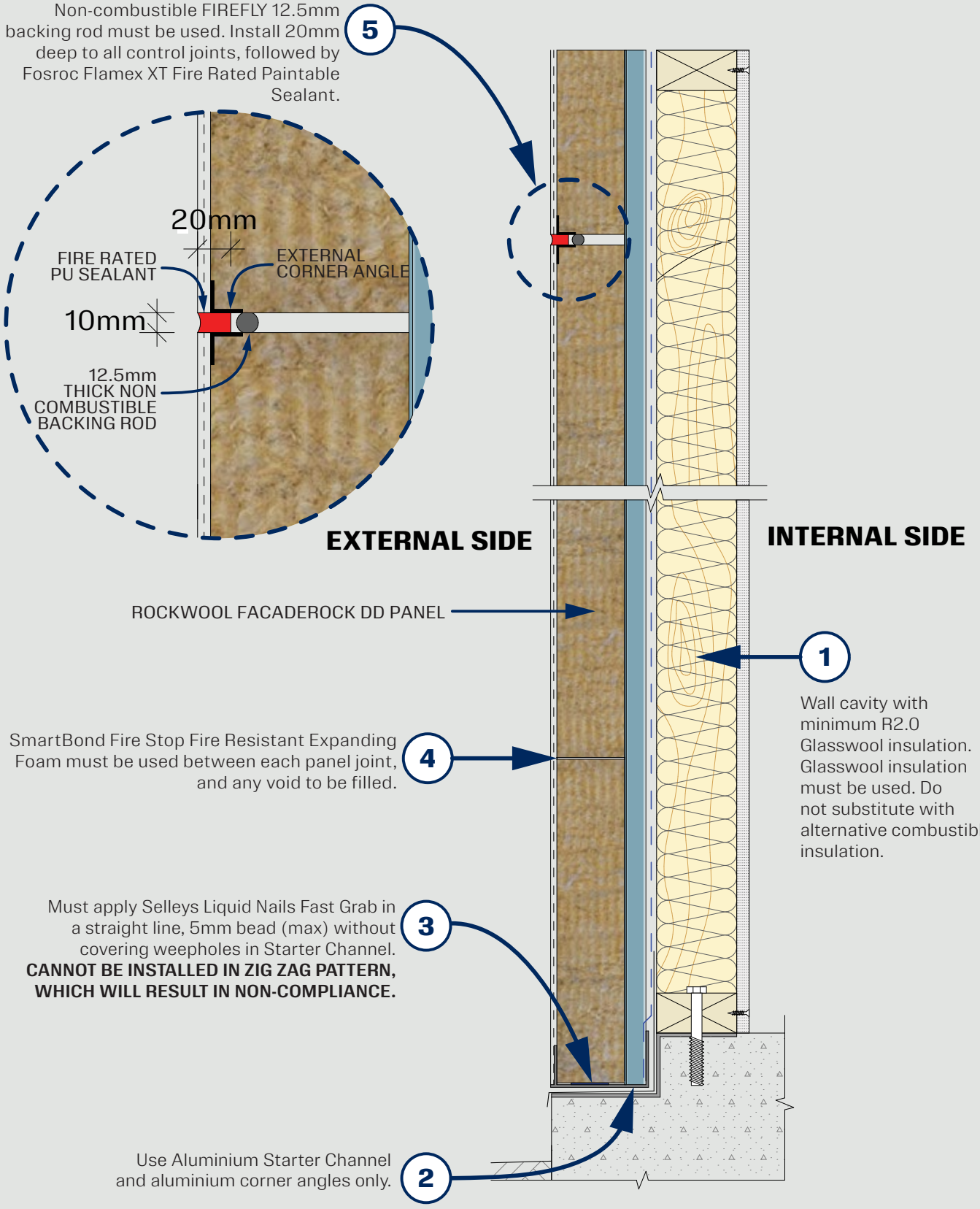


FRL INSTALLATION REQUIREMENTS

Considerations for FRL installation where specified.

The StoneShield Cladding System has been tested to **AS 1530.4: 2014**, achieving FRL values and is approved for use in bushfire prone areas up to BAL-FZ.

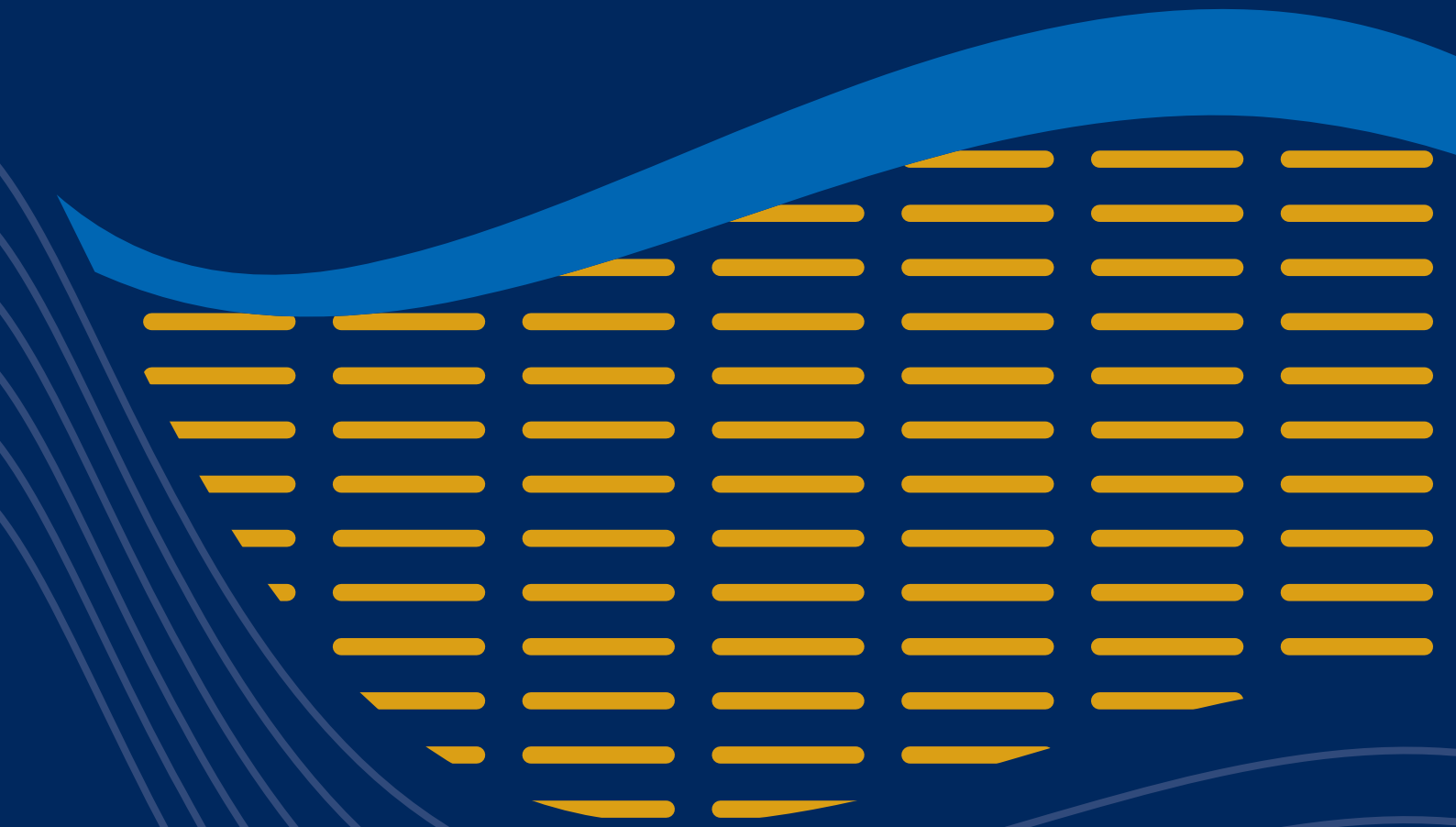
Refer test certificates for full system specification. Compliance can only be reached when installed as per FRL test certificate (certificates can be provided on request).



Go to SECTION 7: Detailed Drawings in this manual →

SECTION 4

ACRATEX COATING SYSTEM SPECIFICATION



Acratex Coating System

ROCKWOOL 75mm FACADEROCK DD PANEL

BASECOAT (RENDER) WITH ALKALI RESISTANT MESH

Basecoat (render) layer with mesh embedded for reinforcement.

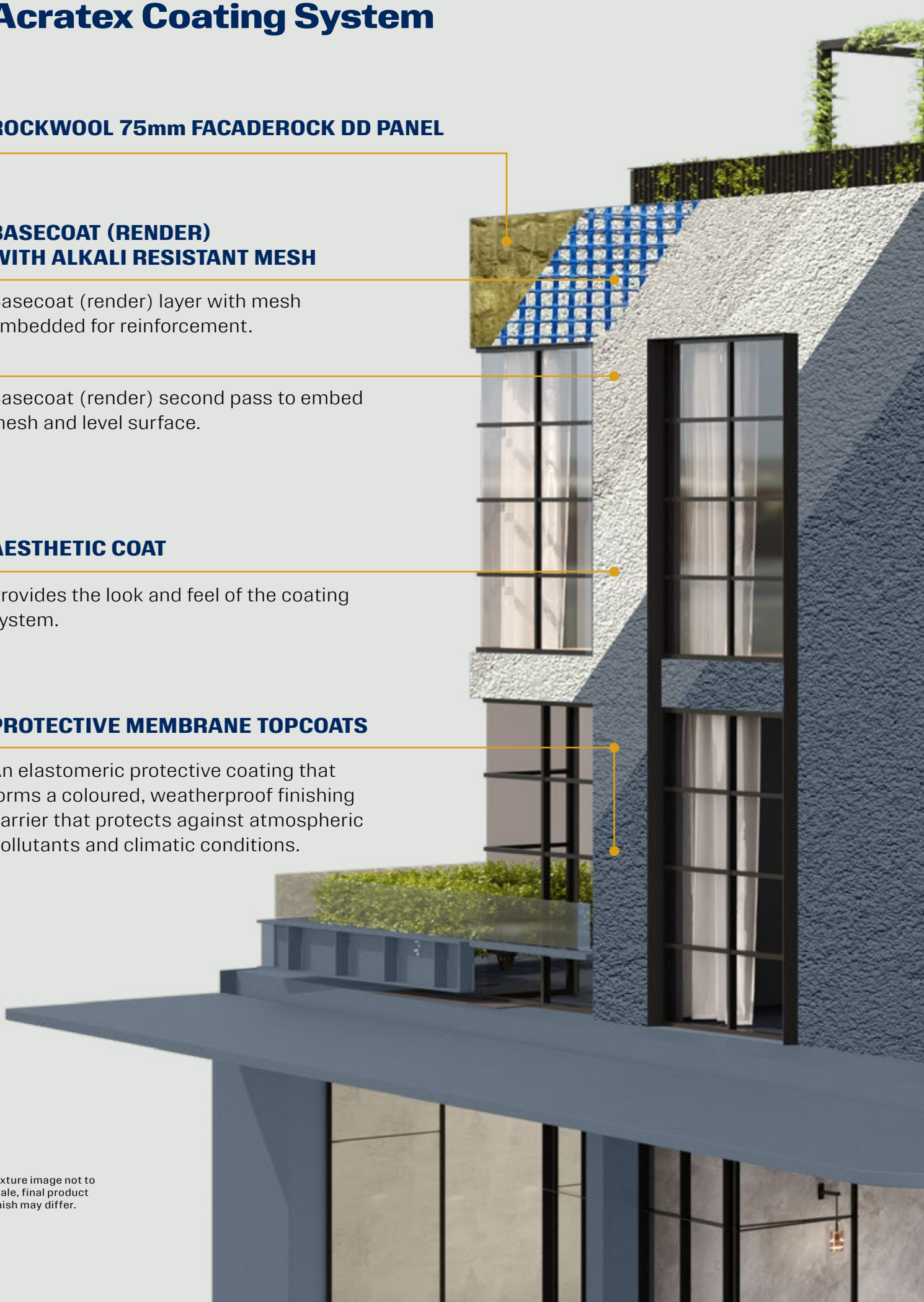
Basecoat (render) second pass to embed mesh and level surface.

AESTHETIC COAT

Provides the look and feel of the coating system.

PROTECTIVE MEMBRANE TOPCOATS

An elastomeric protective coating that forms a coloured, weatherproof finishing barrier that protects against atmospheric pollutants and climatic conditions.



Texture image not to scale, final product finish may differ.

Acratex Coating System Specification

This manual provides system specifications and installation guidance in accordance with the CodeMark Certificate of Conformity for the StoneShield Cladding System which can be finished only with a Dulux Acratex, approved coatings system.

Material consumption will vary depending on surface porosity and application technique. Allowance is to be made when estimating material quantities. Spread rates nominated are theoretical rates required to achieve the specified film builds for technical performance.

Coating Specification – For use in NON-BAL regions

Stage	Product	Spread Rate	Minimum Coating Thickness
Basecoat (render) with Alkali Resistant Mesh	RenderWall AcraPro P400 embedded with 165gsm Exsulite Mesh	2m² – 2.5m²/20kg bag	5mm
Aesthetic Coat (Texture)	Acratex Texture	Refer to relevant Product Data Sheet	
Caulking to control joints	12.5mm backing rod with a paintable approved polyurethane sealant		20mm (sealant thickness) Combined depth of 32.5mm
Caulking to penetrations and openings	A paintable approved polyurethane sealant		Minimum of 5mm
Protective Membrane Topcoats	AcraSkin **Go to DuSpec+ AUAC03802 →**	55m² – 60m² per 15Lt	Minimum of 0.125mm per coat
	AcraShield **Go to DuSpec+ AUAC03800 →**	70m² – 75m² per 15Lt	Minimum of 0.075mm per coat

Coating Specification – For use in Fire Rated Wall (FRL) and all BAL regions

Stage	Product	Spread Rate	Minimum Coating Thickness
Basecoat (render) with Alkali Resistant Mesh	RenderWall AcraPro P400 embedded with 165gsm Exsulite Mesh	2m² – 2.5m²/20kg bag	5mm
Aesthetic Coat (Texture)	Acratex Texture	Refer to relevant Product Data Sheet	
Caulking to control joints	Non-Combustible 12.5mm backing rod with an approved fire rated paintable polyurethane sealant		20mm (sealant thickness) Combined depth of 32.5mm
Caulking to penetrations and openings	An approved fire rated paintable polyurethane sealant		Minimum of 5mm
Protective Membrane Topcoats	AcraSkin **Go to DuSpec+ AUAC03801 →**	55m² – 60m² per 15Lt	Minimum of 0.125mm per coat
	AcraShield **Go to DuSpec+ AUAC03797 →**	70m² – 75m² per 15Lt	Minimum of 0.075mm per coat

NOTE: The information within the above the table is provided for general information that can be used as guide. For compliance purposes a FRL test certificate can be provided for regulatory requirements and evidence of compliance in accordance with the CodeMark Certificate of Conformity.

Go to DuSpec+ for individual Acratex Product Data Sheets →

Acratex Coating System Application Procedure

PRESTART

Ensure that all preparation work has been completed by the relevant trades. This includes installation of flashings and control joints, etc. Check surface levelness of panels and that the surface is plumb and clean from any dirt and pollution that may affect adhesion of the basecoat (render). Check that the panel is dry. If the panel appears damp or wet, allow panel to dry out. No basecoat (render) is to be applied if the panel is damp or wet. A moisture meter can be used to check the moisture level. Any moisture level above 12% is to be considered as damp and do not proceed.

DULUX ACRATEX COATING SYSTEM COMPLIANCE

The multi-layered Dulux Acratex Coating System complies with F3P1 for NCC Volume One and H2P2 for NCC Volume Two.

COATING APPLICATION TO INTERNAL CORNERS

Where a control joint has been installed in internal corners, apply Dulux Acratex RenderWall Basecoat (Render) layer with Exsulite Alkali Resistant Mesh to the edge of the joint (no render/ texture coating is to be applied in the joint).Install the backing rod with a paintable PU sealant and topcoat with Dulux Acratex Protective Membrane Topcoats.*

***Where an Engineer has detailed an internal corner with no control joint, apply an additional layer of Exsulite Alkali Resistant Mesh to the RenderWall Basecoat (Render) layer, resulting in 2 layers of mesh.**

EXTERNAL CORNER BEADS AND ANGLES

Prior to installing external aluminium or PVC corner beads or angles to all external corners, building control joints and edge of StoneWool panel adjacent to other building substrates; check that all existing wall surface areas are straight & level using a straight edge.

Install external corner beads and angles with either Dulux Acratex RenderWall and/or Selleys Liquid Nails Fast Grab construction adhesive. Once installed, re-check for straightness using a straight edge and wipe off excess adhesive protruding through slots in the bead.

BACKING ROD AND POLYURETHANE SEALANT (BY BUILDER AND/OR CAULKING CONTRACTOR)

Install a 12.5mm backing rod to a minimum depth of 20mm in vertical and horizontal control joints followed by Emer-Seal paintable polyurethane sealant, or as approved by Dulux Acratex (to a combined depth of 32.5mm). This includes areas around all window and door frames, all openings, penetrations, electrical meter boxes, ducting, floor and joist penetrations, the gap between different substrates, and all other penetrations where building services have been fixed.

Fire Resistance Level (FRL) walls and BAL requirements, require a non-combustible 12.5mm backing rod to a minimum depth of 20mm in vertical and horizontal control joints followed by Fosroc Flamex XT fire rated sealant or paintable polyurethane sealant, as approved by Dulux Acratex (to a combined depth of 32.5mm).

Refer to the paint manufacturer's Product Data Sheet for installation guidelines and to the approved & stamped construction drawings for details.

BASECOAT (RENDER) WITH ALKALI RESISTANT MESH

Apply a basecoat (render) layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover.

Embed Exsulite Alkali Resistant Mesh into the ‘wet’ freshly applied RenderWall Basecoat layer, then immediately apply an additional layer of RenderWall Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.

Do not install mesh directly against or push mesh directly onto the panel surface.

Exsulite Alkali Resistant Mesh Specification:

- Reinforcement mesh
- Mesh Grade: 165gsm, 5mm × 5mm aperture, alkali resistant, non-adhesive
- Full mesh layer across entire panel overlapped by a minimum of 100mm on all edges.

AESTHETIC COAT (TEXTURE)

Apply a Dulux Acratex Texture in accordance with the relevant Product Data Sheets. Subject to system specification.

See our full range of Texture Finishes →

When applying a Dulux Acratex Texture within 3 days of basecoat (render) application, Acratex Green Render Sealer (GRS)is recommended.

Go to DuSpec+ AUAC00013 for GRS details →

PROTECTIVE MEMBRANE TOPCOATS

Apply Dulux Acratex AcraShield or AcraSkin protective membrane barrier coat in accordance with the relevant product data and application data sheets.

Go to DuSpec+AUAC03802 AcraSkin NON-BAL regions →

Go to DuSpec+AUAC03800 AcraShield NON-BAL regions →

Go to DuSpec+AUAC03801 AcraSkin FRL and/or BAL levels →

Go to DuSpec+AUAC03797 AcraShield FRL and/or BAL levels →

WEATHER AND TEMPERATURE

Weather conditions can affect application and drying time. Hot or dry conditions and limited working time can accelerate drying times and may require adjustments in the scheduling of work to achieve desired results (different to working times in the shade). Cool or damp conditions extend working and drying times and may require added measures of protection against wind, dust, dirt and rain. Refer to product data sheets for application guidelines and conditions prior to work commencing.

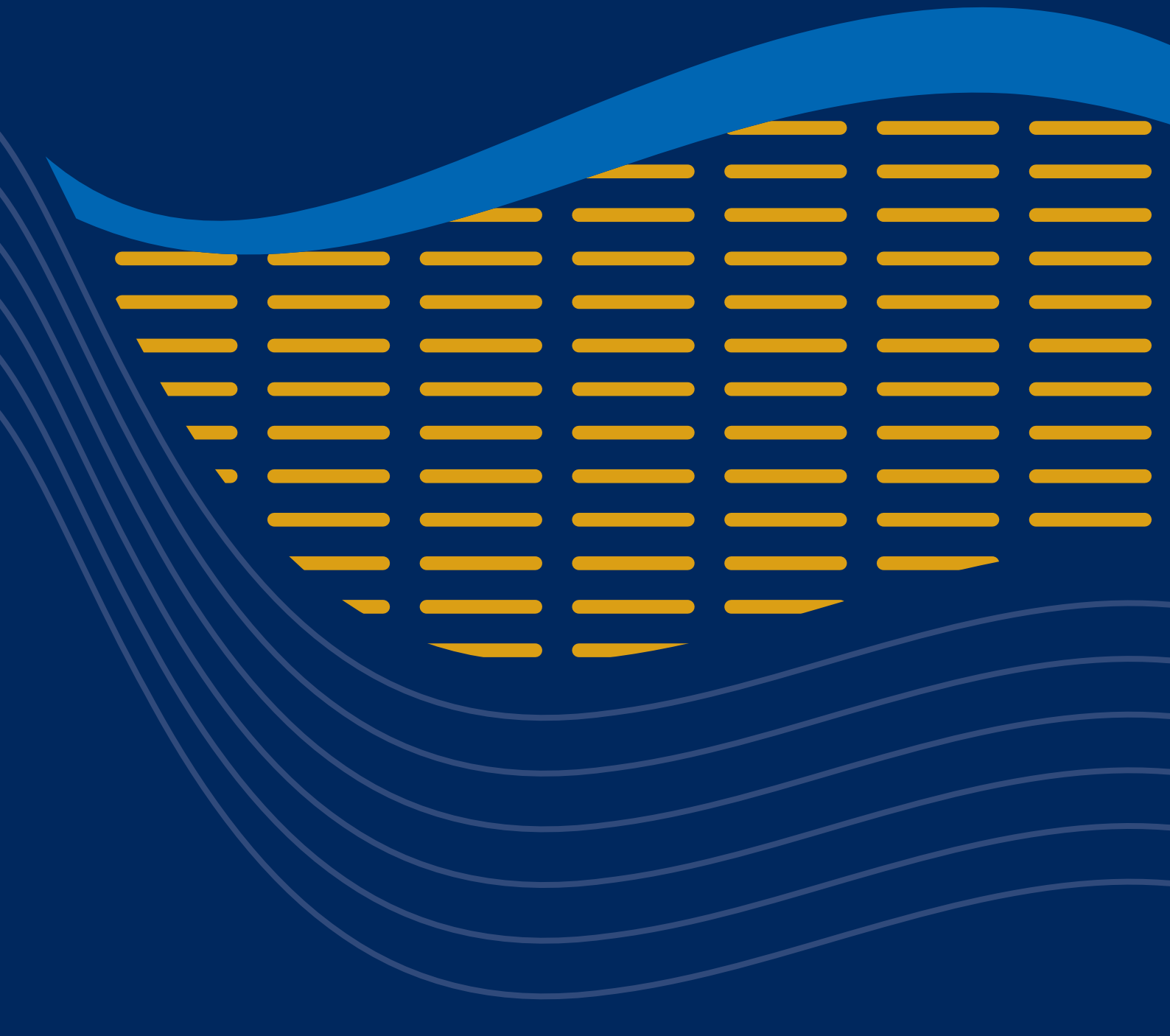
COASTAL AREAS

In coastal areas located within 1km of the shoreline or areas where there is a high exposure to salt air and atmospheric pollutants, it's a requirement to clean and/or wash down surfaces to remove any contamination prior to applying any surface coatings.

In terms of maintenance and warranty requirements, Dulux Acratex recommends that the coating surface should be regularly washed accordingly subject to the exposure conditions to help maintain its long term integrity and performance.

SECTION 5

HEALTH & SAFETY AND CARE & MAINTENANCE



Health & Safety

Dulux Acratex promotes safe work practices. Always check your local WorkCover or WorkSafe authority website for relevant OH&S regulations before starting work.

ICANZ have classified ROCKWOOL 75mm FacadeRock DD panels as NON DANGEROUS GOODS.

Avoid direct skin contact with ROCKWOOL 75mm FacadeRock DD panels, as they may cause itchiness.

MANAGING DUST

Fine dust from drilling, sanding and cutting can be hazardous.

- Always wear a P2 Respirator.
- Perform cutting in a well-ventilated area.
- Dampen dust with water when sweeping.
- Keep other workers at least 3 metres away from the operation.

CUTTING OUTDOORS

- Position the cutting area so the wind blows dust away from workers.
- Use only saws with vacuum extraction.
- Use height-adjustable trestles to minimise bending and improve safety.

WEAR CORRECT PPE

It is recommended that the following PPE is worn:

- P2 Respirator.
- Safety glasses / goggles.
- Gloves, long sleeve shirt and long trousers.
- Protective footwear.

USING POWER TOOLS

- Ensure power tools are tested and tagged according to state OH&S regulations.
- Avoid using power saws indoors.
- Use only saws with vacuum extraction.
- Do not use grinders on this product.
- Follow all tool manufacturer instructions.

MANUAL HANDLING

- Minimise manual lifting of panels and use mechanical lifting devices when possible.
- When lifting manually, use more than one person if needed.
- Keep individual lifting weights as low as possible.
- Train workers in proper manual handling techniques.
- A clean, well-organised worksite improves overall safety.

For all product handling procedures refer to the relevant product MSDS prior to work commencing, or contact Dulux Acratex on 13 23 77.

Care & Maintenance

Performing an annual inspection and clean is essential to ensure both the aesthetic and protective performance of the StoneShield Cladding System by Dulux Acratex. Here are some tips to extend the life of the coating and maintain the value of your investment.

REGULAR INSPECTIONS

Check for cracked, loose or missing sealants to prevent water ingress. Sealant will be found in areas where different substrates meet (i.e. above door openings and windows, pipes, where walls meet the soffit line and where electrical fittings and handrails have been attached to walls). Control joints should also be inspected. All deteriorated and damaged sealant should be removed and replaced as soon as it is apparent. We recommend that a paintable polyurethane sealant be used.

Coastal Areas

Areas within 1km of coastal areas should be inspected and cleaned more frequently for the build-up of salt contamination and pollutants.

Surface Contamination

Dirt can exacerbate mould and algae growth and therefore will cause your coating to deteriorate quickly if not regularly cleaned.

REGULAR CLEANING

- Use a low-pressure water blaster (less than 450psi) using a fanjet of cold water at a 45° angle from the wall (not perpendicular). The water blaster's fan should be kept a minimum of 30cm away from the surface of the coating to avoid damage. Always test a small area first.
- Grime or ingrained dirt can be removed with a scrubbing brush and a solution of detergent and warm water.
- DO NOT use a high-pressure water blaster.

For all technical and product support contact Dulux Acratex on 13 23 77.

Care & Maintenance (continued)

EXPOSURE TO HEAT SOURCES

Care must be taken when installing and operating heat producing appliances (i.e. open barbeques, patio heaters, hot water units, heating units and air conditioners) to ensure the finished wall coating does not become damaged by the heat generated by these items.

INSTALLING EXTERNAL FIXTURES

For any non-load bearing fixtures (i.e. lights, cameras, downpipe brackets, etc), the use of a TOX Insulation Dowel or equivalent can be considered. Follow manufacturer's instructions for installation and weight recommendations. Upon completion, all penetrations are to be sealed to achieve water tightness (i.e. avoid opportunity for water ingress).

Avoid securing heavy or vibrating loads to walls

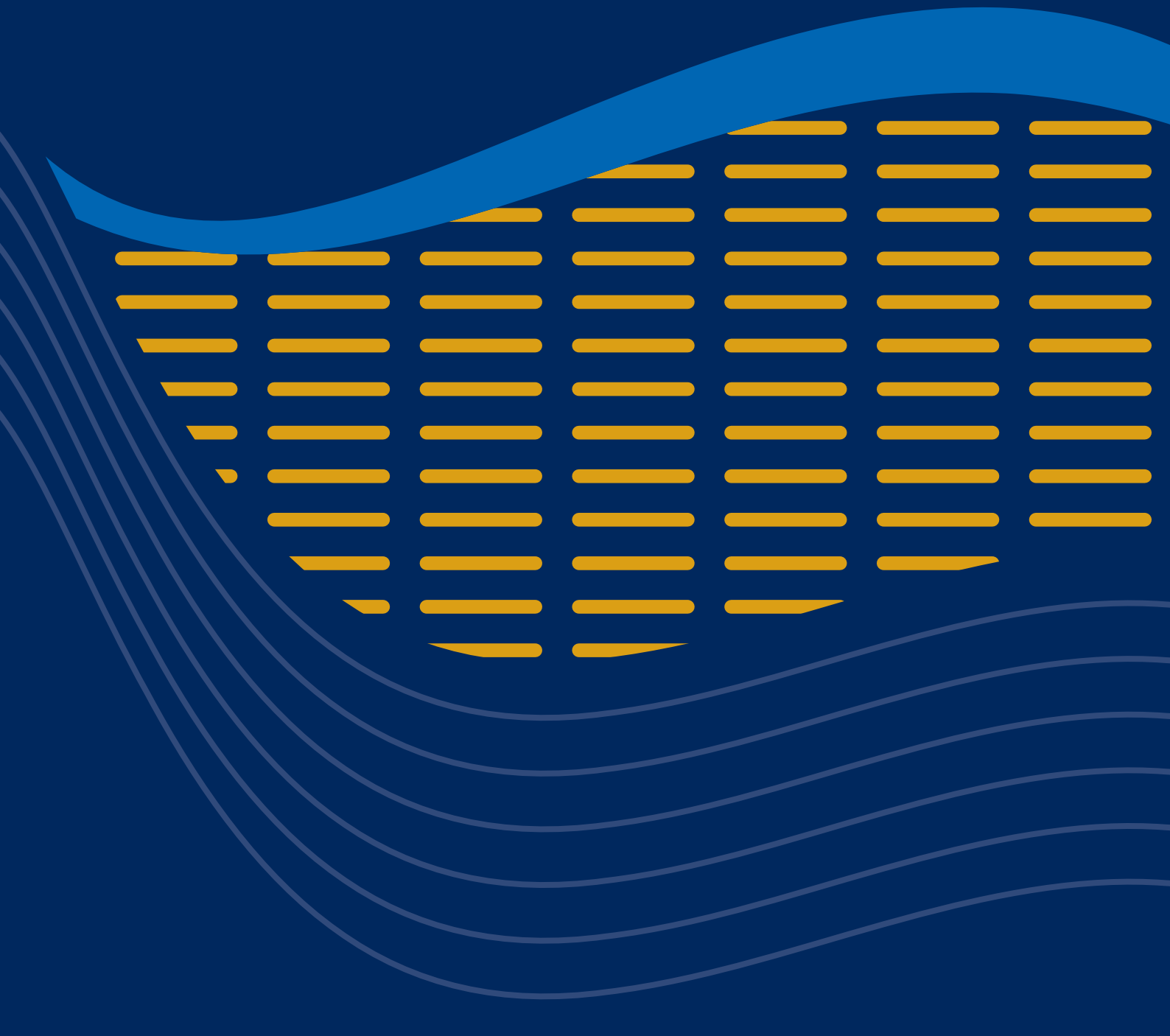
Heavy or vibrating loads (i.e. gates, decks, pergolas, carports, basketball hoops, clotheslines or other load bearing fixtures) should not be directly attached to the walls. **Instead, secure these types of fixtures to independent posts that are separate from the wall.**

REFRESH YOUR COATING

Recoating is recommended to rejuvenate the surface appearance. This can be done by using a Dulux Acratex protective membrane topcoat to a selected colour which will protect from air pollutants, water ingress and dirt accumulation to provide a new low maintenance surface.

SECTION 6

WARRANTY



StoneShield Cladding System Warranty

The StoneShield Cladding System by Dulux Acratex, a division of DuluxGroup (Australia) Pty Ltd (ABN 67 000 049 427), is covered by this Warranty subject to the conditions and limitations as set out below. The benefits of the Warranty are in addition to other rights and remedies under any applicable law.

SPECIFIC DEFINITIONS

- "Builder" has the same meaning as given under the HB50 Dictionary.
- "Buyer" means the purchaser/s of the StoneShield Cladding System from Dulux Acratex.
- "Certificate of Installation" means the Certificate of Installation & CodeMark Certificate of Conformity CM40425 provided by the Customer to Acratex.
- "Coating System" means the coating system used on the StoneShield Cladding System as manufactured by Dulux Acratex as set out in the CodeMark Certificate of Conformity.
- "CodeMark Certificate of Conformity" means CodeMark Certificate of Conformity CM40425.
- "Components" of the StoneShield Cladding System which are manufactured or supplied by third party(s) as itemised in the CodeMark Certificate of Conformity.
- "Consumer" has the same meaning as given in Section 3 of the Australian Consumer Law.
- "Date of Installation" means the date on which the StoneShield Cladding System was completed by the Installer.
- "Installer" has the same meaning as given under the HB50 Dictionary from the “Standards” source.
- "StoneShield Cladding System" means both the Components and Coating System as per CodeMark Certificate of Conformity CM40425.

THE WARRANTY

Subject to the conditions of this Warranty, Dulux Acratex warrants to the Buyer the StoneShield Cladding System when installed in accordance with the StoneShield System CodeMark Certificate of Conformity and Specification & Installation Manual will be free from defects due to faulty manufacture of the Coating System or Components for a period of 10 years from the Date of Installation when finished with one coat of Dulux Acratex AcraSkin and 15 years when finished with two coats of Dulux Acratex AcraSkin or two coats of Dulux Acratex AcraShield.

This Warranty is not transferable and is only provided to and may only be relied upon by the Buyer.

If it is established to Dulux Acratex’s reasonable satisfaction that there is a defect in the StoneShield Cladding System in breach of this Warranty, Dulux Acratex will either: supply replacement Component(s) and /or Coating System products or rectify the parts of the StoneShield Cladding System found to be deemed defective.

WARRANTY TERMS

For this Warranty to be valid:

1. Dulux Acratex must receive a completed and signed "Certificate of Installation" in the form attached at the end of this document. The Certificate must be fully completed, signed by the relevant Installer and provided to Dulux Acratex within three months from the Date of Installation. Dulux Acratex’s acceptance of a Certificate of Installation does not constitute an agreement or acknowledgment that the installation was properly performed or an endorsement or warranty of the installation work.
2. The party making the claim must comply with the claims procedure set out in this document, including providing proof of purchase* of the StoneShield Cladding System.
   *Dulux Acratex proof of purchase documents must show that payment has been made in full and the components line up with StoneShield Cladding System CodeMark of Conformity.
3. All products and components used in the StoneShield Cladding System must be strictly in accordance with the instructions provided by or available from Dulux Acratex including the CodeMark Certificate of Conformity and as set out in the StoneShield Specification & Installation Manual. Due to product and component declaration for compliance with the CodeMark Certificate of Conformity, no substitution of specified products or components are allowed.
4. Dulux Acratex must be allowed full access to inspect the StoneShield Cladding System in situ before any attempt to repair or remove any component of the StoneShield Cladding System.

WHAT IS NOT COVERED BY THE WARRANTY

Subject to the guarantees under the Australian Consumer Law, this Warranty does not extend to any damage, defect or failure within the StoneShield Cladding System which (in Dulux Acratex’s opinion) arise from or are due to:

1. faulty or improper workmanship, installation, application or supervision, including failure to adhere to any installation instructions provided or made available by Dulux Acratex or failure to adhere to the CodeMark Certificate of Conformity;
2. where the substrate on which the StoneShield Cladding System is installed:
   a) is not of a standard design & constructed that meets all statutory and relevant provisions criteria of the National Construction Code of Australia (NCC) and the Australian Standards; or

StoneShield Cladding System Warranty (continued)

b) has not been prepared, installed and maintained strictly in accordance with the instructions provided by or available from Dulux including the StoneShield Cladding System CodeMark Certificate of Conformity and Specification & Installation Manual and Care & Maintenance Specification;

3. hydrostatic pressure, settling, movement, cracking, lifting, peeling, flaking, failure or other deterioration of the substrate;
4. corrosion, ingress of moisture or other contaminants, maltreatment, excessive wear/ tear, staining, discolouration or lack of regular maintenance;
5. building settlement or structural movement;
6. being subjected to abnormal treatment including impact, abrasion or mechanical action, surface marking, scratches or stains arising during or after the installation of the StoneShield Cladding System;
7. building design or detailing that has caused a defect including cracking, and settlement;
8. inadequate maintenance, including failure to follow procedures set out in the instructions for use or care of the StoneShield Cladding System or lack of regular cleaning, removal of contaminants or failure to repair damage;
9. efflorescence, normal wear and tear, growth of mould, mildew, fungi, bacteria, or any organism on any surfaces (whether on the exposed or unexposed surfaces);
10. contact with chemicals such as solvents, detergents and pollutants, or exposure to a harsh chemical environment or an excessively salty environment;
11. any use of adhesive tapes, sealants or mastics on the Components or recoating of the surface of the StoneShield Cladding System outside of the recommended maintenance guidelines in StoneShield Cladding System Specification & Installation Manual;
12. any aesthetic variation in the look of the Coating System including any texture or colour variation or surface pattern or any variation caused by glancing light;
13. any other causes specified in the instructions for use or care as being excluded from this Warranty;
14. earthquakes, fire, cyclones, floods or other severe weather conditions or unusual climatic conditions; or
15. any other causes outside the reasonable control of Dulux Acratex; or
16. to the extent permitted by law, any consequential or indirect loss of any kind or loss of income, profit, business, goodwill or reputation.

AUSTRALIAN CONSUMER LAW

If you are a consumer under the Australian Consumer Law, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

MAKING A CLAIM UNDER THE WARRANTY

The Buyer must give Dulux Acratex written notice of any claim pursuant to the Warranty within 14 days of any defect coming to the Buyer's notice and within 90 days of the defect becoming apparent. Dulux Acratex must be given access to inspect the premises as noted under Warranty Terms section above.

The Buyer must contact Dulux Acratex by post: Dulux Admin 1 Jeanes St, Beverley SA 5009, telephone 13 23 77 or email registrations@acratex.com.au. The Buyer must show proof of purchase and bear all expenses incurred in making a claim, except where they are entitled to recover such expenses under the Australian Consumer Law, in which case Dulux Acratex will bear these expenses. All claims for such expenses must be notified in writing, with acceptable substantiation provided, within 30 days from when the Warranty claim is made.

StoneShield Cladding System by Dulux Acratex
Certificate of Installation & CodeMark Certificate of Conformity CM40425

The StoneShield Cladding System by Dulux Acratex Certificate of Installation & CodeMark Certificate of Conformity CM40425 is to be issued by the Installer &/or Applicator of the system to verify that installation has been completed to the nominated job address in accordance with the CodeMark Certificate of Conformity CM40425 and StoneShield Cladding System Specification & Installation Manual with no substitutions of components or of Acratex multi-layered coating system. Warranty can only be requested upon completion and submission of this form to Dulux Acratex. Warranty terms and conditions can be found at **dulux.com.au/StoneShieldwarranty**

Dulux Acratex must receive a completed and signed "Certificate of Installation & CodeMark Certificate of Conformity CM40425" that must be fully completed, signed by the relevant Installer and provided to Dulux Acratex within three months from the Date of Installation. Submission must include Proof of Purchase and photos as outlined below.

Dulux Acratex's acceptance of a StoneShield Cladding System by Dulux Acratex Certificate of Installation & CodeMark Certificate of Conformity CM40425 does not constitute an agreement or acknowledgment that the installation was properly performed or an endorsement or warranty of the installation work.

PROJECT DETAILS:

Lot or Street No.: Address (Street / Road / Other):	Suburb:
	State:
Builder Business Name:	Builder Contact Name:

STONESHIELD CLADDING SYSTEM INSTALLED:

☐ Ground Floor	☐ Second Floor	FRL:	☐ —/30/30	☐ —/60/60	Frame Type:
☐ First Floor	☐ Other	☐ 30/30/30	☐ 60/60/60	☐ 90/90/90	☐ Timber Frame ☐ Steel Frame

BUILD/INSTALLATION DETAILS:

Building Classification:	☐ Class 1	☐ Class 10	☐ Class 2 to 9		Net Wall Area:	(m^2)
Location Region:	☐ BAL-LOW	☐ BAL-12.5	☐ BAL-19	☐ BAL-29	☐ BAL-40	☐ BAL-FZ
Wind Classification:	☐ N1	☐ N2	☐ N3	☐ N4		

WALL BATTS: Installed by others or by the installer

- ☐ R2.0 Pink Batts
- ☐ R2.0 Glasswool Batts as per AS 4859.1

WALL WRAP: Installed by others or by the installer

- ☐ Fletchers Insulation Sisalation Vapawrap Wall Wrap & installed to AS/NZS 4200.1:2017
- ☐ Other Breathable Wrap complies to AS/NZS 4200.1:2017 & installed to AS/NZS 4200.1:2017

ACRATEX COATING SYSTEM:

Basecoat:	Product Name			
Texture:	Product Name			
Topcoat:	☐ AcraSkin AUAC03802 NON-BAL regions	☐ AcraShield AUAC03800 NON-BAL regions	☐ AcraSkin AUAC03801 FRL and/or BAL levels	☐ AcraShield AUAC03797 FRL and/or BAL levels

Dulux Account/ Customer No.:	Dulux Sales Rep Name:

DECLARATION:

I/We the undersigned certify that the installation of the nominated StoneShield Cladding System by Dulux Acratex has been carried out in strict accordance with:

- The details and conditions of the CodeMark Certificate of Conformity and its respective
- The StoneShield Cladding System Specification and Installation Manual
- I/We acknowledge that Dulux Acratex's receipt of this Certificate or issuance of a Warranty does not constitute an agreement or acknowledgment that the StoneShield Cladding System was properly installed or an endorsement or warranty of the installation work.

PROOF OF PURCHASE:

☐ Delivery Docket/Collection Docket (Attached showing components purchased that align with CodeMark Certificate of Conformity)

☐ Proof of Purchase & Payment of Components

PHOTO SUBMISSION:

A minimum of 10 photos must be submitted with the StoneShield Cladding System by Dulux Acratex Certificate of Installation & CodeMark Certificate of Conformity CM40425. These photos are for Dulux Acratex's records. Issuance of a Warranty is not evidence that Dulux Acratex has approved the installation or other work depicted in the photos. ***Photos provided must clearly show:**

- *Wall wrap installed with bituminous tape, starter channel and cavity spacers including back blocking (ie: 3 meter distance showing area in elevation).
- *Installation of StoneWool Panels installed with fixing disks (ie: 3 meter distance showing area in elevation).
- *Control joints, window details, etc.
- Any details that are project specific.
- *Application of basecoat (render) and mesh (ie: 3 meter distance showing area in elevation).
- *Application of aesthetic coat (ie: 3 meter distance showing area in elevation).
- *Application of topcoat membrane (ie: 3 meter distance showing area in elevation).
- Uploads of Acratex products with batch numbers will also be accepted.

*All items marked with an asterisk, must be clearly visible in submitted photos.

CERTIFICATING INSTALLER:

☐ Installed full StoneShield Cladding System including Acratex Coating System.

☐ Installed Cladding Only (Rendering & Finishing Contractor Section must be certified by the Finishing Contractor)

Business Name:
Builders / Trade Licence No.:
Installer Principal (Certifiers Name):
SIGNATURE:
Installation Certified on this day (Date):

RENDERING & FINISHING CONTRACTOR:

To be completed and Certified by the Contractor where the Finishing is not part of the Certifying Installers contract

Business Name:
Trade Licence No.:
Rendering & Finishing Principal (Certifiers Name):
SIGNATURE:
Render/Finishing Certified on this day (Date):

Refer to **acratex.com.au** for current StoneShield Cladding System by Dulux Acratex Certificate of Installation & CodeMark Certificate of Conformity CM40425 plus StoneShield Cladding System Specification & Installation Manual. On completion of this form, it is the responsibility of the Installer to forward to Acratex by email to **registrations@acratex.com.au** as part of project registration and warranty processes. **NOTE: All documents & photos are required as part of the project registration. Dulux Acratex may reject submissions if insufficient information has been submitted.**

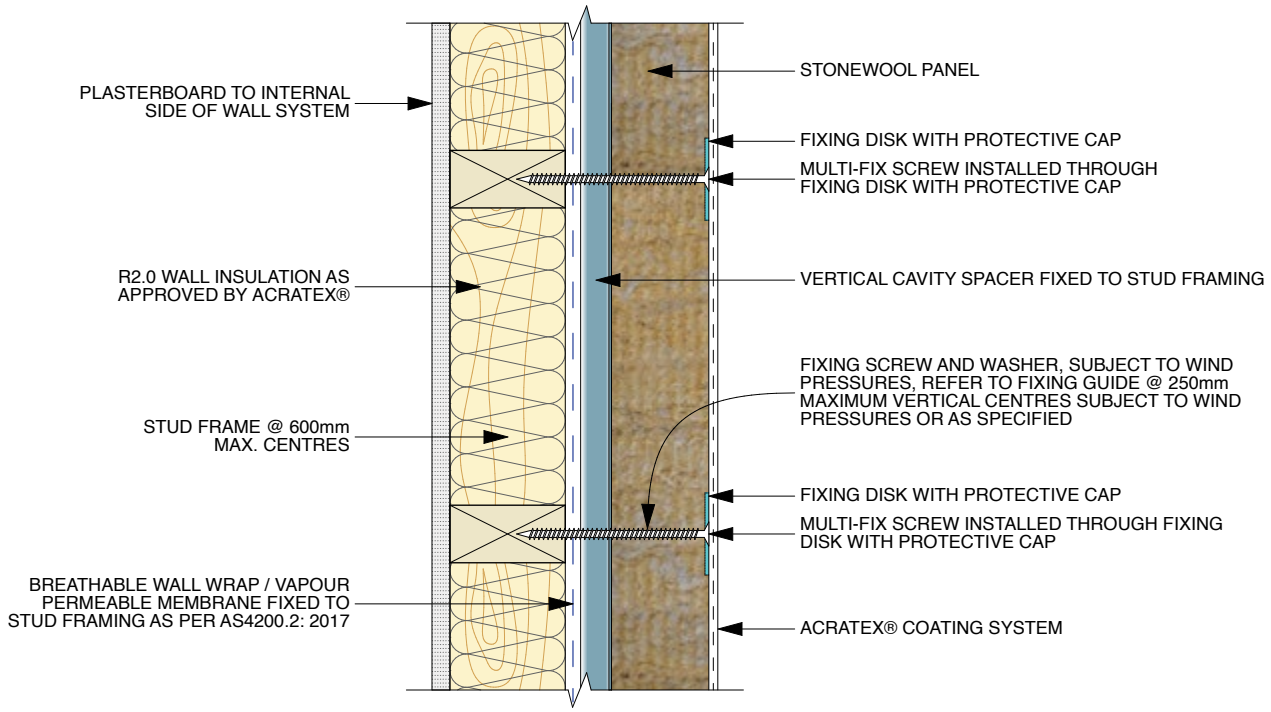
SECTION 7

DETAILED DRAWINGS

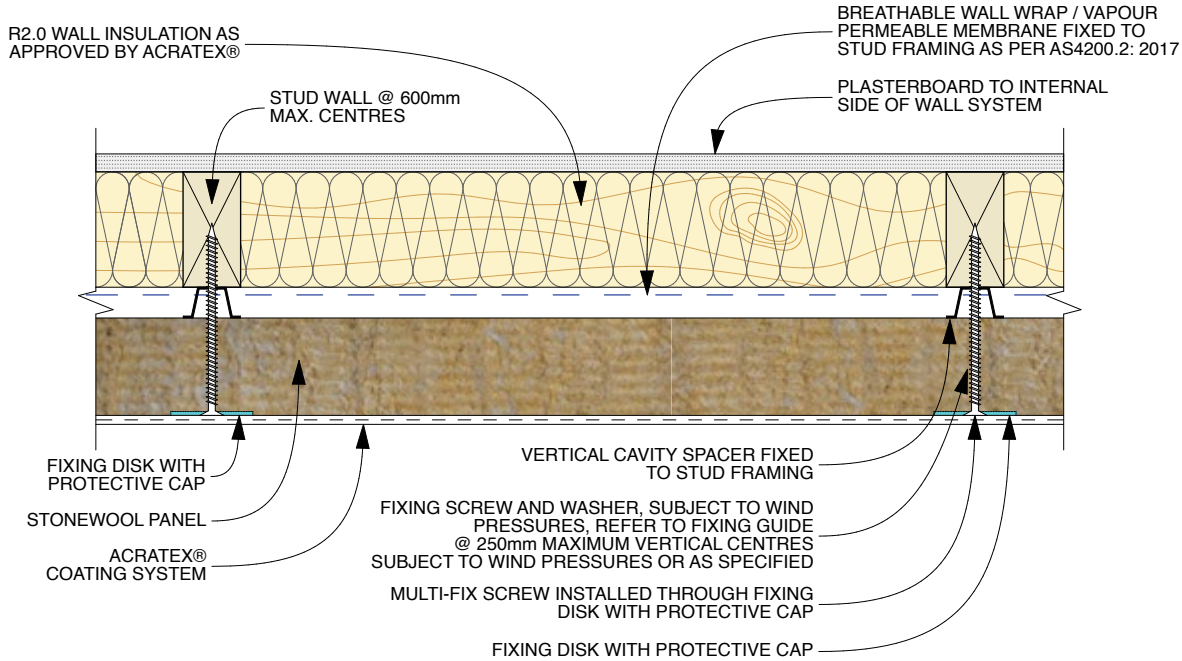
Detailed Drawings List

Detailed Drawings List (continued)

TYPICAL FIXING DETAIL



ELEVATION SECTION VIEW



PLAN SECTION VIEW

NOTE:

DETAIL IS AS PER CODEMARK.
HOWEVER SUBJECT TO WIND CATEGORY AND /OR ENGINEERS SPECIFICATION.

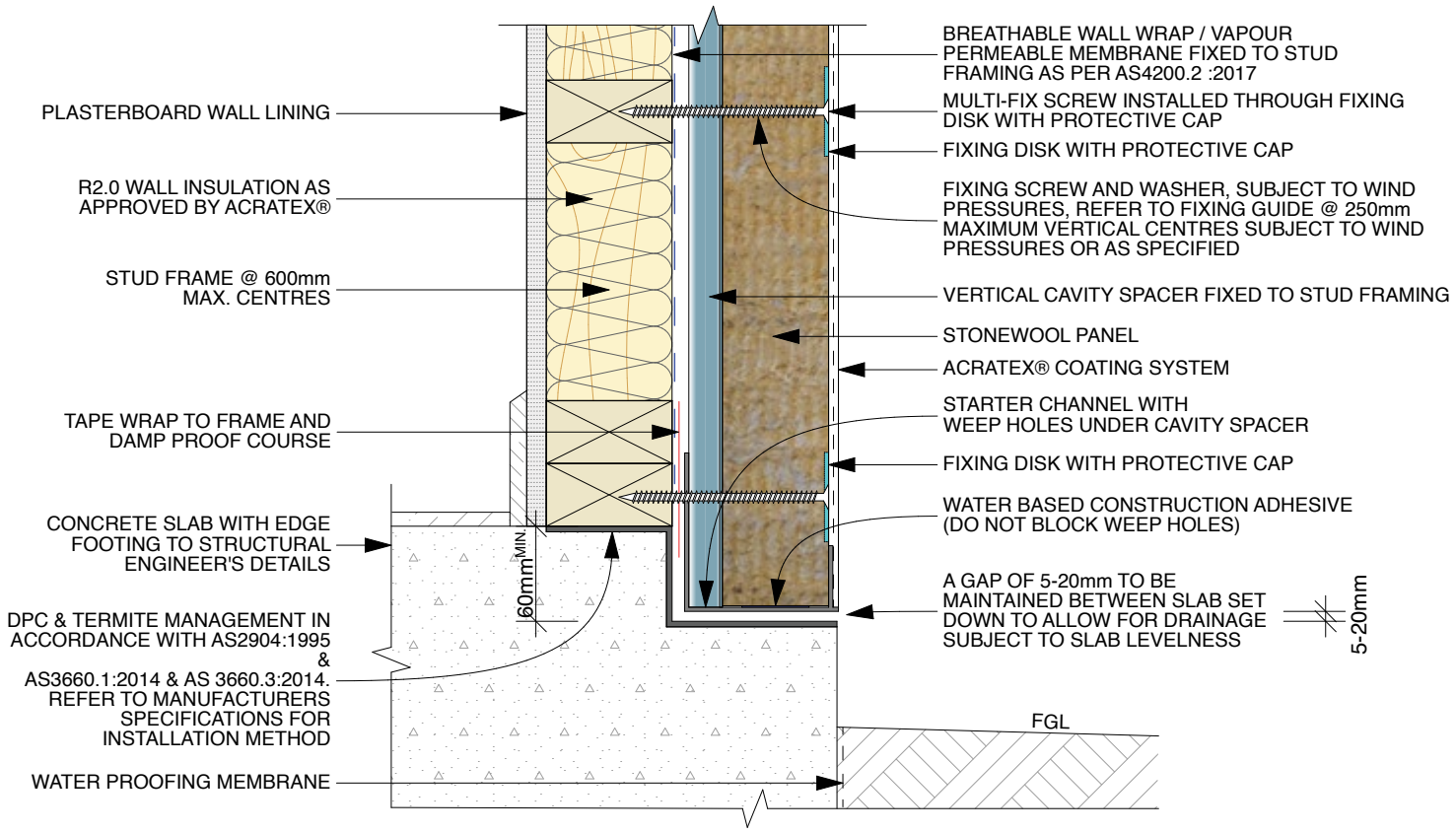
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: TYPICAL FIXING DETAIL

Scale	Drawing Number	Issue
N.T.S	**SW-001**	V8.1

SLAB REBATE FOR NON BAL REGIONS



ELEVATION SECTION VIEW

NOTE:

SPACE BETWEEN STUD FRAMING AND CAVITY SPACER IS SHOWN GREATER FOR CLARITY.

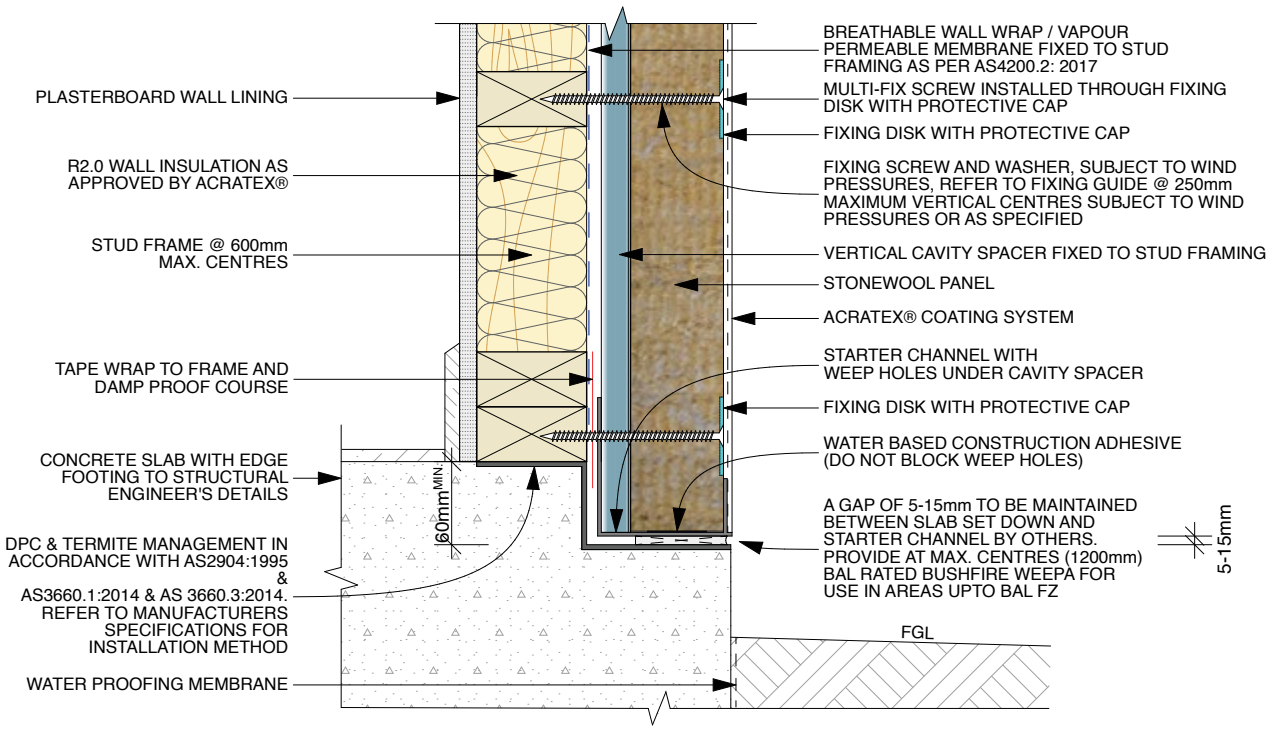
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: SLAB REBATE FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-02a**	V8.1

SLAB REBATE FOR ALL BAL REGIONS



ELEVATION SECTION VIEW

NOTE:

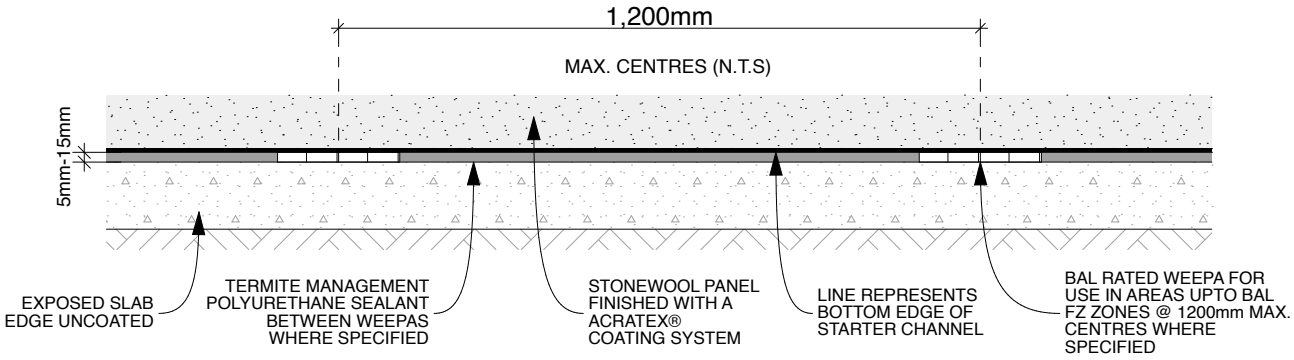
SPACE BETWEEN STUD FRAMING AND CAVITY SPACER IS SHOWN GREATER FOR CLARITY.

NOTE:

PROVIDE BUSHFIRE COMPLIANCE BAL RATED WEEPAS TO COMPLY WITH AS3959-2018 WITH VERMIN GUARD AT A MAXIMUM 1200mm CENTRE TO CENTRE.

NOTE:

A GAP OF 5-15mm TO BE MAINTAINED BETWEEN SLAB SET DOWN AND STARTER CHANNEL. PROVIDE AT MAX. CENTRES (1200mm) BAL RATED BUSHFIRE WEEPA FOR USE IN AREAS UPTO BAL FZ ZONES WITH TERMITE INSECT RESISTANT POLYURETHANE SEALANT OR EQUIVALENT IN BETWEEN @ 1200mm MAX. CENTRES.



ELEVATION VIEW

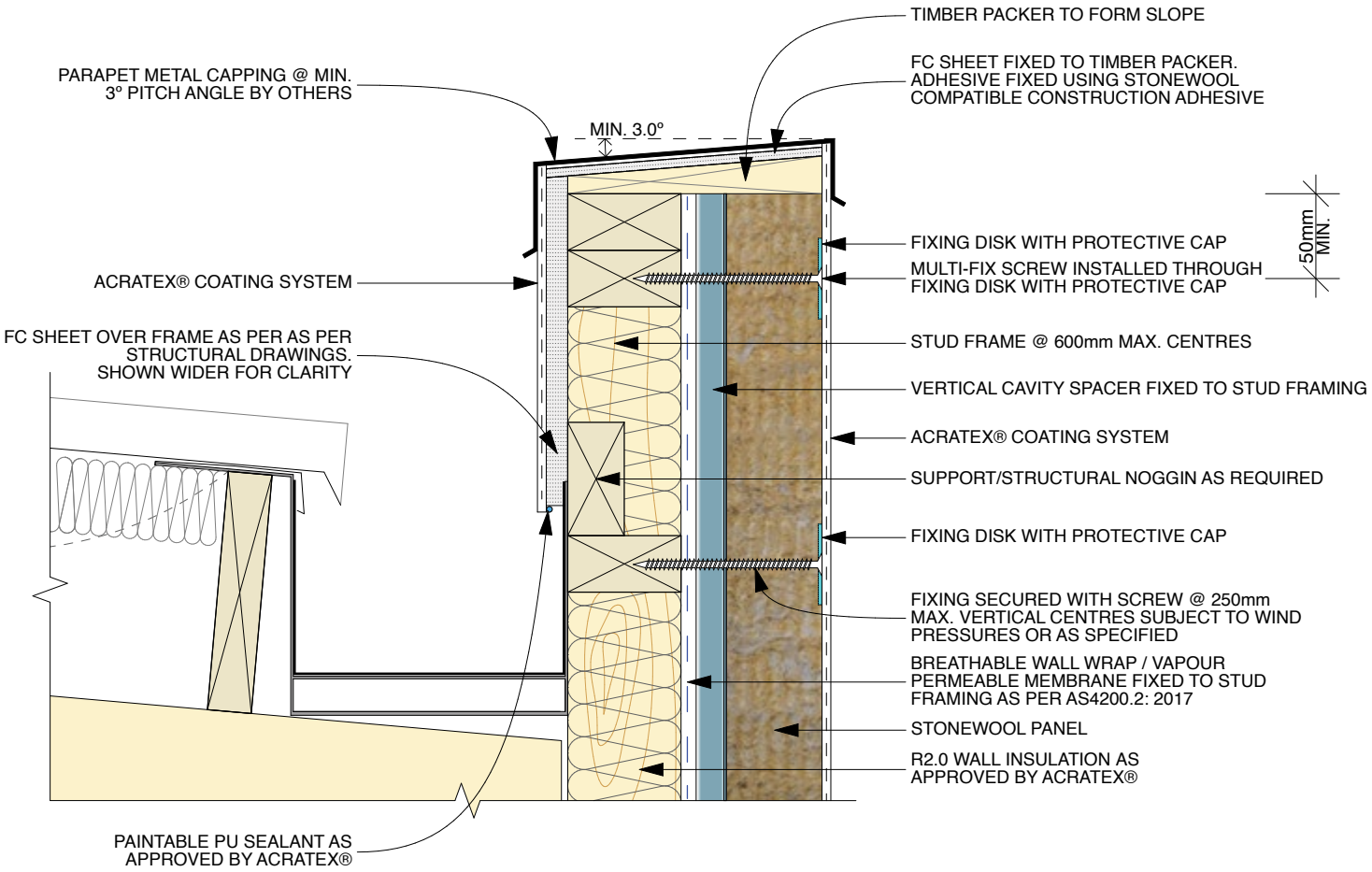
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: SLAB REBATE FOR ALL BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-02b**	V8.1

PARAPET WALL CONSTRUCTION TO BOX GUTTER



ELEVATION SECTION VIEW

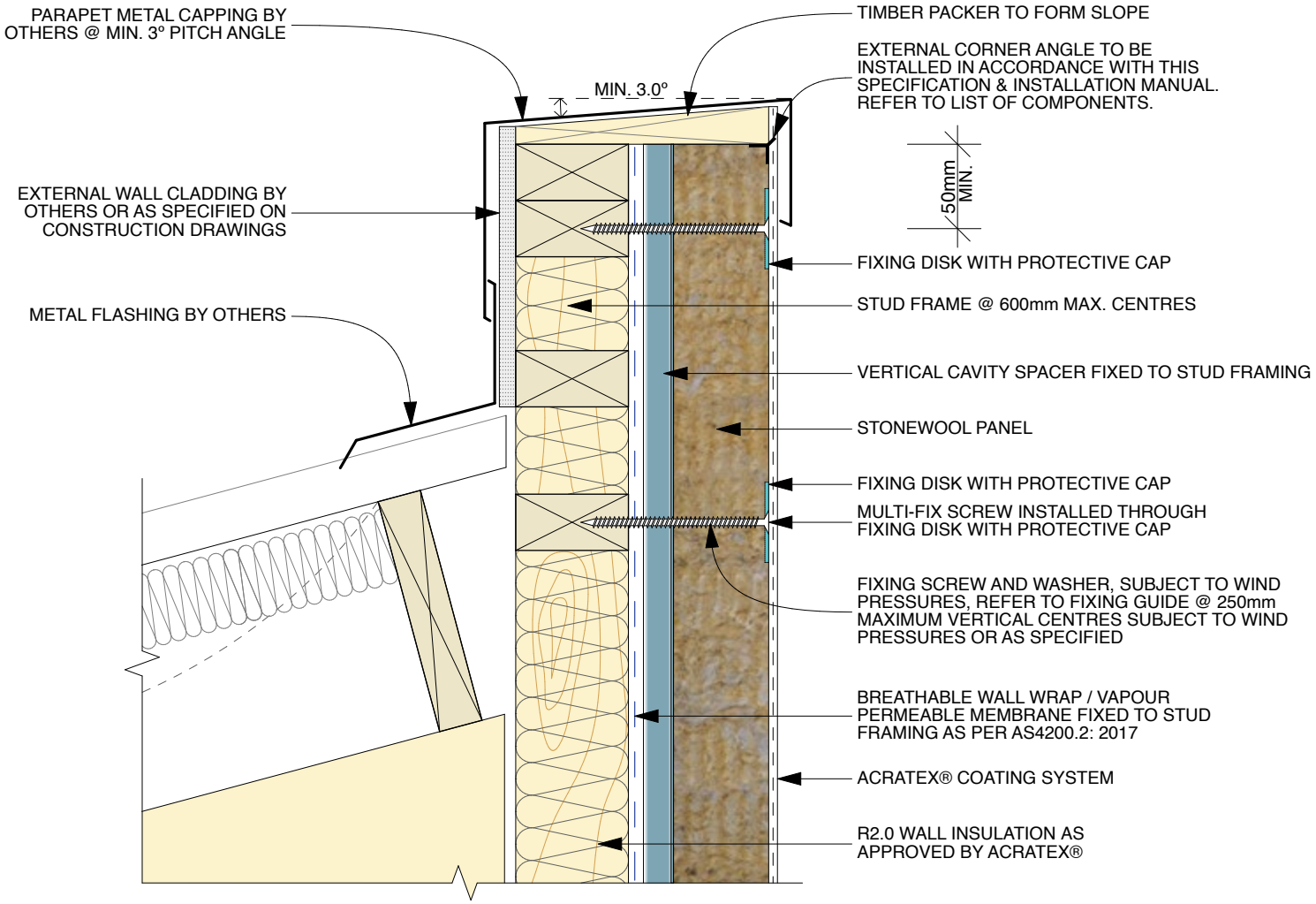
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
PARAPET WALL CONSTRUCTION TO BOX GUTTER

Scale	Drawing Number	Issue
N.T.S	**SW-03**	V8.1

METAL CAPPING PARAPET



ELEVATION SECTION VIEW

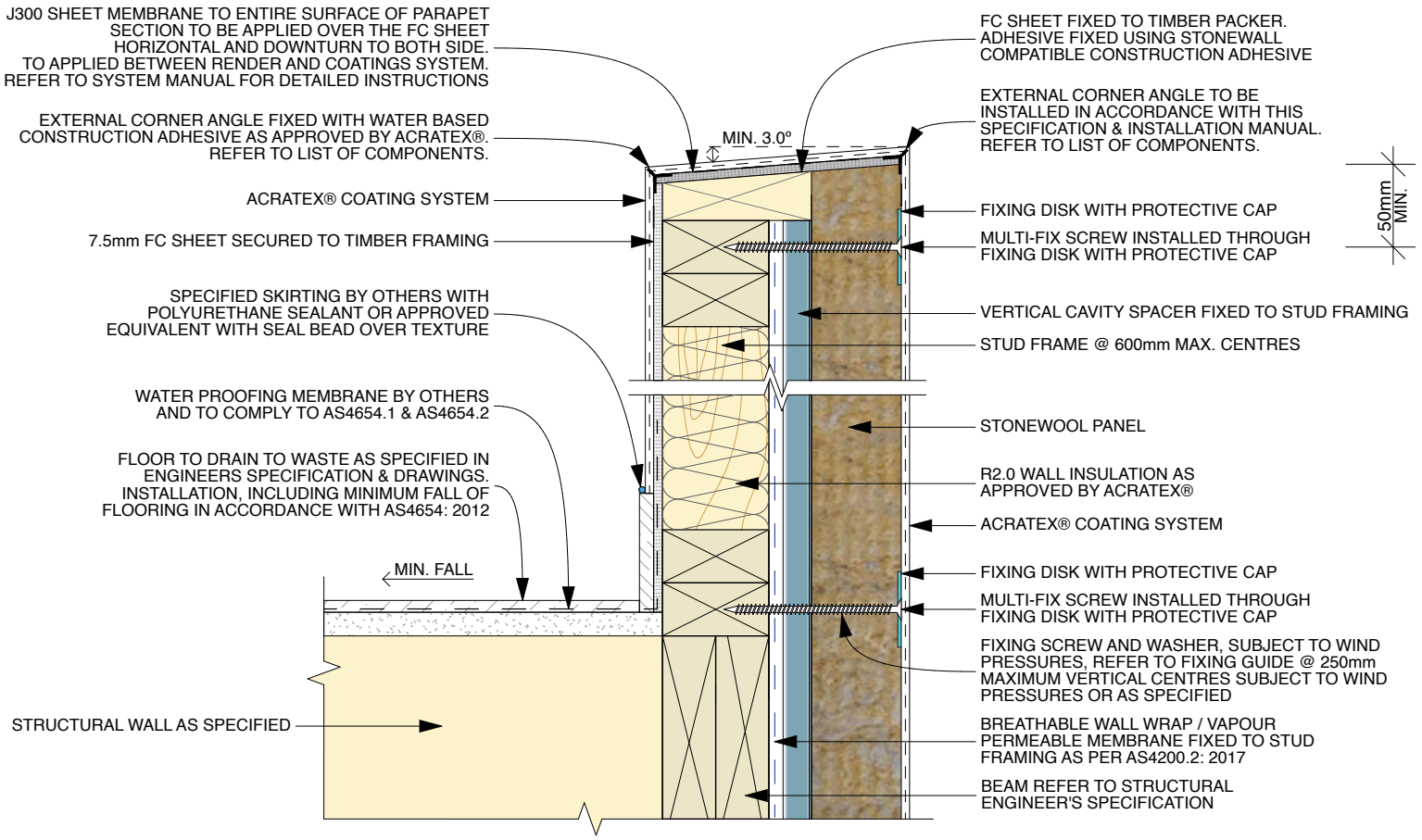
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
METAL CAPPING PARAPET

Scale	Drawing Number	Issue
N.T.S	**SW-04**	V8.1

BALUSTRADE WALL DETAIL



ELEVATION SECTION VIEW

Notes: The StoneShield Cladding System is CodeMark certified. For compliance and warranty purposes installation of panels & system components must be carried out strictly according to the instructions and specifications provided in the installation manual. Drawings and related notes, are illustrative of the typical StoneShield Cladding System installation details and are provided as a guide for construction industry professionals. The components and details have been tested and are required as part of the CodeMark compliance. The drawings should be viewed in the context of the complete cladding or build and installation design and individual product data sheets and instructions. These details may not be modified without approval from Dulux Acratex. Drawings are not to scale and are not intended as engineering details or construction drawings. Do not scan or copy printed drawings. Refer to acratex.com.au for current drawings.

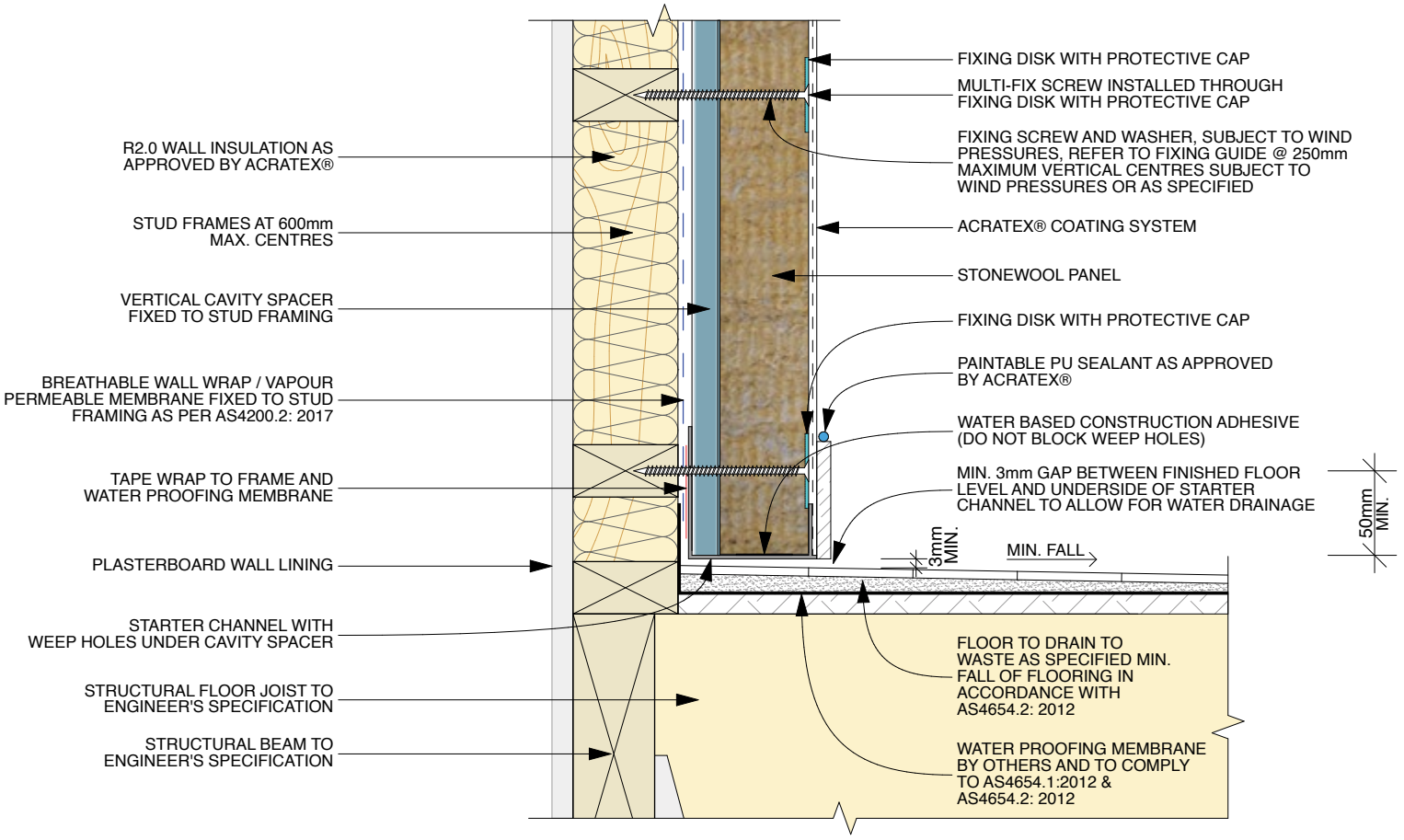
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: BALUSTRADE WALL DETAIL

Scale	Drawing Number	Issue
N.T.S	**SW-05**	V8.1

EXTERNAL WALL TO BALCONY DETAIL



ELEVATION SECTION VIEW

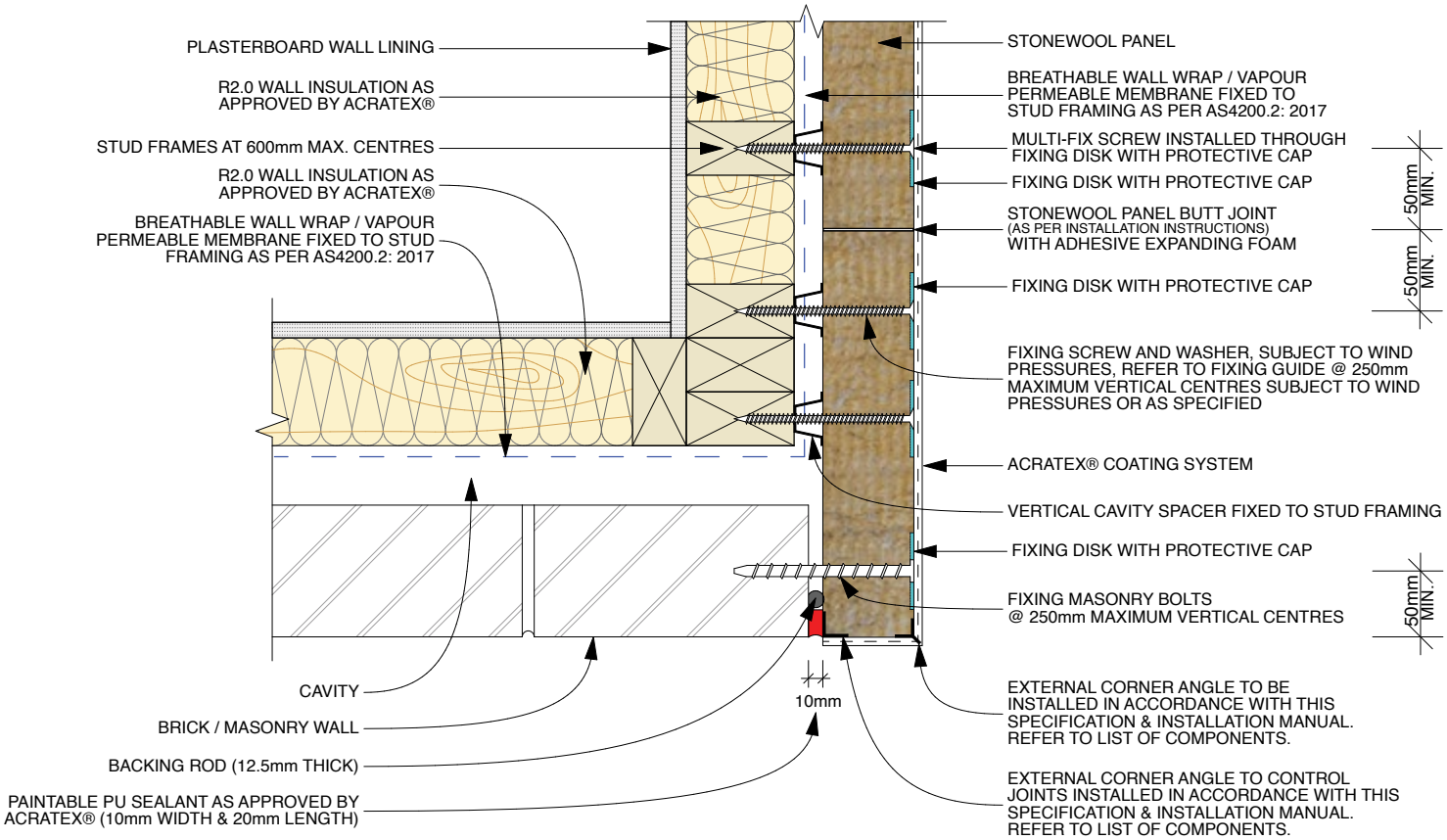
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
EXTERNAL WALL TO BALCONY DETAIL

Scale	Drawing Number	Issue
N.T.S	**SW-06**	V8.1

MASONRY JUNCTION DETAIL WITH CONTROL JOINT



PLAN SECTION VIEW

Notes: The StoneShield Cladding System is CodeMark certified. For compliance and warranty purposes installation of panels & system components must be carried out strictly according to the instructions and specifications provided in the installation manual. Drawings and related notes, are illustrative of the typical StoneShield Cladding System installation details and are provided as a guide for construction industry professionals. The components and details have been tested and are required as part of the CodeMark compliance. The drawings should be viewed in the context of the complete cladding or build and installation design and individual product data sheets and instructions. These details may not be modified without approval from Dulux Acratex. Drawings are not to scale and are not intended as engineering details or construction drawings. Do not scan or copy printed drawings. Refer to acratex.com.au for current drawings.

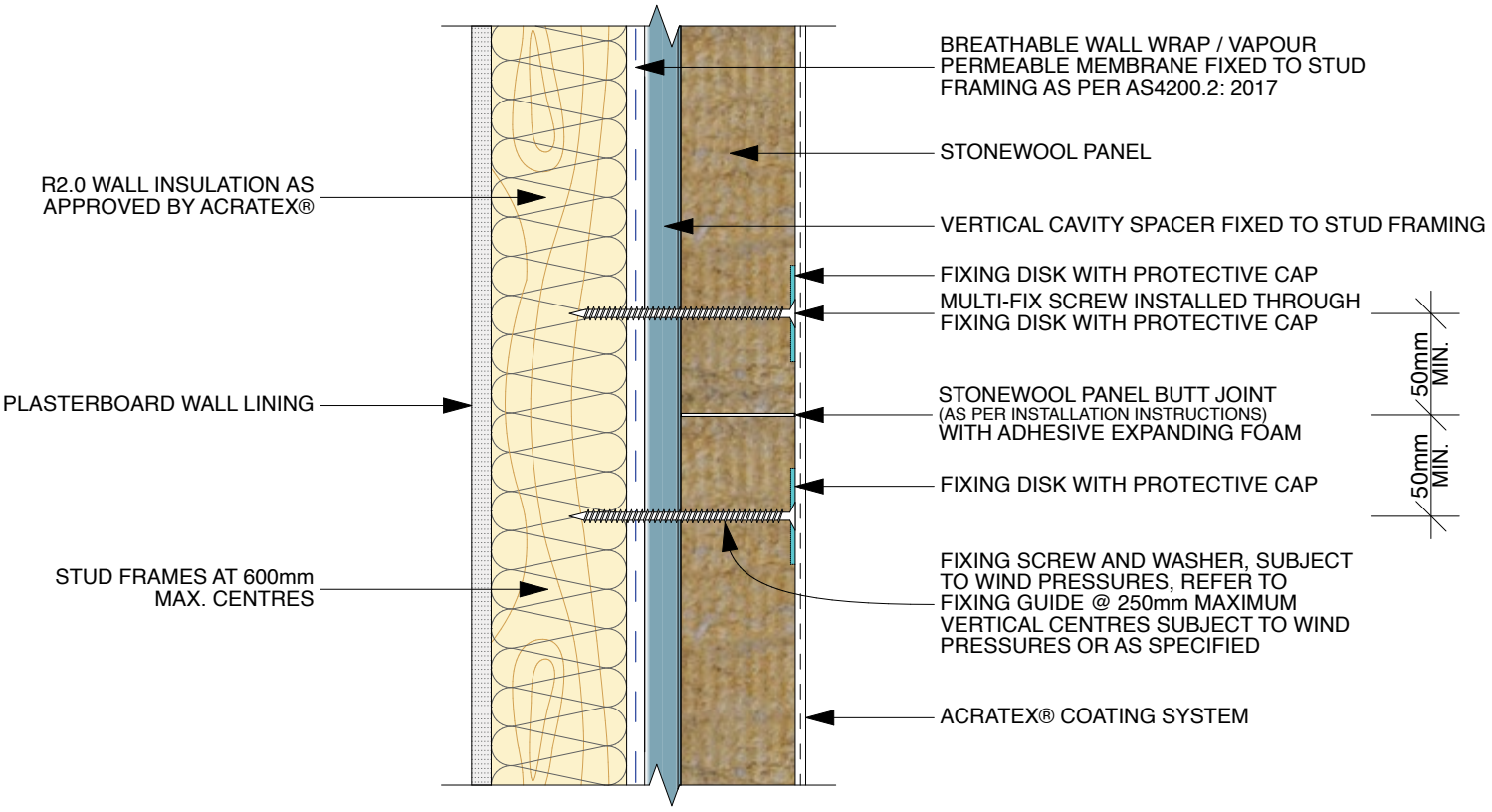
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
MASONRY JUNCTION DETAIL WITH CONTROL JOINT

Scale	Drawing Number	Issue
N.T.S	**SW-07**	V8.1

TYPICAL HORIZONTAL PANEL JUNCTION



ELEVATION SECTION VIEW

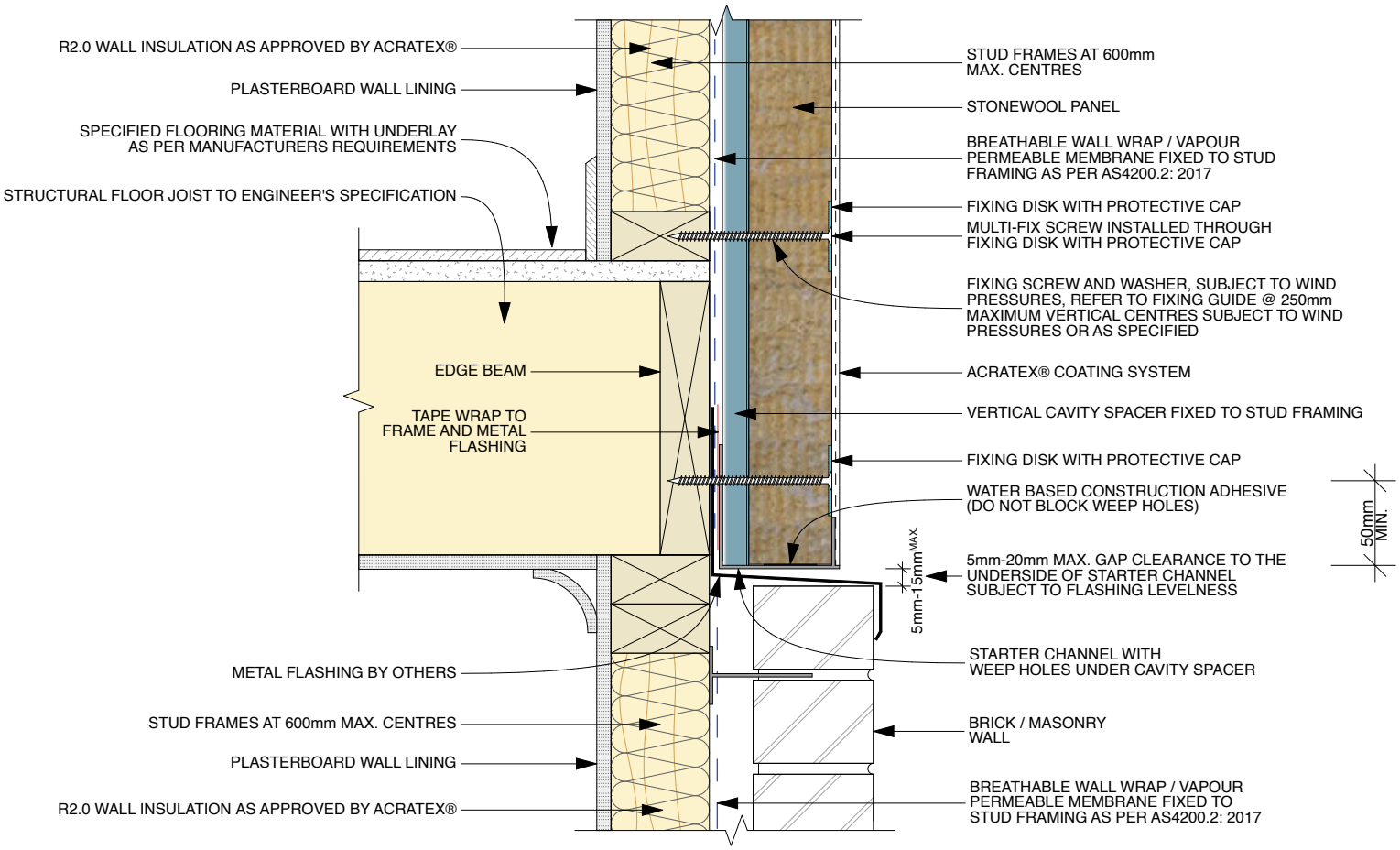
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
TYPICAL HORIZONTAL PANEL JUNCTION

Scale	Drawing Number	Issue
N.T.S	**SW-08**	V8.1

PANEL TO MASONRY METAL FLASHING FOR NON BAL REGIONS



ELEVATION SECTION VIEW

NOTE:
SPACE BETWEEN STUD FRAMING AND CAVITY SPACER IS SHOWN GREATER FOR CLARITY.

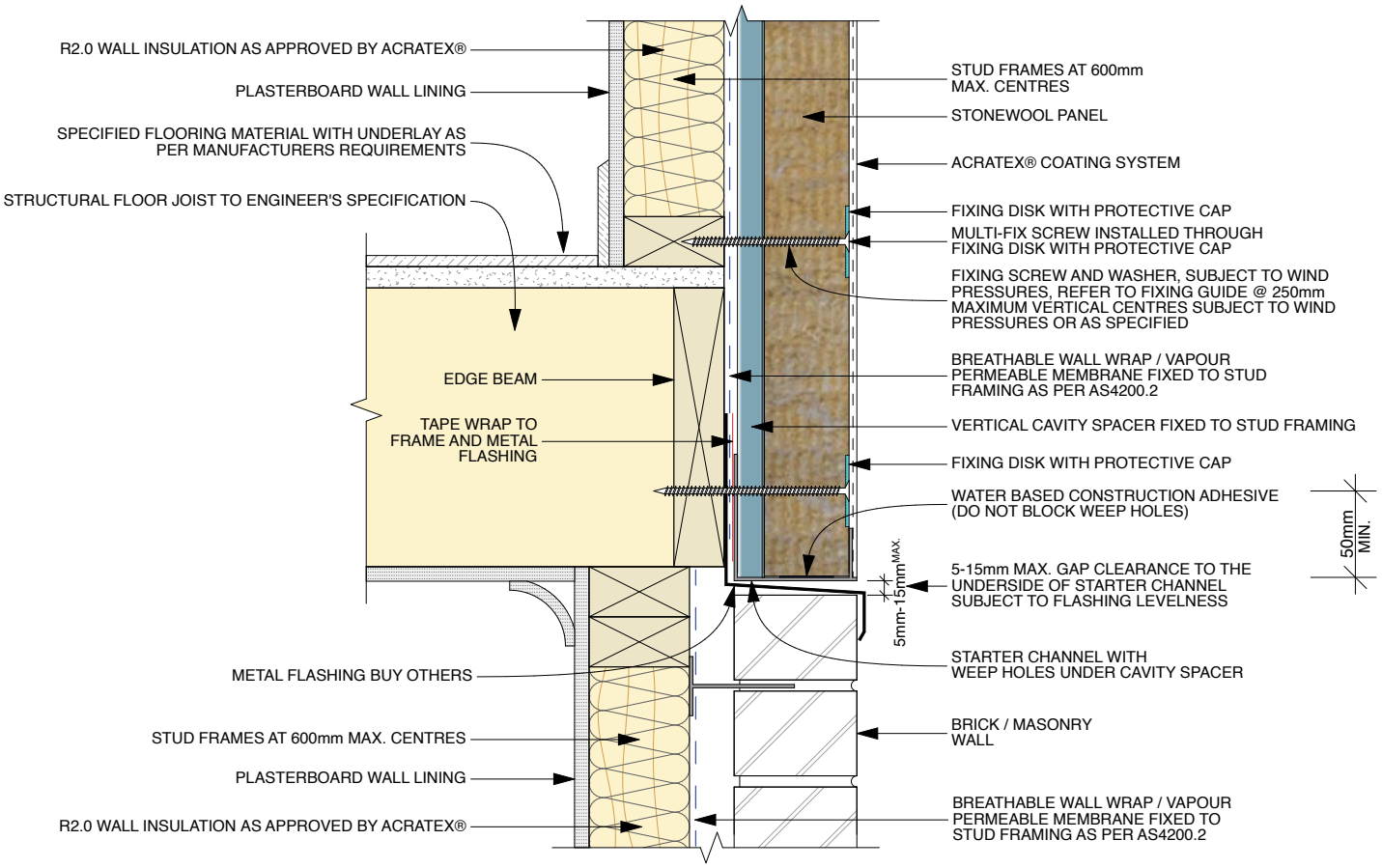
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
PANEL TO MASONRY METAL FLASHING FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-09**	V8.1

FLUSH PANEL TO MASONRY WITH Z FLASHING FOR NON BAL REGIONS



ELEVATION SECTION VIEW

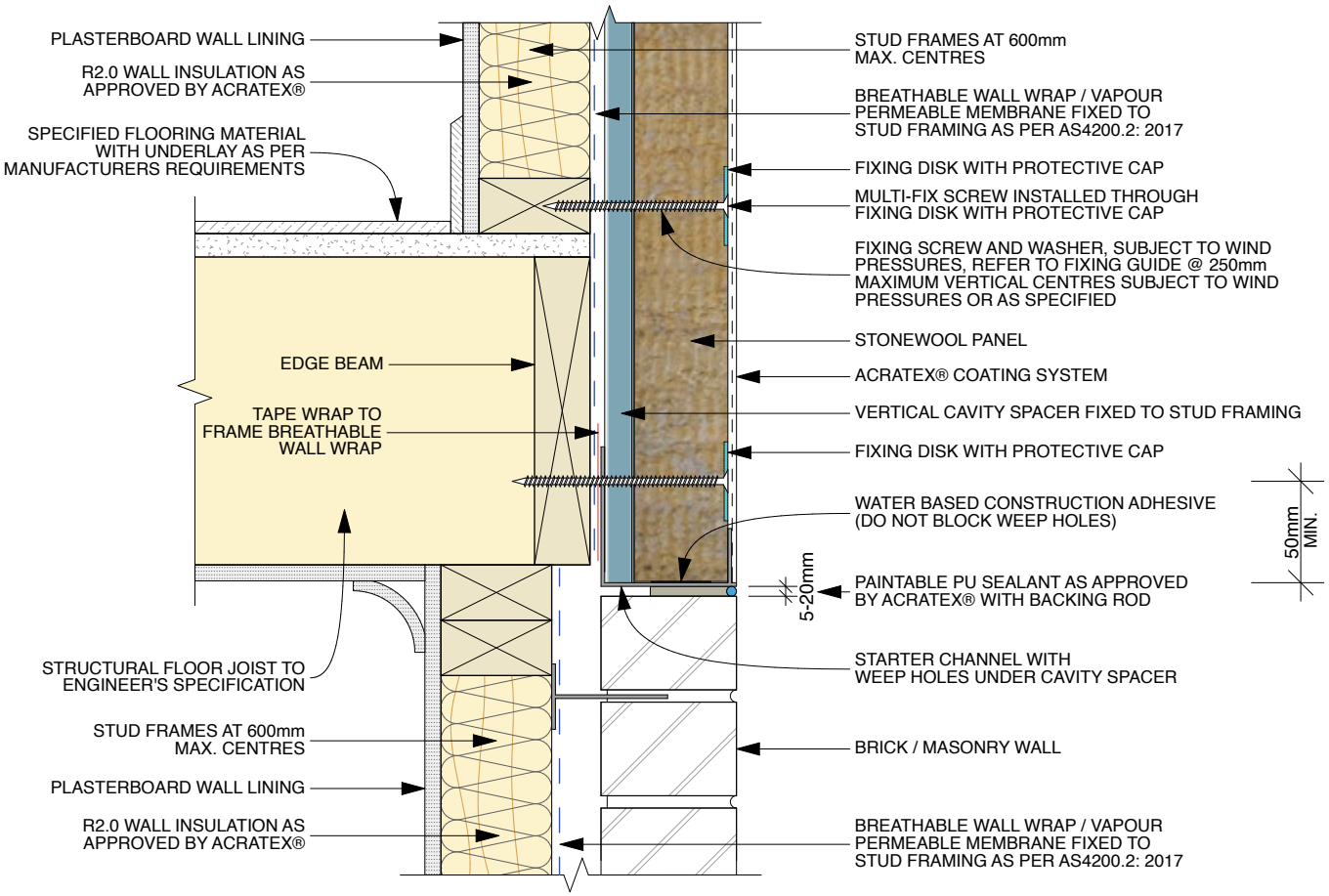
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: FLUSH PANEL TO MASONRY WITH Z FLASHING FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-10**	V8.1

FLUSH PANEL TO MASONRY SEALED JOINT NO FLASHING FOR NON BAL REGIONS



ELEVATION SECTION VIEW

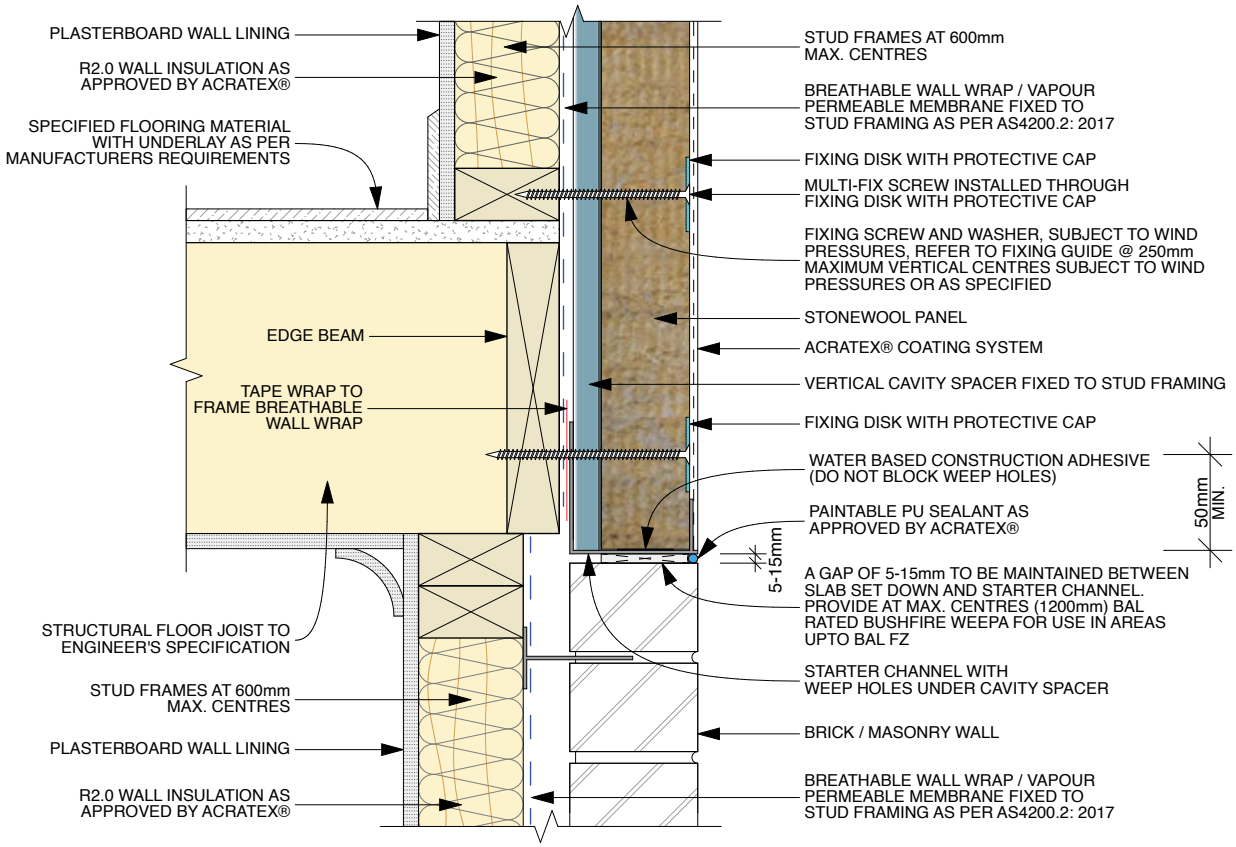
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: FLUSH PANEL TO MASONRY SEALED JOINT NO FLASHING FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-11a**	V8.1

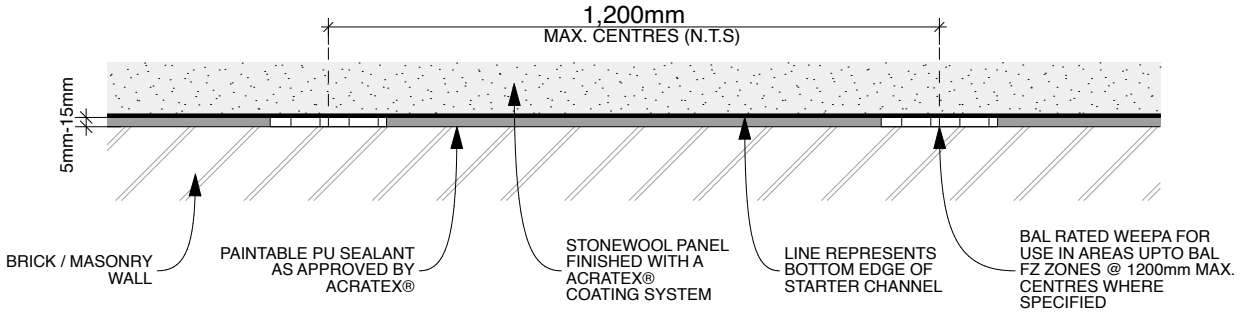
FLUSH PANEL TO MASONRY SEALED JOINT NO FLASHING FOR BAL REGIONS



ELEVATION SECTION VIEW

NOTE:

A GAP OF 5-15mm TO BE MAINTAINED BETWEEN SLAB SET DOWN AND STARTER CHANNEL. PROVIDE AT MAX. CENTRES (1200mm) BAL RATED BUSHFIRE WEEPA FOR USE IN AREAS UPTO BAL FZ ZONES WITH TERMITE INSECT RESISTANT POLYURETHANE SEALANT OR EQUIVALENT IN BETWEEN @ 1200mm MAX. CENTRES.



ELEVATION VIEW

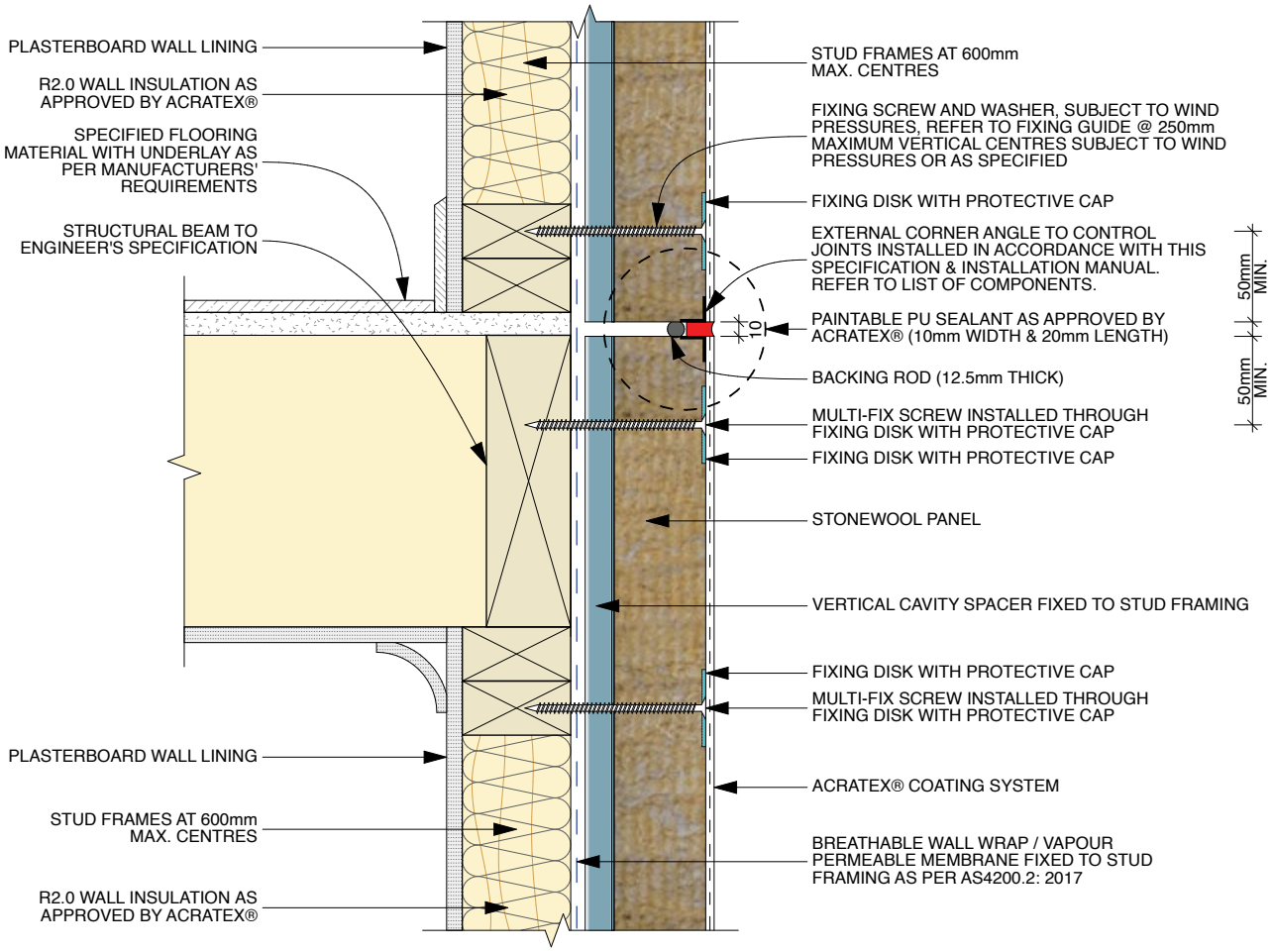
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

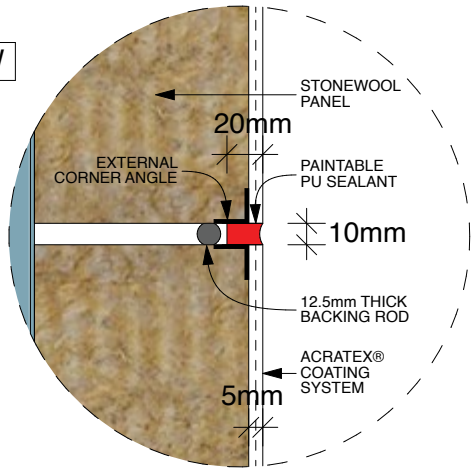
Drawing Name: FLUSH PANEL TO MASONRY SEALED JOINT NO FLASHING FOR BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-11b**	V8.1

HORIZONTAL CONTROL JOINT DETAIL FOR USE IN NON FRL WALL



ELEVATION SECTION VIEW



NOTE:

THE LOCATION OF THE EXPANSION JOINT IS ADJUSTABLE DEPENDING ON THE DESIGN PARAMETERS TO EACH PROJECT.

NOTE:

THE DETAIL ABOVE IS DESIGNED TO SIT WITHIN A ZONE ALLOWING FOR MOVEMENT WHEN UNDER STRESS. THE MAIN MOVEMENT IS FROM WALLS AND FLOOR INTERCHANGE AREAS.

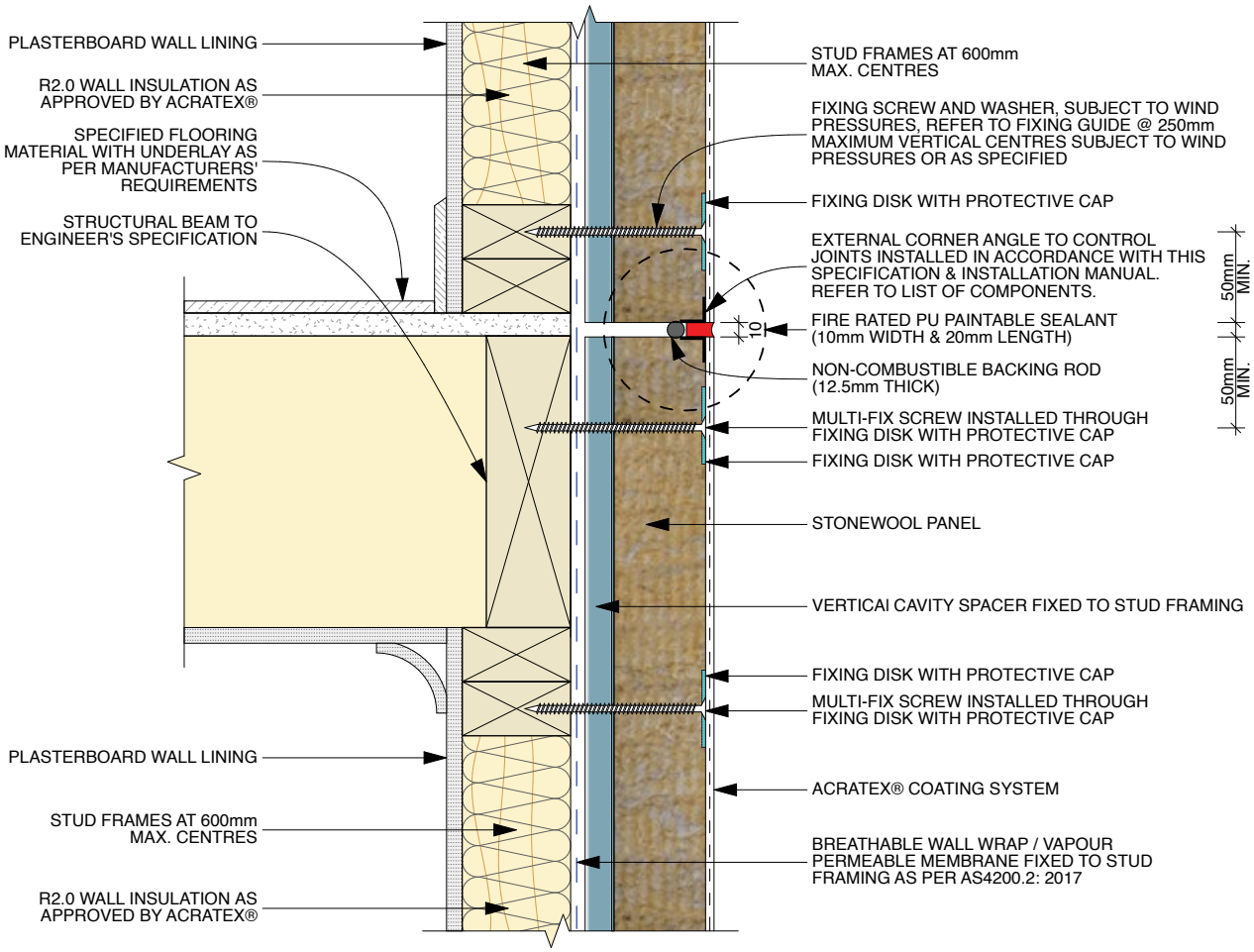
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

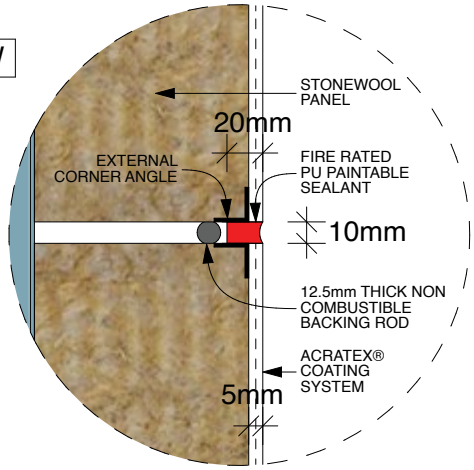
Drawing Name: HORIZONTAL CONTROL JOINT DETAIL FOR USE IN NON FRL WALL

Scale	Drawing Number	Issue
N.T.S	**SW-12a**	V8.1

HORIZONTAL CONTROL JOINT DETAIL FOR USE IN A FRL WALL AND ALL BAL REGIONS



ELEVATION SECTION VIEW



NOTE:

THE LOCATION OF THE EXPANSION JOINT IS ADJUSTABLE DEPENDING ON THE DESIGN PARAMETERS TO EACH PROJECT.

NOTE:

THE DETAIL ABOVE IS DESIGNED TO SIT WITHIN A ZONE ALLOWING FOR MOVEMENT WHEN UNDER STRESS. THE MAIN MOVEMENT IS FROM WALLS AND FLOOR INTERCHANGE AREAS.

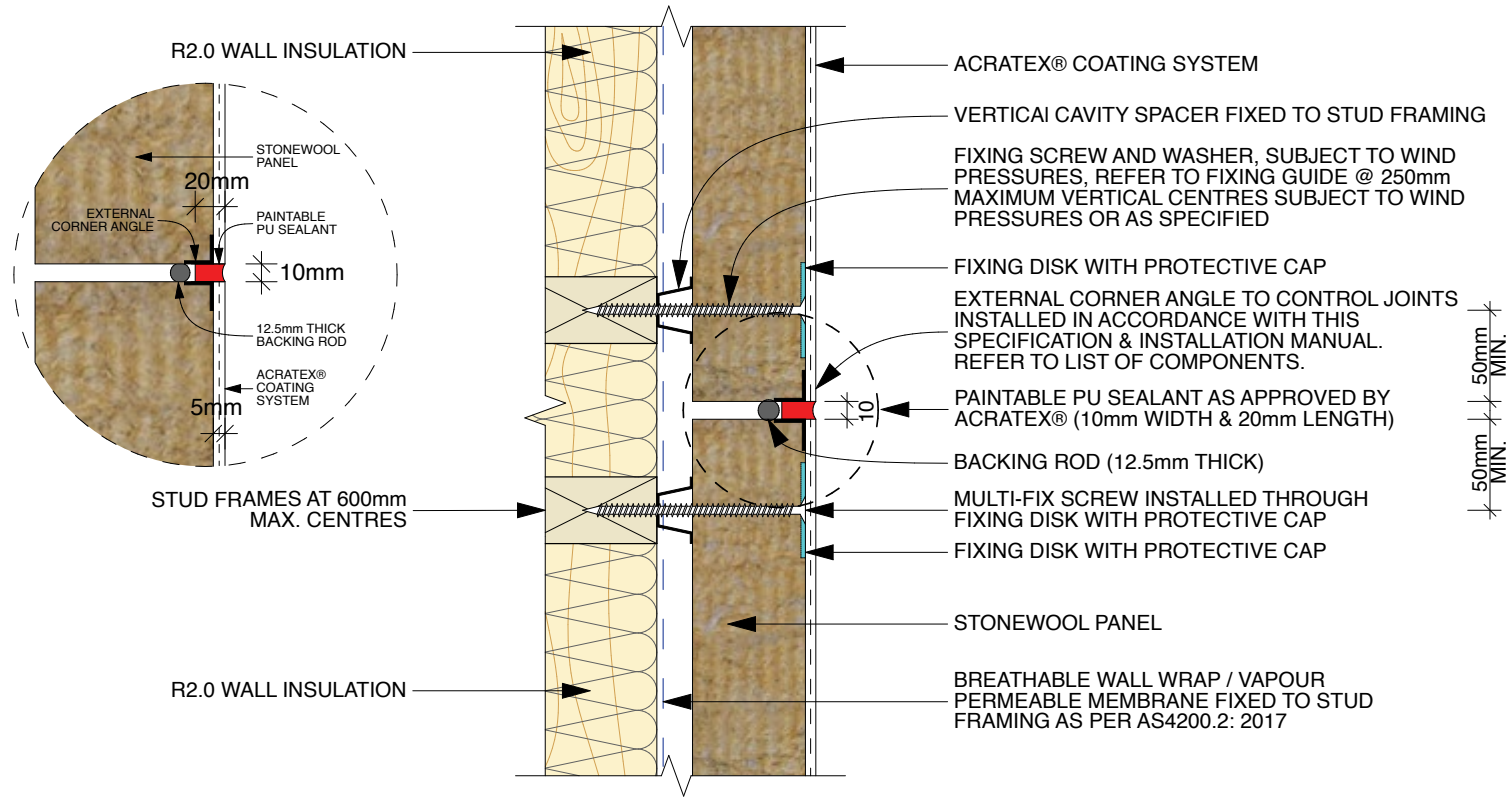
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: HORIZONTAL CONTROL JOINT DETAIL FOR USE IN A FRL WALL AND ALL BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-12b**	V8.1

VERTICAL CONTROL JOINT DETAIL FOR USE IN NON FRL WALL



PLAN SECTION VIEW

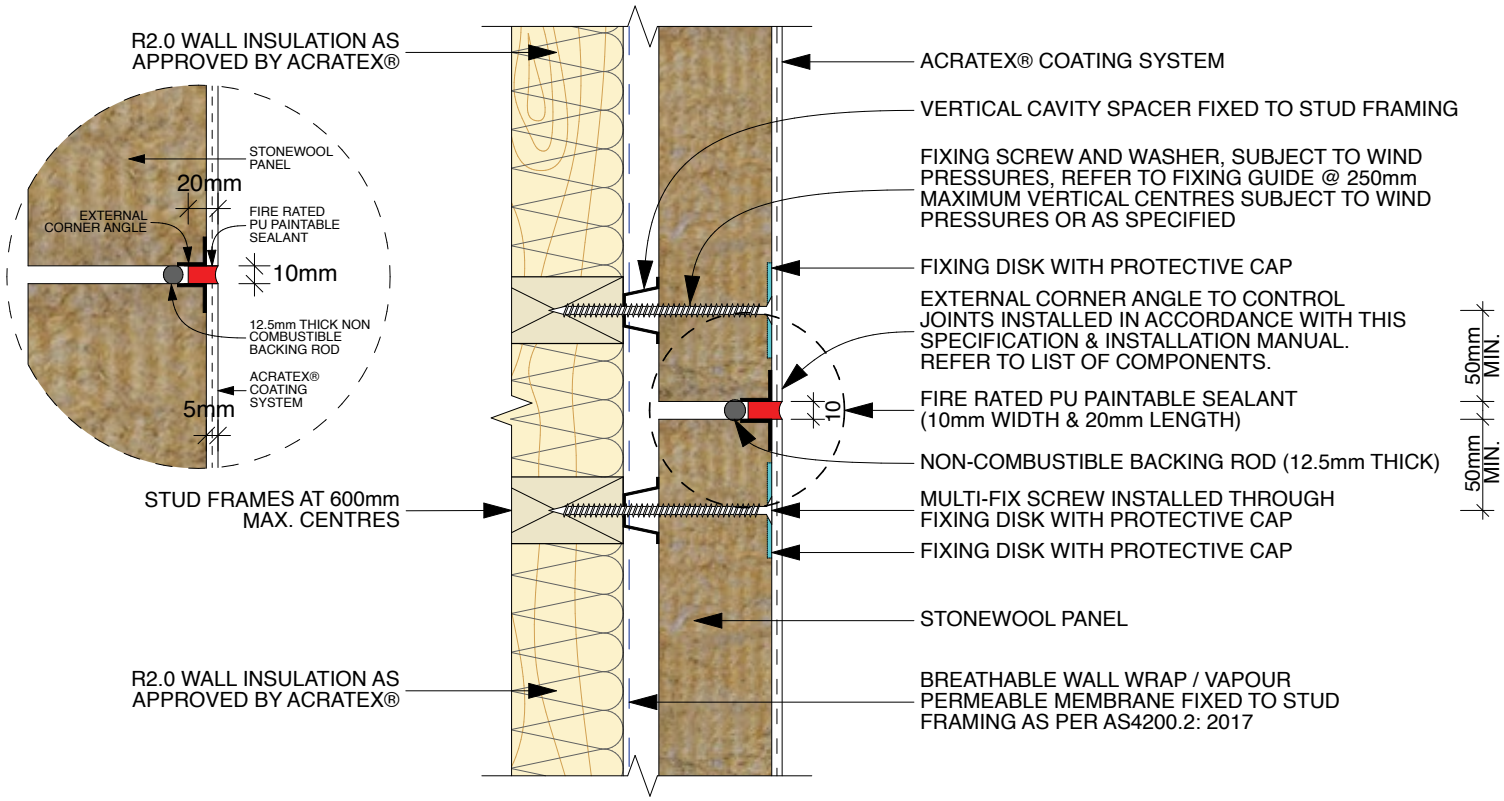
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
VERTICAL CONTROL JOINT DETAIL FOR USE IN NON FRL WALL

Scale	Drawing Number	Issue
N.T.S	**SW-13a**	V8.1

VERTICAL CONTROL JOINT DETAIL FOR USE IN A FRL WALL AND ALL BAL REGIONS



PLAN SECTION VIEW

Notes: The StoneShield Cladding System is CodeMark certified. For compliance and warranty purposes installation of panels & system components must be carried out strictly according to the instructions and specifications provided in the installation manual. Drawings and related notes, are illustrative of the typical StoneShield Cladding System installation details and are provided as a guide for construction industry professionals. The components and details have been tested and are required as part of the CodeMark compliance. The drawings should be viewed in the context of the complete cladding or build and installation design and individual product data sheets and instructions. These details may not be modified without approval from Dulux Acratex. Drawings are not to scale and are not intended as engineering details or construction drawings. Do not scan or copy printed drawings. Refer to acratex.com.au for current drawings.

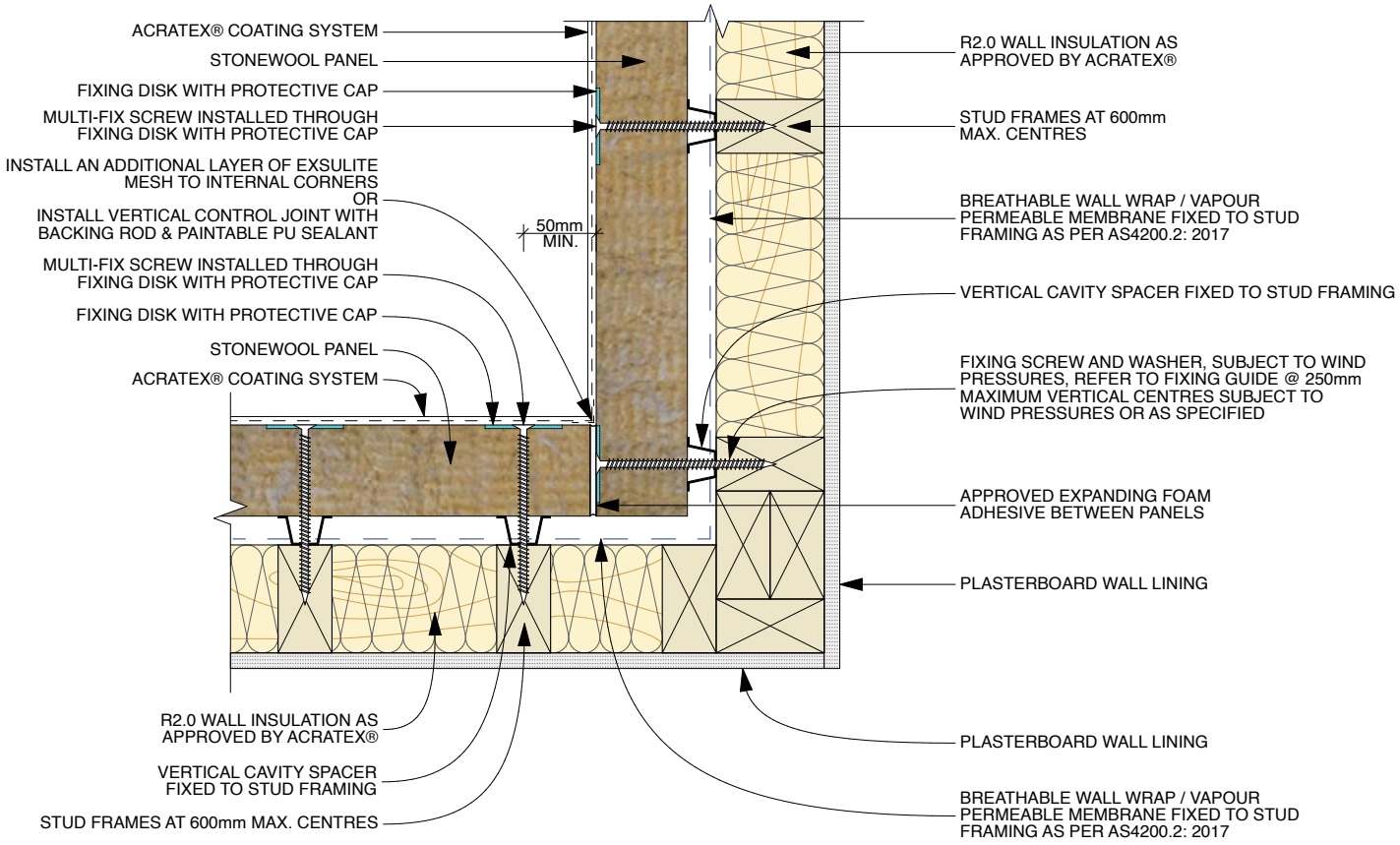
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: VERTICAL CONTROL JOINT DETAIL FOR USE IN A FRL WALL AND ALL BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-13b**	V8.1

INTERNAL CORNER JUNCTION



PLAN SECTION VIEW

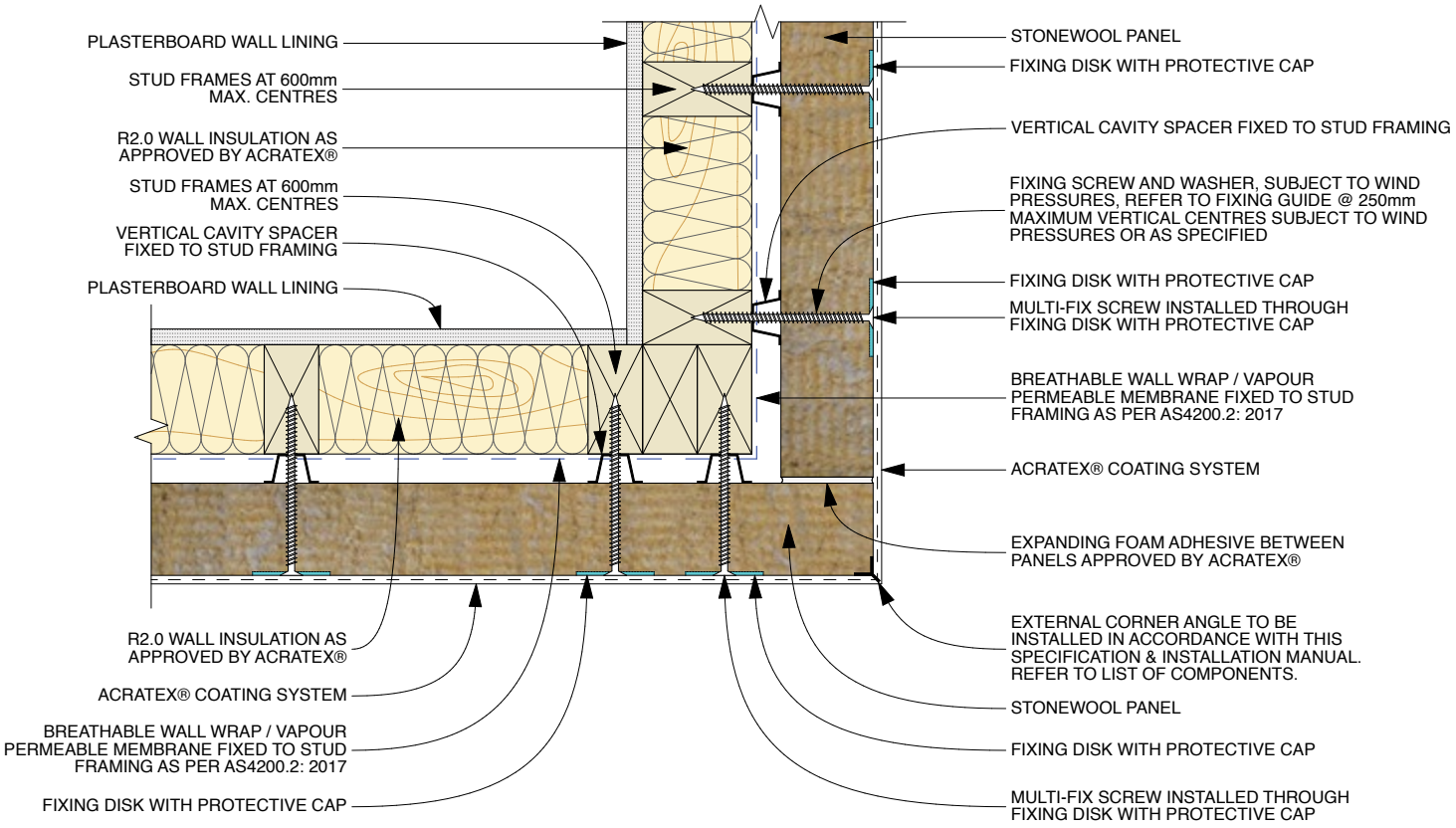
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
INTERNAL CORNER JUNCTION

Scale	Drawing Number	Issue
N.T.S	**SW-14**	V8.1

EXTERNAL CORNER JUNCTION



PLAN SECTION VIEW

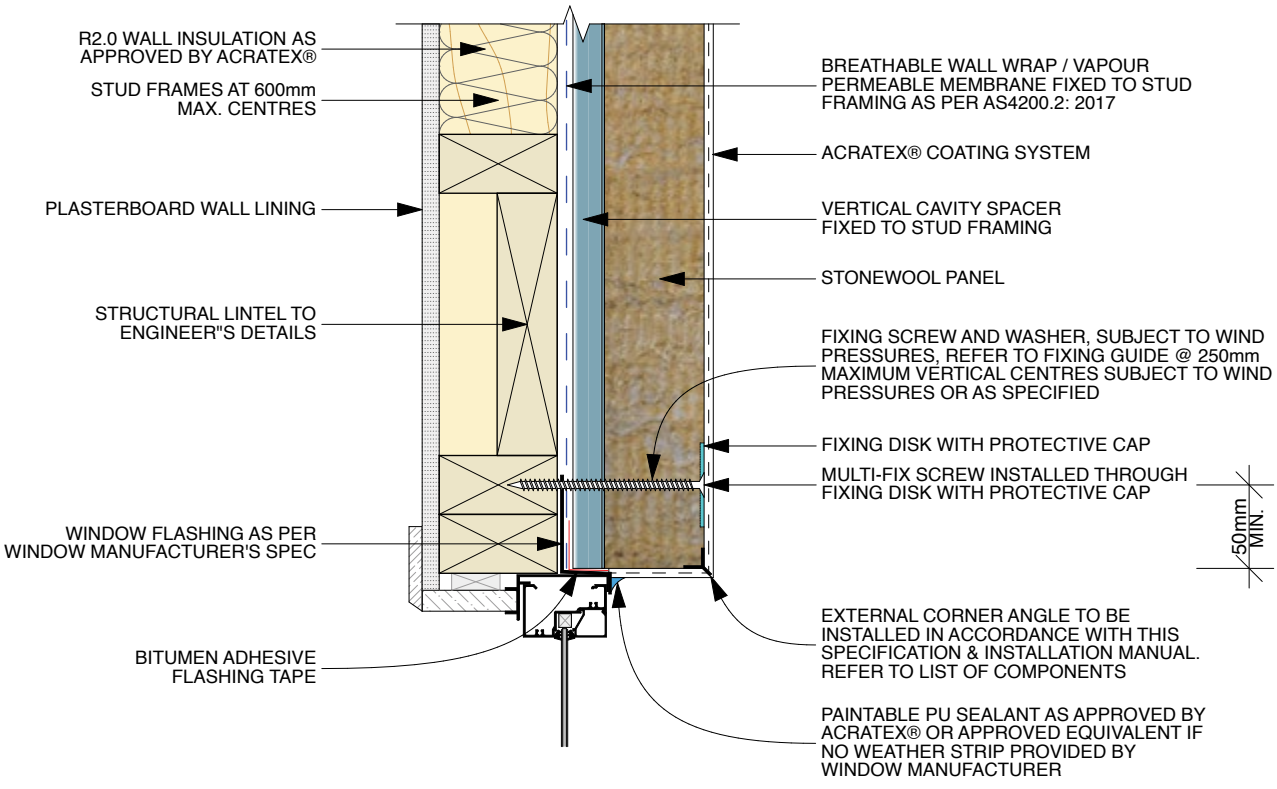
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

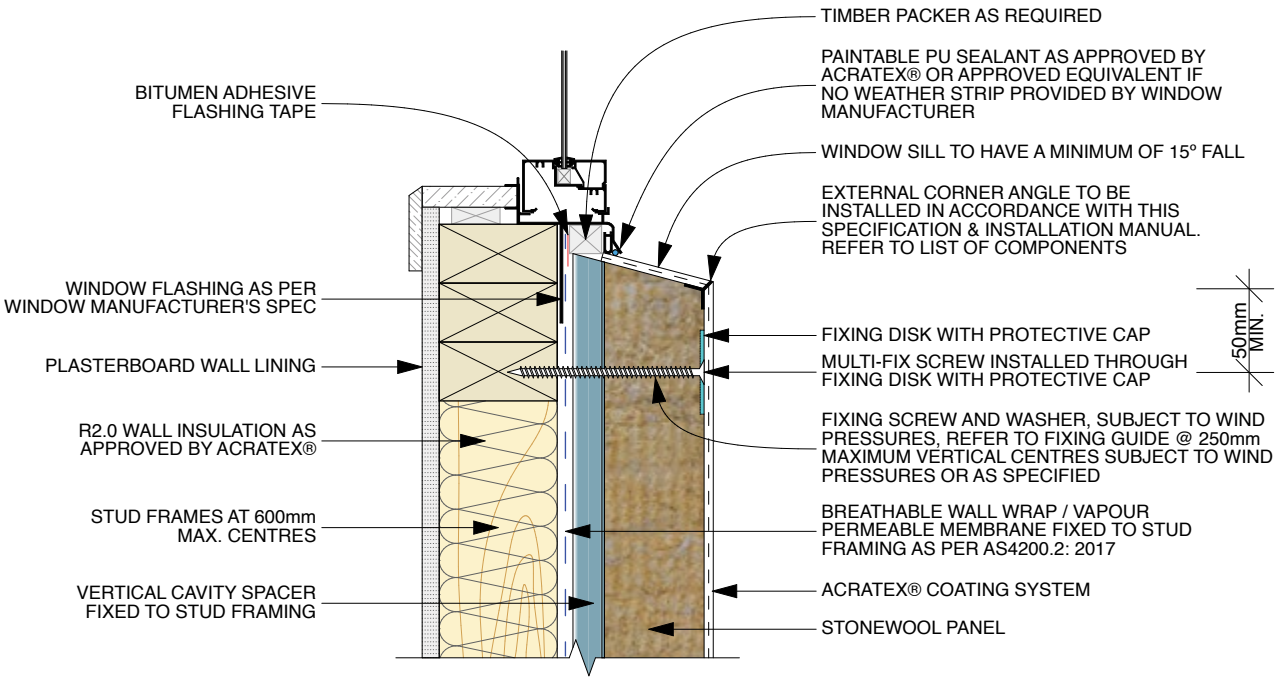
STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: EXTERNAL CORNER JUNCTION

Scale	Drawing Number	Issue
N.T.S	**SW-15**	V8.1

WINDOW HEAD AND SILL





ELEVATION SECTION VIEW

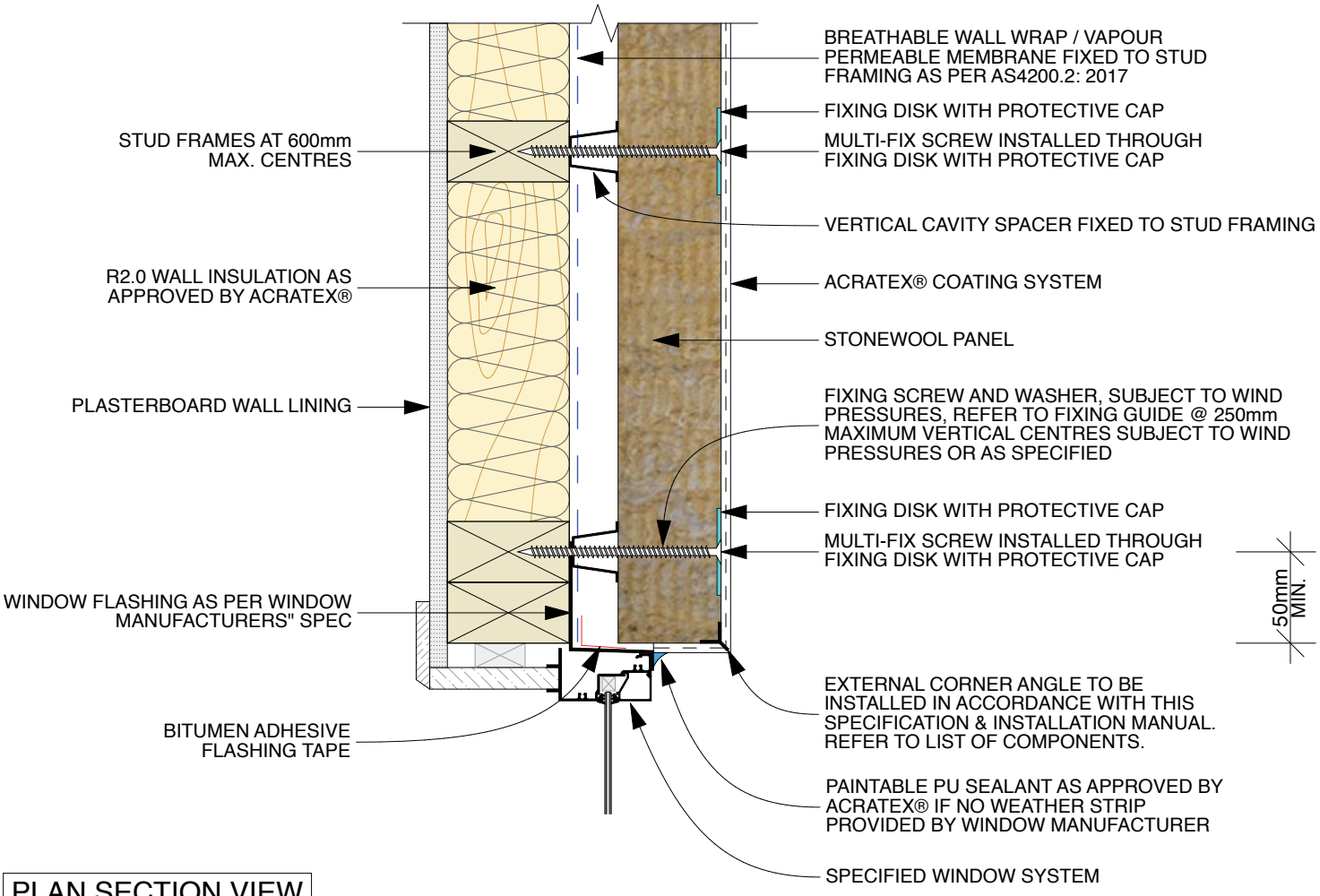
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
WINDOW HEAD AND SILL

Scale	Drawing Number	Issue
N.T.S	**SW-16**	V8.1

WINDOW JAMB



PLAN SECTION VIEW

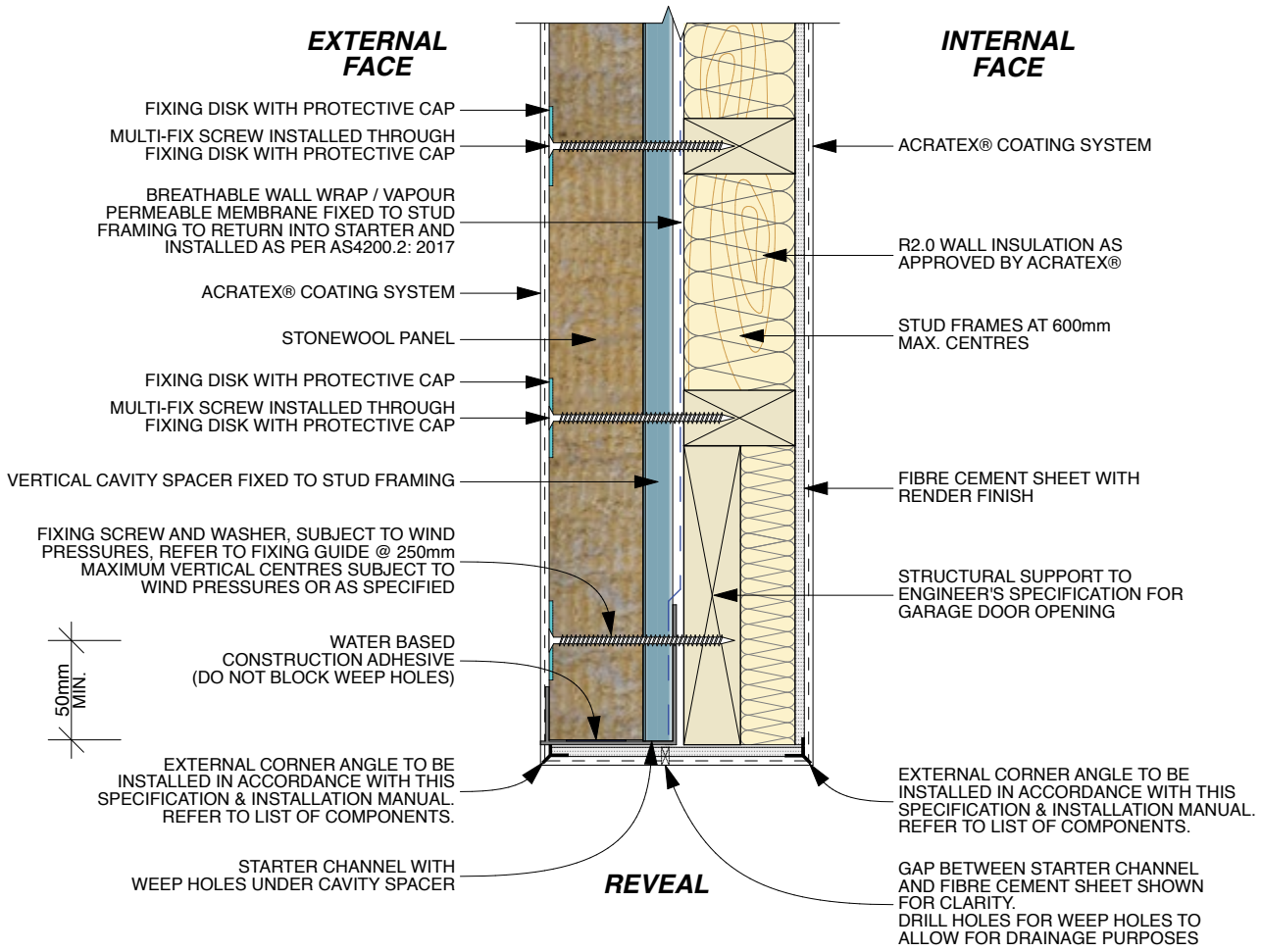
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: WINDOW JAMB

Scale	Drawing Number	Issue
N.T.S	**SW-17**	V8.1

GARAGE OPENING REVEAL DETAIL



ELEVATION SECTION VIEW

NOTE:
REINFORCING MESH SHOULD EXTEND TO COVER EXTERNAL ANGLES IN ALL CASES.

NOTE:
DO NOT INSTALL EXTERNAL CLADDING IN AREAS WHERE IT MAY REMAIN IN CONTACT WITH STANDING WATER OR DEBRIS.
DO NOT BACK FILL.

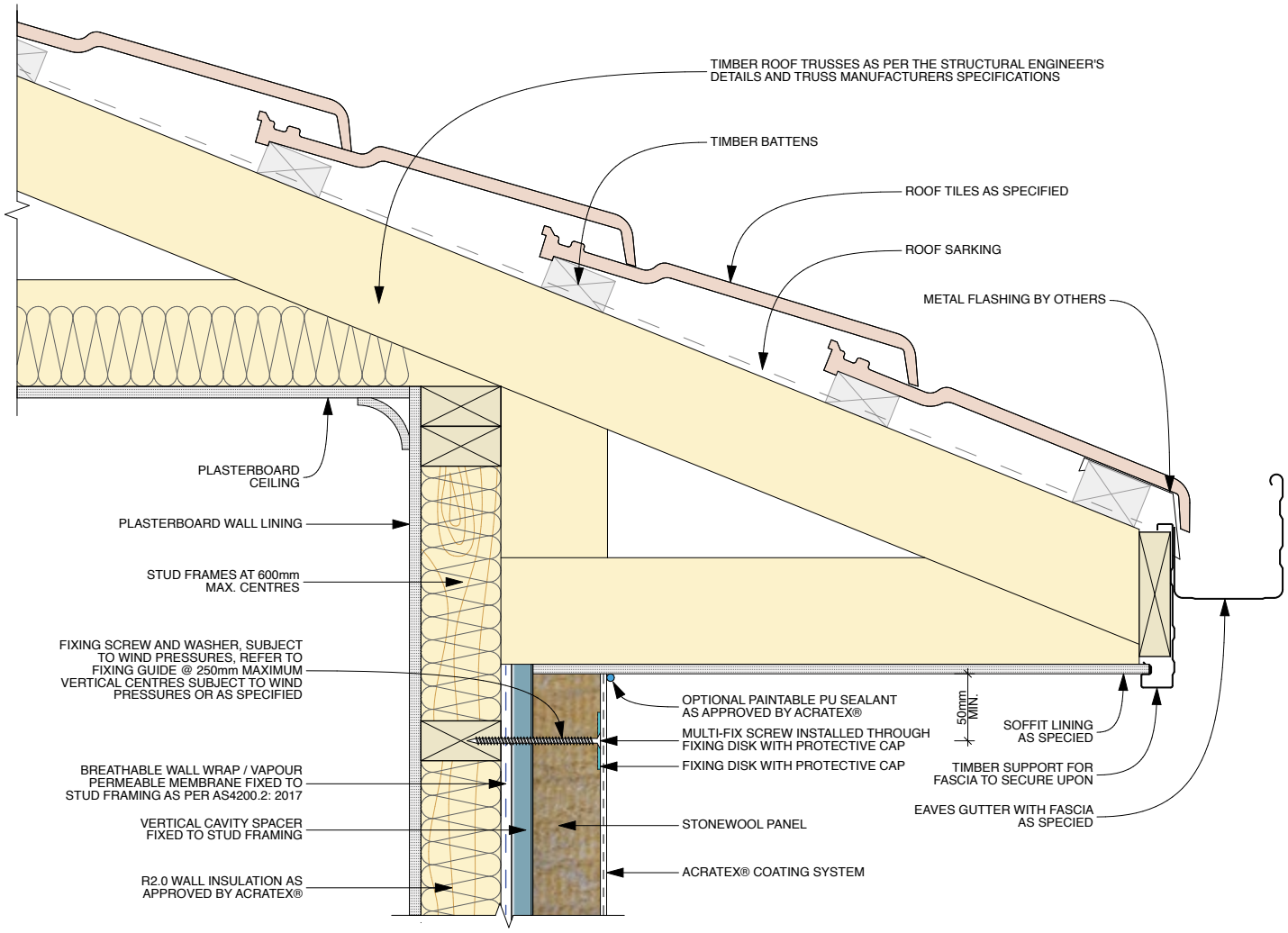
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
GARAGE OPENING REVEAL DETAIL

Scale	Drawing Number	Issue
N.T.S	**SW-18**	V8.1

TILED ROOF TRUSS EAVES



ELEVATION SECTION VIEW

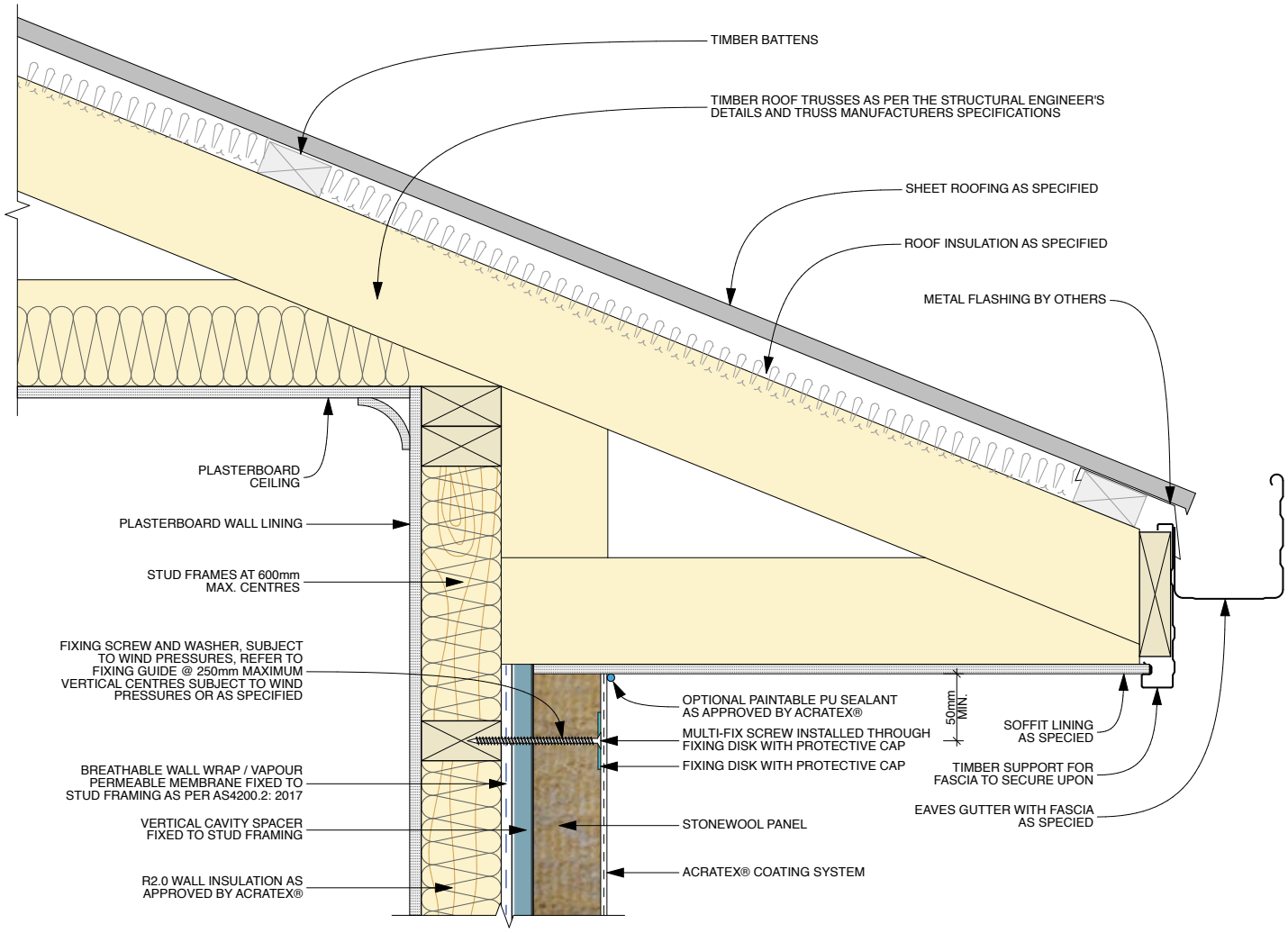
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: TILED ROOF TRUSS EAVES

Scale	Drawing Number	Issue
N.T.S	**SW-19a**	V8.1

SHEET ROOF TRUSS EAVES



ELEVATION SECTION VIEW

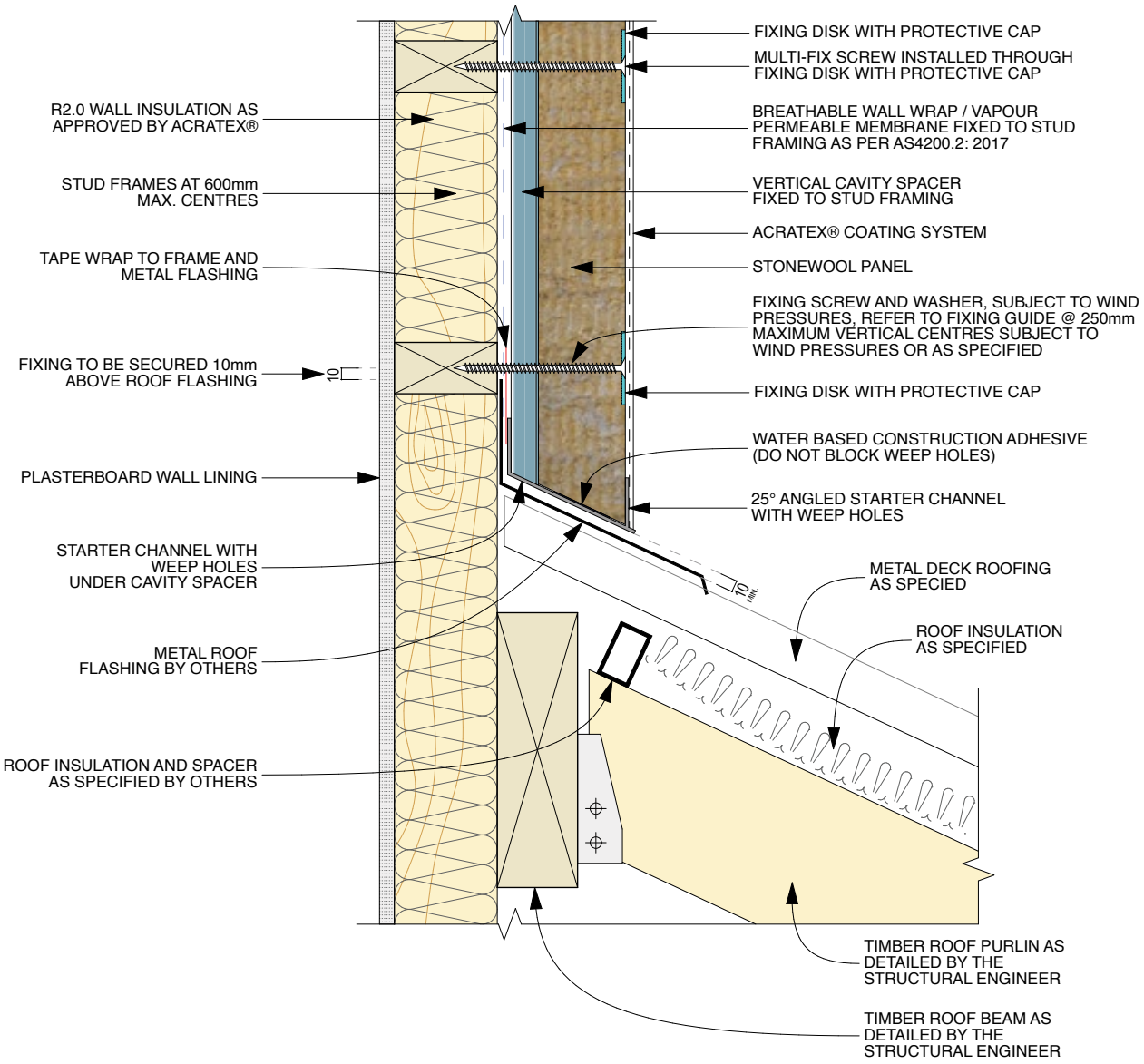
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
SHEET ROOF TRUSS EAVES

Scale	Drawing Number	Issue
N.T.S	**SW-19b**	V8.1

25 DEGREE ANGLED STARTER CHANNEL FLASHING DETAIL - OVER ROOF



ELEVATION SECTION VIEW

NOTE:

SPACE BETWEEN STUD FRAMING AND CAVITY SPACER IS SHOWN GREATER FOR CLARITY

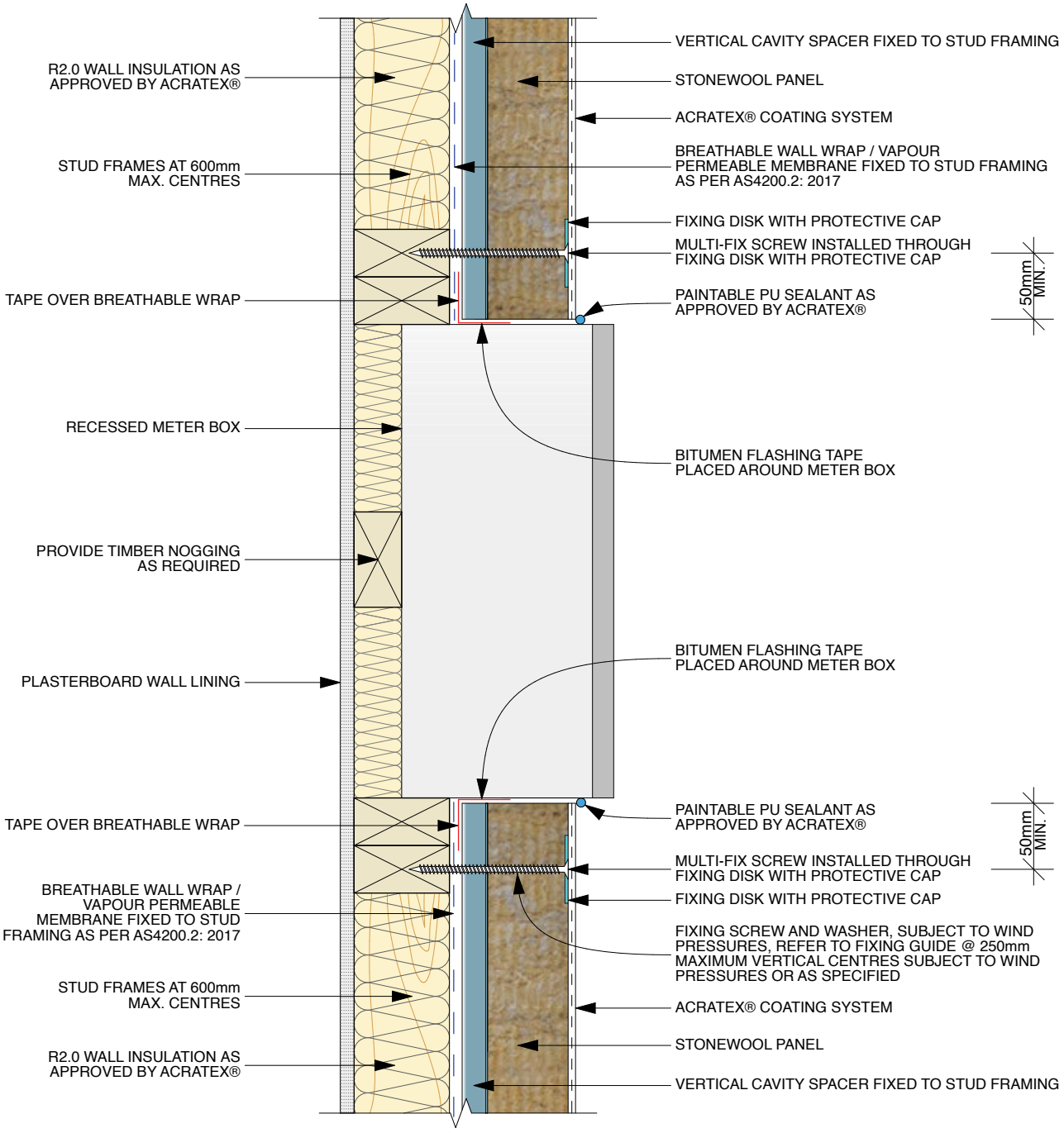
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: 25 DEGREE ANGLED STARTER CHANNEL FLASHING DETAIL - OVER ROOF

Scale	Drawing Number	Issue
N.T.S	**SW-20**	V8.1

METER BOX PENETRATION



ELEVATION SECTION VIEW

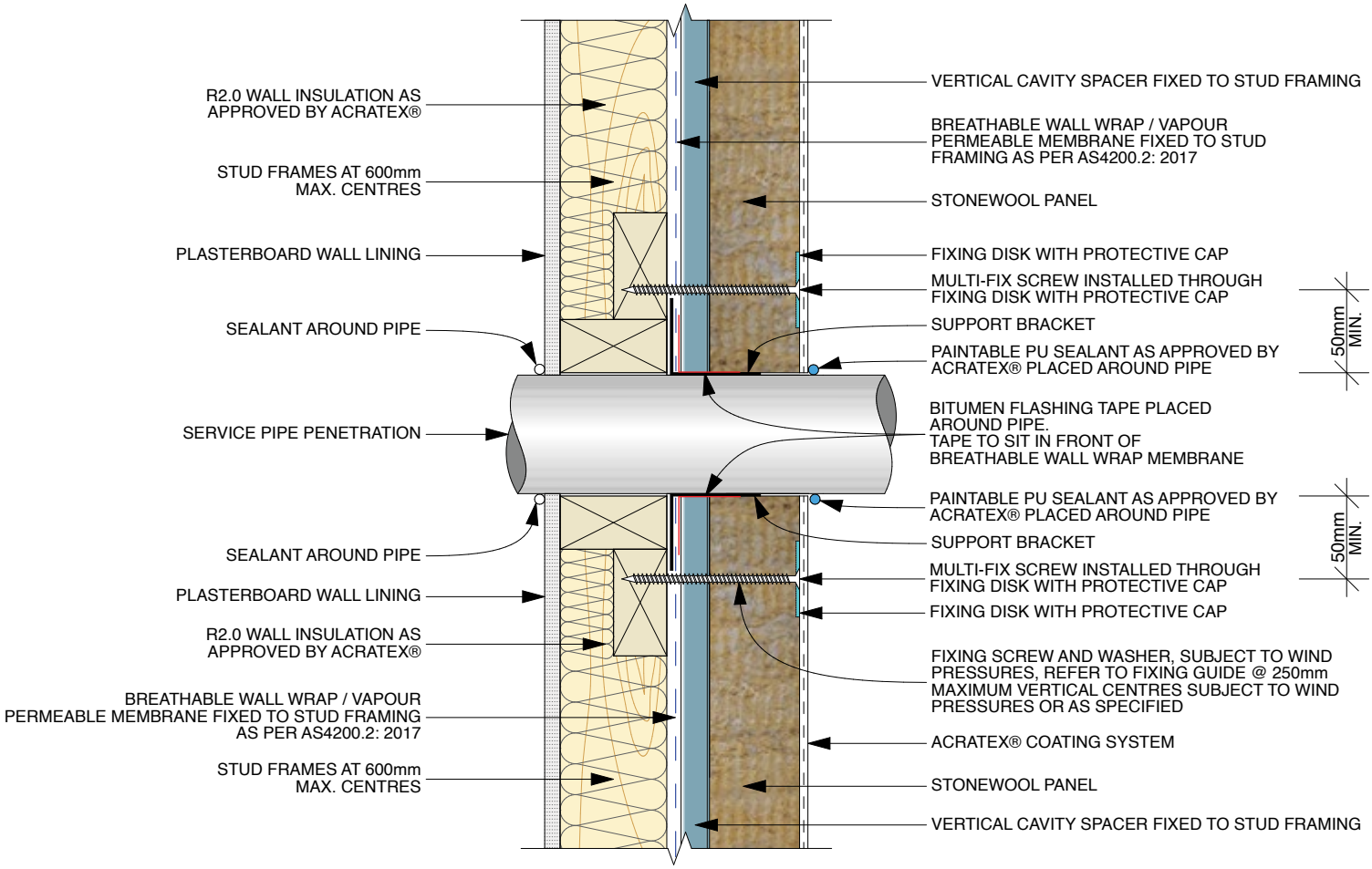
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
METER BOX PENETRATION

Scale	Drawing Number	Issue
N.T.S	**SW-21**	V8.1

WALL PENETRATION



ELEVATION SECTION VIEW

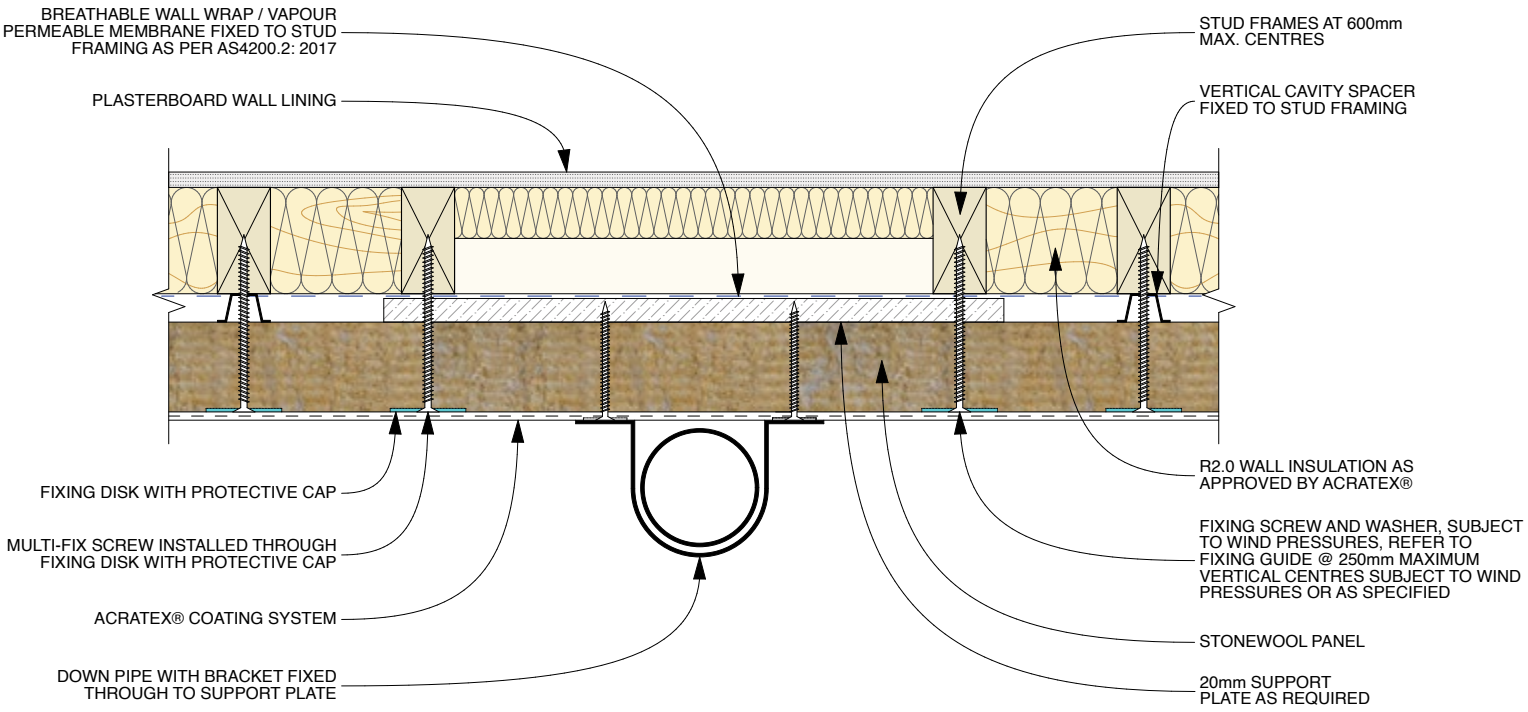
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
WALL PENETRATION

Scale	Drawing Number	Issue
N.T.S	**SW-22**	V8.1

DOWN PIPE FIXING



PLAN SECTION VIEW

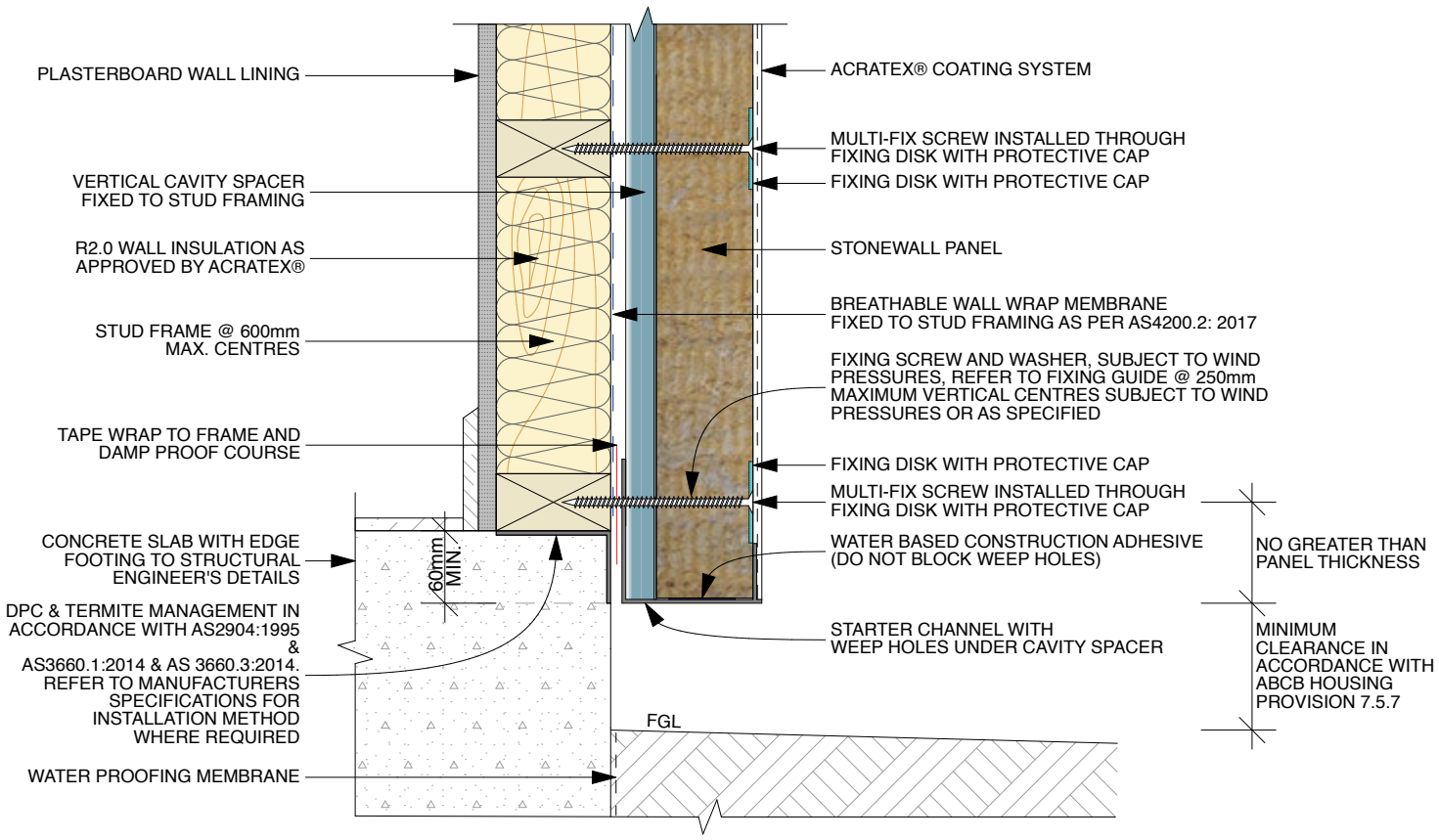
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: DOWN PIPE FIXING

Scale	Drawing Number	Issue
N.T.S	**SW-23**	V8.1

SLAB OVERHANG FOR NON BAL REGIONS



ELEVATION SECTION VIEW

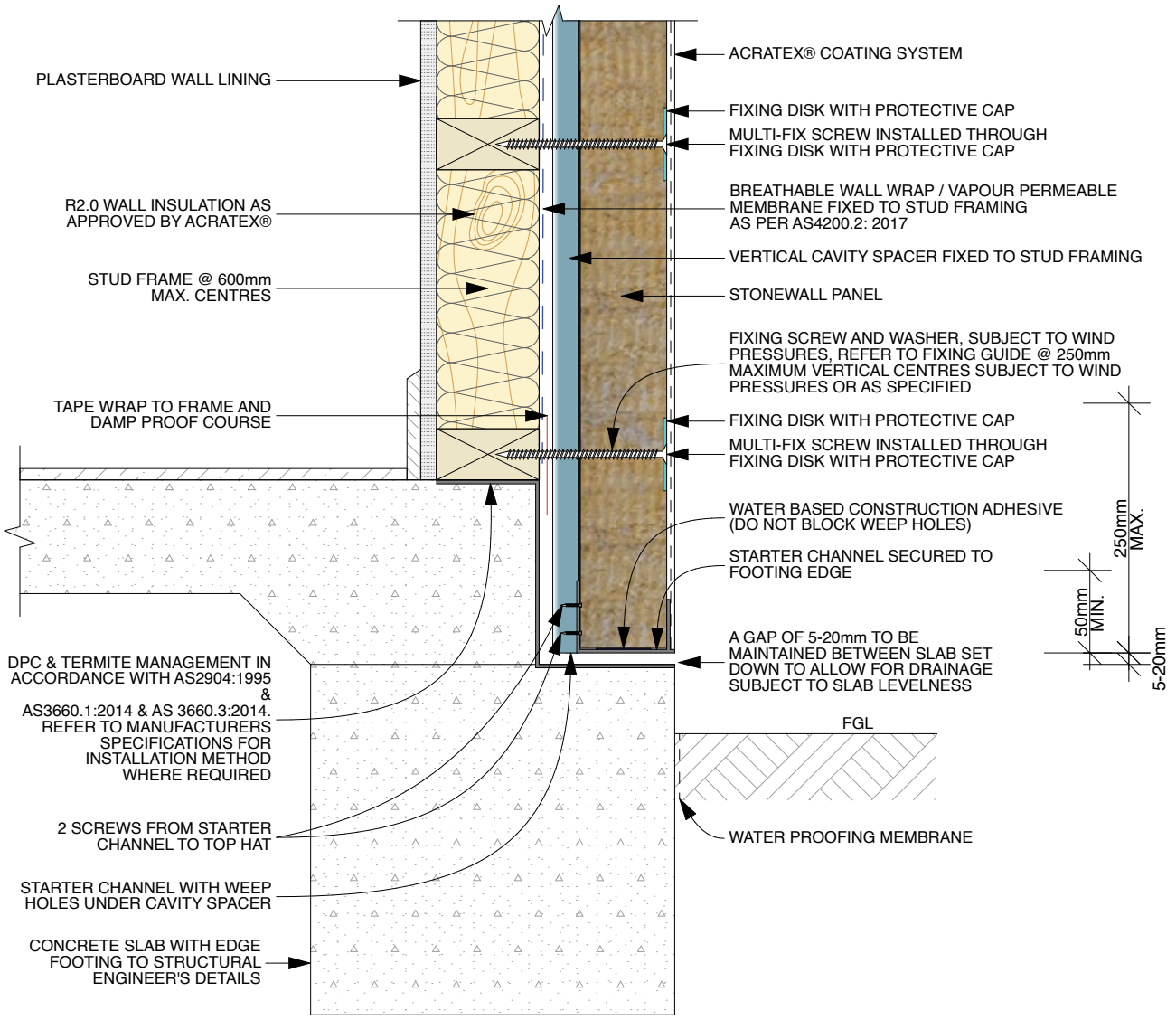
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: SLAB OVERHANG FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-24**	V8.1

JUNCTION TO SHALLOW CONCRETE EDGE BEAM FOR NON BAL REGIONS



ELEVATION SECTION VIEW

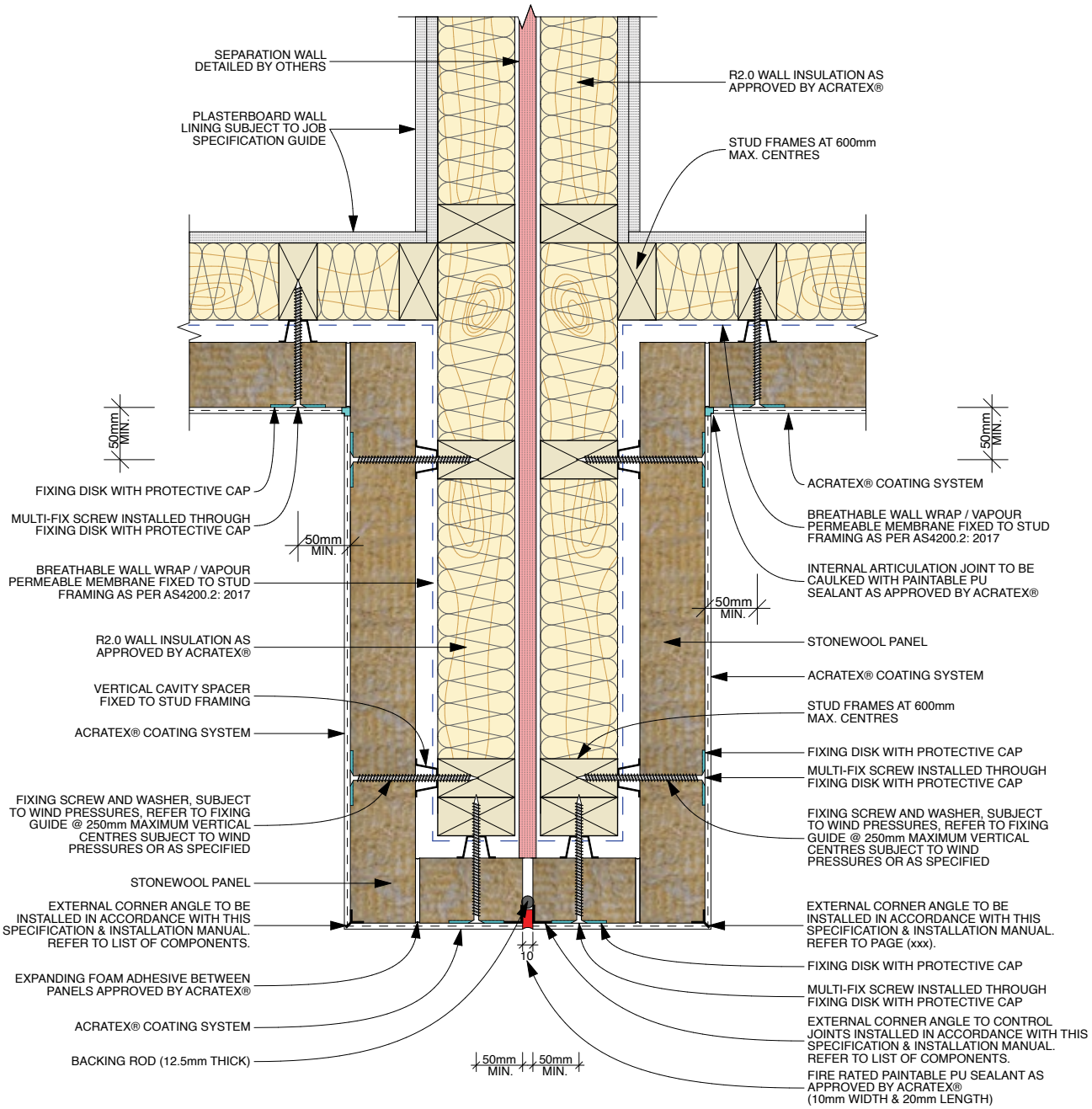
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: JUNCTION TO SHALLOW CONCRETE EDGE BEAM FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**SW-25**	V8.1

SEPARATION WALL PROJECTION DETAIL WITH VERTICAL CONTROL JOINT (GUIDE ONLY)



PLAN SECTION VIEW

NOTE:
The ability of a particular combustible cladding system for use on an external non-FRL wall adjacent to a Separation Wall, to satisfy the relevant fire performance requirements of BCA Volume 1 for Class 2, 3, and 4 buildings, and or BCA Volume 2 for Class 1a buildings, is to be determined & approved by the relevant building surveyor. The construction drawing detail as shown are provided as a guide only and is up to the relevant building surveyor to provide sign off once satisfied that it conforms to the requirements of the job on a case-by-case basis as part of the overall building approval process prior to installation commencing.

The BCA criteria allow for a non-FRL external wall (the external wall is not the separation wall, this particular case is where the external wall that abuts the internal separation wall does not require an FRL)(when the wall is at 90 degrees or more to the allotment boundary).

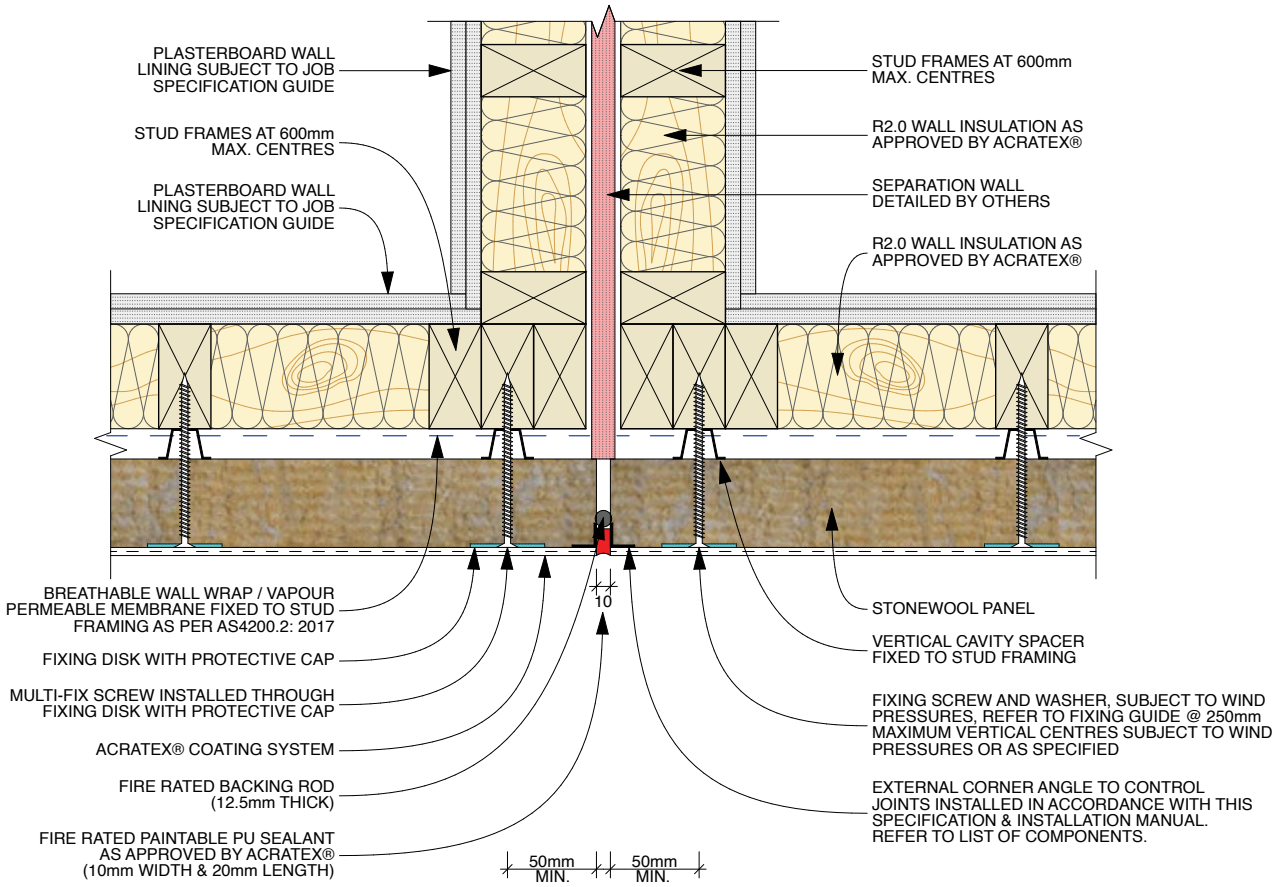
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
SEPARATION WALL PROJECTION DETAIL WITH VERTICAL CONTROL JOINT (GUIDE ONLY)

Scale	Drawing Number	Issue
N.T.S	**SW-26**	V8.1

SEPARATION WALL DETAIL WITH VERTICAL CONTROL JOINT (GUIDE ONLY)



PLAN SECTION VIEW

NOTE:
The ability of a particular combustible cladding system for use on an external non-FRL wall adjacent to a Separation Wall, to satisfy the relevant fire performance requirements of BCA Volume 1 for Class 2, 3, and 4 buildings, and or BCA Volume 2 for Class 1a buildings, is to be determined & approved by the relevant building surveyor. The construction drawing detail as shown are provided as a guide only and is up to the relevant building surveyor to provide sign off once satisfied that it conforms to the requirements of the job on a case-by-case basis as part of the overall building approval process prior to installation commencing.

The BCA criteria allow for a non-FRL external wall (the external wall is not the separation wall, this particular case is where the external wall that abuts the internal separation wall does not require an FRL)(when the wall is at 90 degrees or more to the allotment boundary).

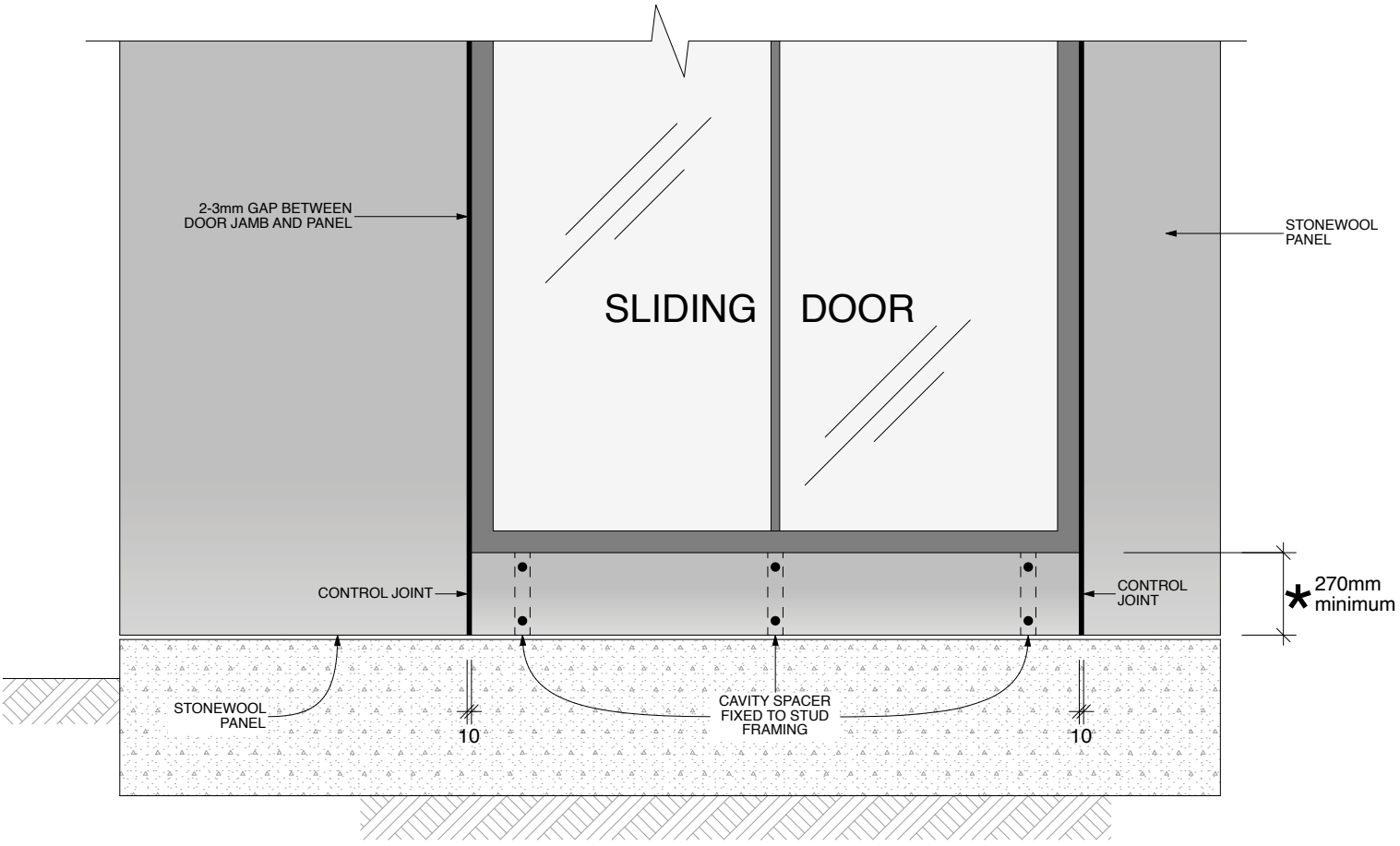
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: SEPARATION WALL DETAIL WITH VERTICAL CONTROL JOINT (GUIDE ONLY)

Scale	Drawing Number	Issue
N.T.S	**SW-27**	V8.1

SLIDING DOOR SILL FOR STONEWOOL @ MINIMUM 270mm



NOTE:

* DRAWING INDICATES THE MINIMUM HEIGHT FOR A STONEWOOL PANEL THAT CAN BE INSTALLED. ANY OPENINGS THAT IS UNDER 270mm IN HEIGHT WILL REQUIRE AN ALTERNATIVE MATERIAL.

TYPICAL ELEVATION VIEW

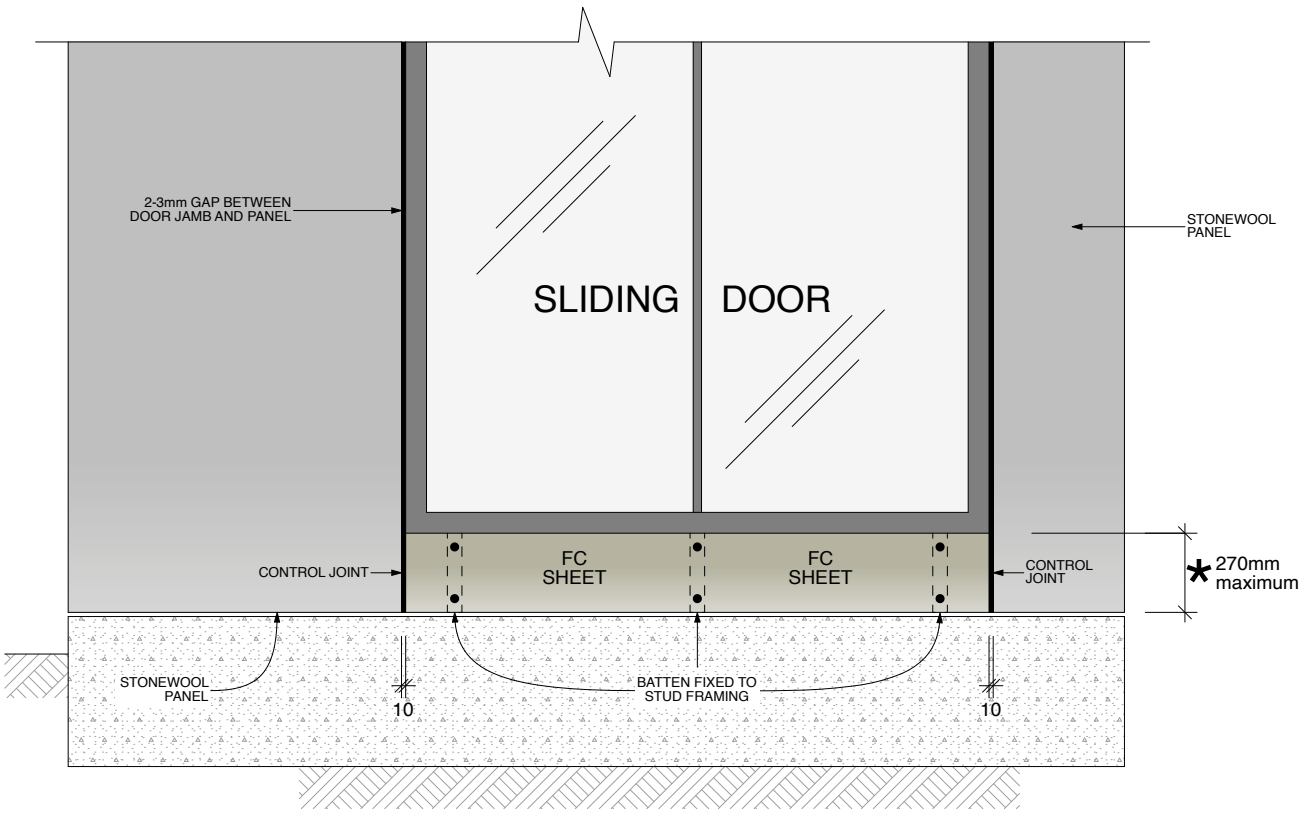
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
SLIDING DOOR SILL FOR STONEWOOL @ MINIMUM 270mm

Scale	Drawing Number	Issue
N.T.S	**SW-28a**	V8.1

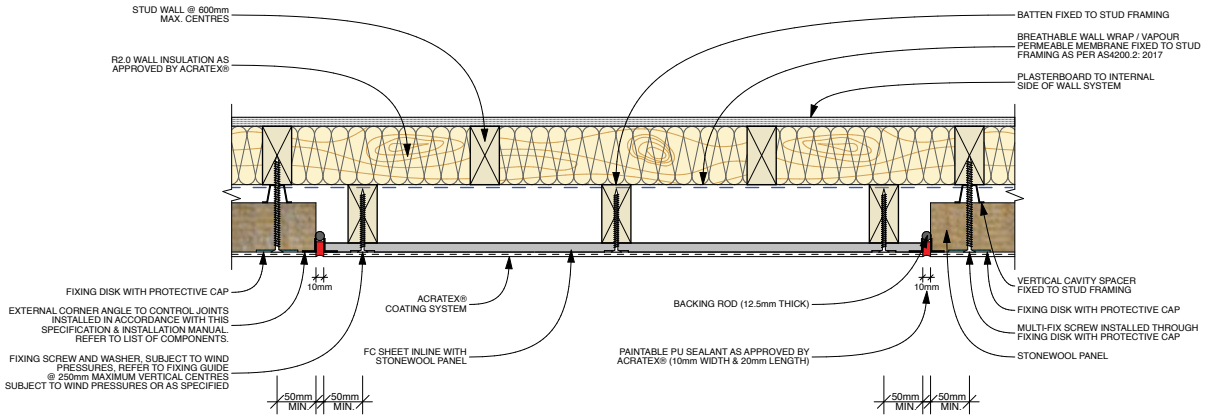
SLIDING DOOR SILL FOR STONEWOOL @ MAXIMUM 270mm



NOTE:

* DRAWING INDICATES THE MINIMUM HEIGHT FOR A STONEWOOL PANEL THAT CAN BE INSTALLED. ANY OPENINGS THAT IS UNDER 270mm IN HEIGHT WILL REQUIRE AN ALTERNATIVE MATERIAL.

TYPICAL ELEVATION VIEW



PLAN SECTION VIEW

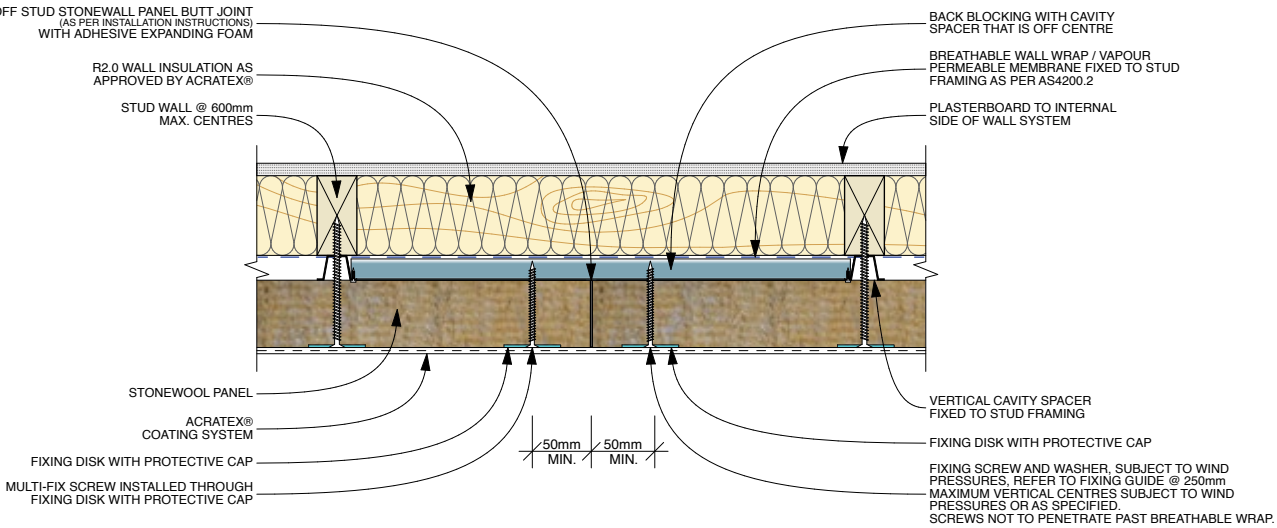
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

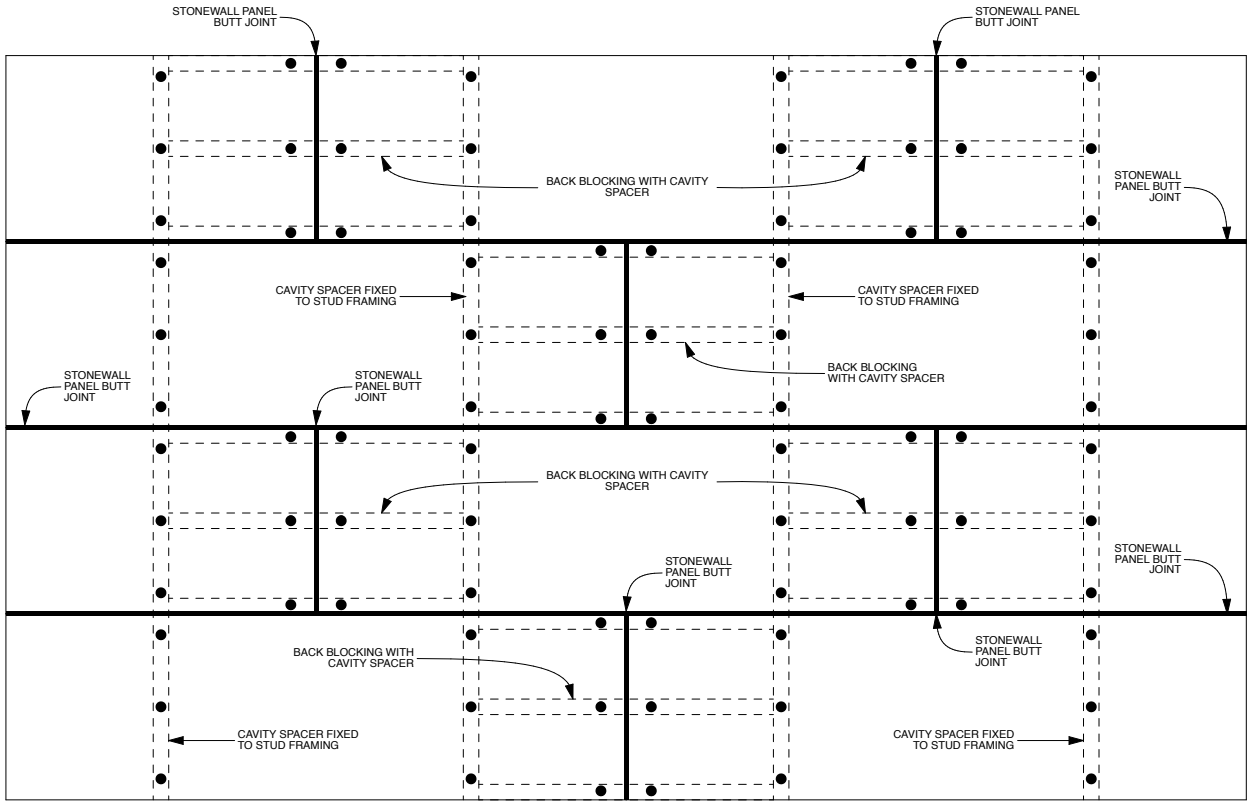
Drawing Name
SLIDING DOOR SILL FOR STONEWOOL @ MAXIMUM 270mm

Scale	Drawing Number	Issue
N.T.S	**SW-28b**	V8.1

BACK BLOCKING & OFF STUD PANEL BUTT JOINING DETAIL



PLAN SECTION VIEW



ELEVATION VIEW

Notes: The StoneShield Cladding System is CodeMark certified. For compliance and warranty purposes installation of panels & system components must be carried out strictly according to the instructions and specifications provided in the installation manual. Drawings and related notes, are illustrative of the typical StoneShield Cladding System installation details and are provided as a guide for construction industry professionals. The components and details have been tested and are required as part of the CodeMark compliance. The drawings should be viewed in the context of the complete cladding or build and installation design and individual product data sheets and instructions. These details may not be modified without approval from Dulux Acratex. Drawings are not to scale and are not intended as engineering details or construction drawings. Do not scan or copy printed drawings. Refer to acratex.com.au for current drawings.

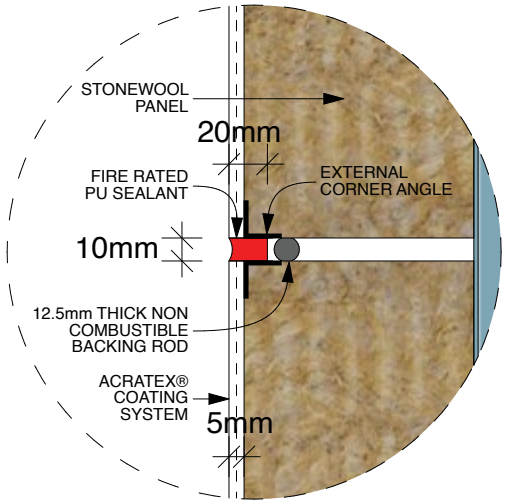
Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

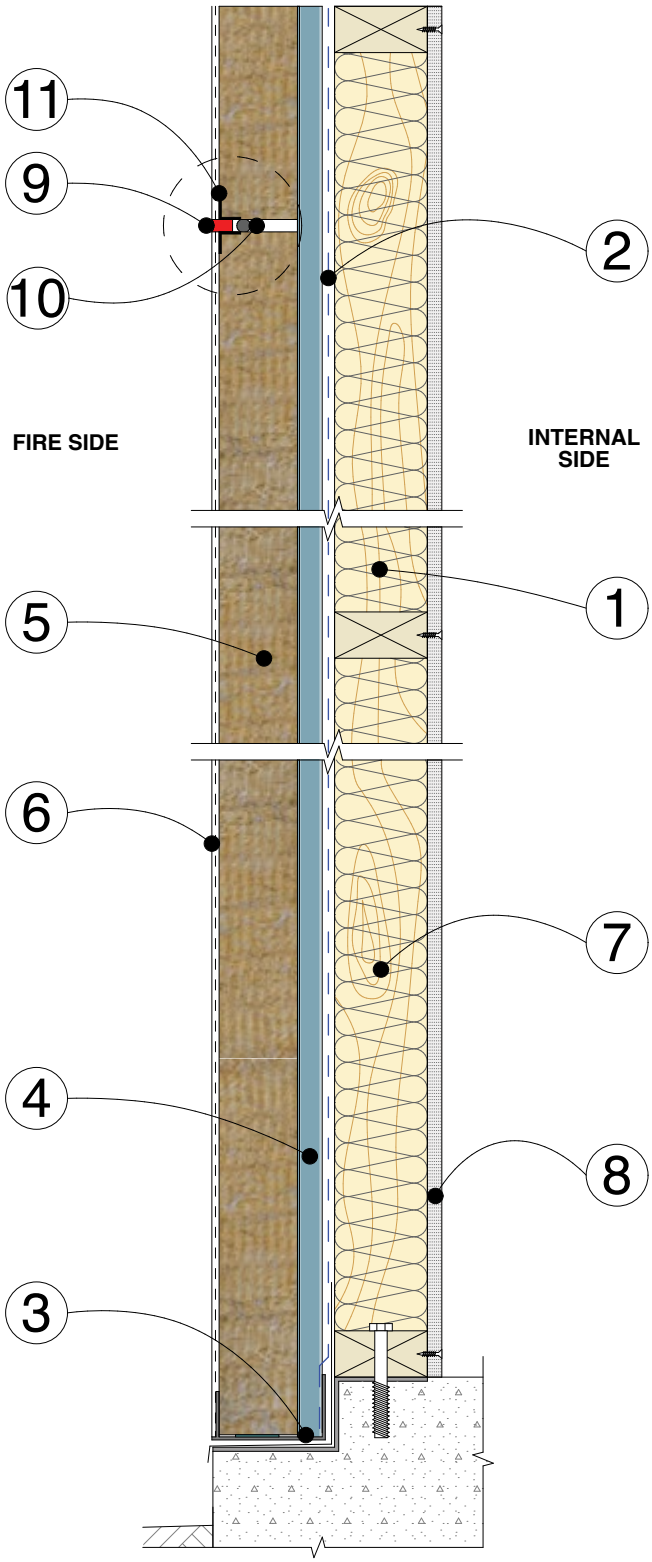
STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name
BACK BLOCKING & OFF STUD PANEL BUTT JOINING DETAIL

Scale	Drawing Number	Issue
N.T.S	**SW-29**	V8.1

HORIZONTAL CONTROL JOINT





1. TIMBER FRAME

2. SARKING / WALL WRAP AS PER AS4200.2

3. STARTER CHANNEL WITH WEEP HOLE

4. CAVITY BATTEN

5. STONEWOOL EXTERNAL WALL CLADDING

6. ACRATEX® EXTERNAL WALL COATING

7. R2.0 WALL INSULATION AS APPROVED BY ACRATEX®

8. INTERNAL PLASTERBOARD

9. FIRE RATED PU PAINTABLE SEALANT (20mm LENGTH) TO CONTROL JOINT

10. NON-COMBUSTIBLE BACKING ROD (12.5mmTHICK) TO CONTROL JOINT

11. EXTERNAL CORNER ANGLE TO CONTROL JOINTS INSTALLED IN ACCORDANCE WITH THIS SPECIFICATION & INSTALLATION MANUAL.

ELEVATION SECTION VIEW

Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: HORIZONTAL CONTROL JOINT

Scale	Drawing Number	Issue
N.T.S	**SW-30**	V8.1

VERTICAL CONTROL JOINT

1. TIMBER FRAME

2. SARKING / WALL WRAP AS PER AS4200.2

3. STARTER CHANNEL WITH WEEP HOLE

4. CAVITY BATTEN

5. STONEWOOL EXTERNAL WALL CLADDING

6. ACRATEX® EXTERNAL WALL COATING

7. R2.0 WALL INSULATION AS APPROVED BY ACRATEX®

8. INTERNAL PLASTERBOARD

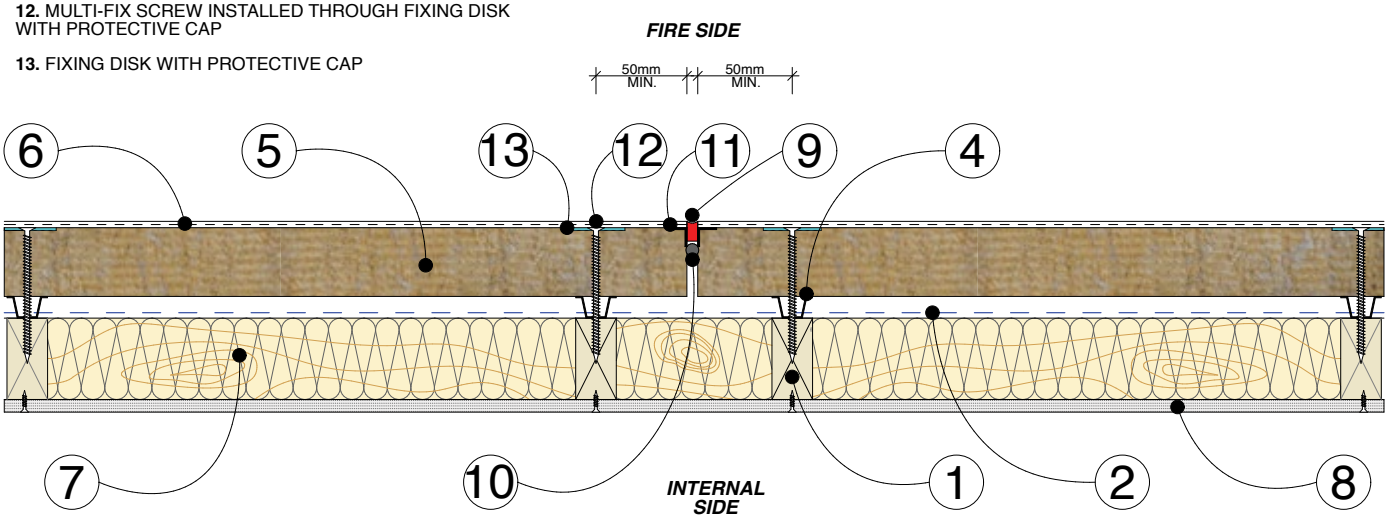
9. FIRE RATED PU PAINTABLE SEALANT (20mm LENGTH) TO CONTROL JOINT

10. NON-COMBUSTIBLE BACKING ROD (12.5mmTHICK) TO CONTROL JOINT

11. EXTERNAL CORNER ANGLE TO CONTROL JOINTS INSTALLED IN ACCORDANCE WITH THIS SPECIFICATION & INSTALLATION MANUAL.

12. MULTI-FIX SCREW INSTALLED THROUGH FIXING DISK WITH PROTECTIVE CAP

13. FIXING DISK WITH PROTECTIVE CAP



PLAN SECTION VIEW

Revisions		
Issue	Description	Date
V8.1	Final Issue	4/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

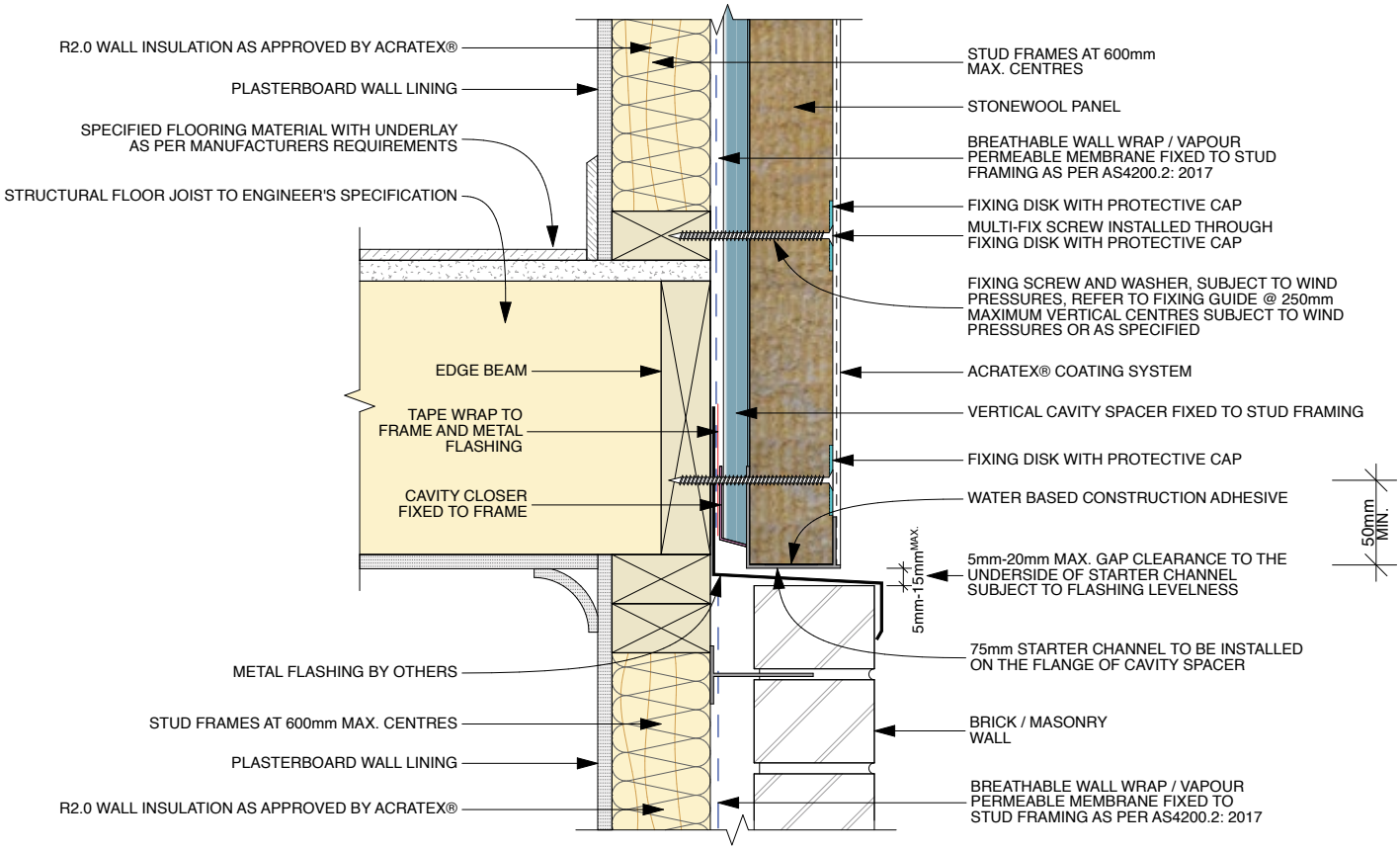
Drawing Name: VERTICAL CONTROL JOINT

Scale	Drawing Number	Issue
N.T.S	**SW-31**	V8.1

AUXILIARY DETAIL DRAWINGS

THE FOLLOWING DRAWINGS CAN BE CONSIDERED AS AN ALTERNATIVE WHERE THE STANDARD DRAWING DETAILS CANNOT BE USED DUE TO SITE CONDITIONS, RESTRICTIONS AND/OR BUILDING VARIATIONS WHICH DOESN'T ALLOW THE STANDARD DETAIL TO BE INSTALLED.
GOOD BUILDING PRACTICE SHOULD BE THE PROTOCOL IN ALL INSTANCES.

PANEL TO MASONRY METAL FLASHING FOR NON BAL REGIONS



ELEVATION SECTION VIEW

ALTERNATIVE RECTIFICATION DETAIL FOR MAJOR MIS-ALIGNED FRAME

NOTE:

- THIS DETAIL CAN BE CONSIDERED WHEN PACKING OUT 'MIS-ALIGNMENTS' CANNOT ACHIEVE A PLUMB LINE.
- TOLERANCE FOR MIS-ALIGNMENTS ARE AS SPECIFIED IN THE NCC, AUSTRALIAN STANDARDS AND ANY STATE OR TERRITORY LEGISLATION.
- AS A GENERAL RULE OF THUMB, FRAMES ARE DEFECTIVE IF THEY DEVIATE FROM PLANE (HORIZONTAL OR VERTICAL BOW) BY MORE THAN 4mm IN ANY 2m LENGTH OF WALL.

NOTE:

SPACE BETWEEN STUD FRAMING AND CAVITY SPACER IS SHOWN GREATER FOR CLARITY.

Revisions		
Issue	Description	Date
V8.1	Final Issue	5/6/2025

STONESHIELD™ CLADDING SYSTEM BY DULUX® ACRATEX®

Drawing Name: PANEL TO MASONRY METAL FLASHING FOR NON BAL REGIONS

Scale	Drawing Number	Issue
N.T.S	**AX-01**	V8.1

SECTION 8

APPENDIX

ROCKWOOL Facaderock DD/DD Plus

Solution for ETICS (External Thermal Insulation Composite System)

ROCKWOOL Facaderock DD / DD Plus is a dual-density stone wool slab primarily used in external thermal insulation composite systems (ETICS). Manufactured using dual-density technology, the outer surface of each slab features a distinctly higher density than the underside.

This dual-density design includes a high-density top layer that helps minimize base coat consumption during installation and a lower-density inner layer that reduces board weight and allows it to better adapt to wall irregularities. This provides a firm and robust surface for the application of fixings, while the resilient underside can accommodate unevenness in the substrate.

Facaderock DD / DD Plus contributes toward improved energy efficiency, thermal comfort, moisture control, and acoustic performance, providing increased design freedom in new construction and retrofit projects.

For more information at www.rockwool.com/anz

Fire Performance

Using Facaderock DD / DD Plus and as a continuous insulation helps you to meet non-combustibility requirements for ETICS applications.

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ROCKWOOL Facaderock DD/DD Plus

Technical Parameters

Product	Facaderock DD	Facaderock DD Plus	Test Standard
Reaction to Fire	Non-combustible Euroclass A1	Non-combustible Euroclass A1	AS 1530.1 EN 13501-1
Fire Hazard Properties	Ignitibility: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0-1	Ignitibility: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0-1	AS 1530.3
Melting Point	1000°C	1000°C	ASTM E794
Thermal Conductivity at mean 23°C	0.040 W/mK	0.040 W/mK	AS/NZS 4859.1
Water Absorption (partial immersion) - short	0.5 kg/m^2	0.5 kg/m^2	BS EN ISO 29767
Water Repellent	99 %	99 %	GB/T 10299
Compressive Strength @ 10% deformation	40 kPA	60 kPA	EN 826
Tensile Strength (perpendicular to the surface)	≥ 10 kPA	≥ 15 kPA	EN 1607

Application

ROCKWOOL Facaderock DD / DD Plus is a non-combustible stone wool insulation boards engineered to be used in mechanically-fastened exterior thermal insulation composite systems (ETICS).

Compliance with the Australia NCC

These range of ROCKWOOL products when properly specified and installed, demonstrate compliance with the following requirements:

- **Thermal**
  Complies with AS/NZS 4859.1 and meets the requirements of NCC through adherence to NCC 2022 Volume 1 Section J4D3 (1), NCC 2019 Volume 1 Section J1.2(a), NCC 2019 Volume 2 Section 3.12.1.1(a) and state-prescribed variations.

- **Fire Hazard Properties**
  Adheres to NCC 2019 Volume 1 Specification C1.10 Clause 7 and NCC 2022 Specification 7 Clause S7C7 for insulation materials. When tested to AS1530.3, these products conforms to the "Spread of Flame" and "Smoke Developed" requirements outlined in NCC 2022 Specification 7 Clause S7C7 and NCC 2019 Volume 1 Specification C1.10 Clause 7.

- **Non-Combustibility**
  Complies with the non-combustibility standards of NCC 2022 Volume 1 C2D2 and NCC 2019 Volume 1 C1.9(a) or satisfies the testing criteria outlined in AS 1530.1.

Packaging and Storage

ROCKWOOL Facaderock DD / DD Plus is shrink-wrapped in polyethylene sheets for ease of handling, transportation and storage. Products should be stored in doors or under waterproof covering.

Health & Safety

ROCKWOOL stone wool products are manufactured from FBS-1 stone wool. FBS-1 stone wool is safe to use and the fibre component of these products is listed by Safe Work Australia as Man-made Vitreous Fibre (stone wool) of low bio persistence as specified under Note Q in the Australian Hazardous Substances Information System and in the Australian Approved Criteria.

ROCKWOOL Facaderock DD/DD Plus

Product Specification

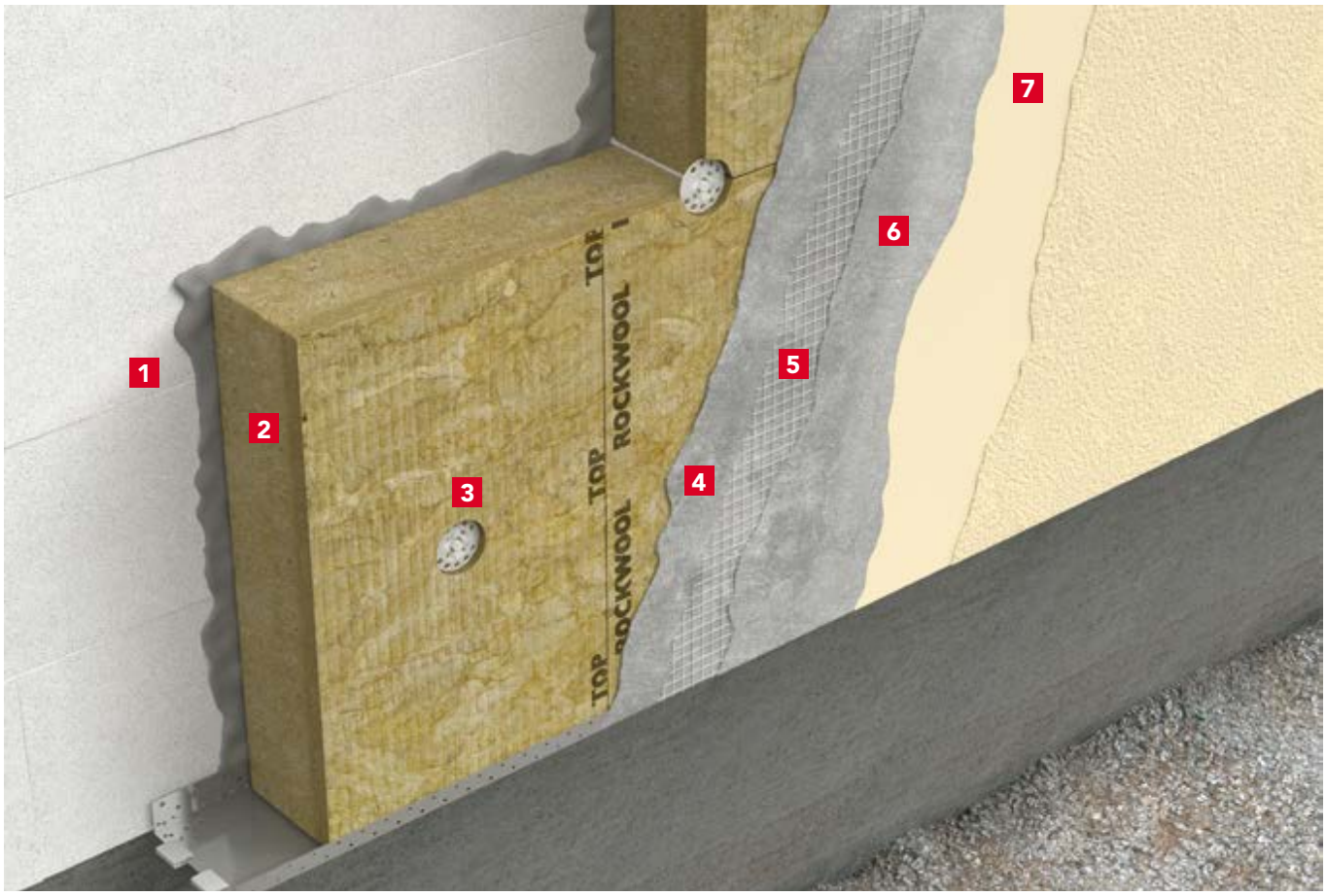
ROCKWOOL Facaderock DD

R-Value m²K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m²)
1.25	50	600	1200	6	4.32
1.85	75	600	1200	4	2.88
2.50	100	600	1200	3	2.16
3.00	120	600	1200	3	2.16
3.75	150	600	1200	2	1.44
1.25	50	600	900	6	3.24
1.85	75	600	900	4	2.16
2.50	100	600	900	3	1.62
3.00	120	600	900	3	1.62
3.75	150	600	900	2	1.08
1.25	50	600	600	6	2.16
1.85	75	600	600	4	1.44
2.50	100	600	600	3	1.08
3.00	120	600	600	3	1.08
3.75	150	600	600	2	0.72

ROCKWOOL Facaderock DD Plus

R-Value m²K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m²)
1.25	50	600	1200	6	4.32
1.85	75	600	1200	4	2.88
2.50	100	600	1200	3	2.16
3.00	120	600	1200	3	2.16
1.25	50	600	900	6	3.24
1.85	75	600	900	4	2.16
2.50	100	600	900	3	1.62
3.00	120	600	900	3	1.62
1.25	50	600	600	8	2.88
1.85	75	600	600	5	1.80
2.50	100	600	600	4	1.44
3.00	120	600	600	3	1.08

ROCKWOOL Facaderock DD/DD Plus

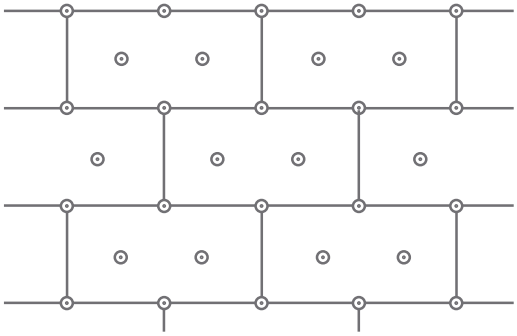


1	Adhesive mortar
2	**ROCKWOOL Facaderock DD / DD Plus**
3	Mechanical fastener
4	Reinforced mortar
5	Fiberglass mesh
6	Base coat
7	Finishing coat

ROCKWOOL Facaderock DD/DD Plus

Design & Installation Considerations

- ROCKWOOL Facaderock DD / DD Plus has two sides with different mechanical strength, a "ROCKWOOL" mark is placed on the side with higher strength for ease of identication. When installing the product, the marked side must be facing towards the outside.
- The adhering surface of Facaderock DD / DD Plus should be treated with suitable primer for stone wool to achieve the best adhering effect.
- Facaderock DD / DD Plus should be fixed to substrate by bonding and anchorage, and the effective binding area should not be less than 60% of the slab surface area.
- It is suggested the number of anchor not be less than 6 pieces per square meter and should be increased within the edges and corner areas.
- Glass fiber mesh should be embedded in base coat which is covering Facaderock; an additional layer of glass fiber mesh should be applied on the walls of ground floor.
- Rendered finishing coat should be used. Bricks and tiles are not recommended.
- While positioning Facaderock DD / DD Plus, the joints shall be staggered as the layout sketch and gaps between slabs shall be avoided as much as possible. Small slabs should be used as few as possible.
- If Facaderock DD / DD Plus becomes damp or wet, the reinforcement layer (base coat) and finishing coat must be applied after the panels are dried naturally.



Layout of anchoring

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AUAC03802 Dulux Acratex AcraSkin for StoneShield cladding System on New Stone Wool [Exterior]

Scope of Works

The Dulux Acratex StoneShield Cladding System is an alternative way to design & build. The StoneShield System delivers an alternative walling system to traditional masonry construction. It includes lightweight panels that are easily cut and fixed to timber or steel framing finished with a protective coating system. The StoneShield System is designed as a totally integrated, multi-layered, non-load bearing lightweight cladding system for facades. Delivering a weatherproof external building envelope that provides excellent thermal performance (R-Value) with continuous insulation (CI) to reduce thermal bridging and also offers noise reduction and fire rated (FRL) performance.

Refer to the StoneShield Cladding System Specification and Installation Manual for further information.
Contact Dulux Acratex for all supporting test certificates.

Where FRL and/or BAL levels specification are required, refer to Duspec: AUAC03801 Dulux Acratex AcraSkin for StoneShield in FRL and/or BAL levels on New Stone Wool [Exterior]

Coating system including:

RenderWall AcraPro P400 is a pre-blended high polymer cementitious base coat which provides positive adhesion to stable low absorbency substrates.

Acratex 951 Coventry Coarse is a decorative, low build protective coating displaying excellent resistance to weathering and atmospheric chemicals. The finish will resemble that of a coarse granular render which is sponge floated

Acratex AcraSkin® is a high build water borne, highly flexible 100% acrylic elastomeric membrane weatherproofing coating with excellent water impermeability, carbonation resistance, chloride ion resistance, and resistance to mould and mildew. That can be applied by roller - conventional nap or low profile texture sleeves or airless spray to provide maximum crack bridging and anti-carbonation performance.

Substrate and Substrate Preparation

Substrate Notes

Stone wool is a mineral based cladding panel that is made from volcanic rock. Stone wool is produced by mixing volcanic rock with limestone before heating it to 1500 degrees. The molten rock is spun into a 'wool'. A binder and either an oil or a wetting agent is added depending on the application of the end product. The wool is compacted and a final heat treatment cures the binder giving the panel its physical properties.

Stone wool cladding panels are non-combustible and have thermal insulating properties that make it an ideal cladding material for multiple applications. It is currently widely used in External Thermal Insulation Composite Systems (ETICS) and can also be used as part of Codemark accredited cavity construction systems that can be used for residential, multi-residential and commercial construction.

ROCKWOOL Facaderock DD
ROCKWOOL Facaderock DD is a dual-density stone wool slab. Manufactured using dual-density technology, the outer surface of each slab features a distinctly higher density than the underside. This dual-density design includes a high-density top layer that helps minimize base coat consumption during installation and a lower-density inner layer that reduces board weight and allows it to better adapt to wall irregularities. This provides a firm and robust surface for the application of fixings, while the resilient underside can accommodate unevenness in the substrate.

Compliance with the Australia NCC
These range of ROCKWOOL products when properly specified and installed, demonstrate compliance with the following requirements:

Thermal
Complies with AS/NZS 4859.1 and meets the requirements of NCC through adherence to NCC 2022 Volume 1 Section J4D3 (1), NCC 2019 Volume 1 Section J1.2(a), NCC 2019 Volume 2 Section 3.12.1.1(a) and state-prescribed variations.

Fire Hazard Properties
Adheres to NCC 2019 Volume 1 Specification C1.10 Clause 7 and NCC 2022 Specification 7 Clause S7C7 for insulation materials. When tested to AS1530.3, these products conforms to the "Spread of Flame" and "Smoke Developed" requirements outlined in NCC 2022 Specification 7 Clause S7C7 and NCC 2019 Volume 1 Specification C1.10 Clause 7.

Non-Combustibility
Complies with the non-combustibility standards of NCC 2022 Volume 1 C2D2 and NCC 2019 Volume 1 C1.9(a) or satisfies the testing criteria outlined in AS 1530.1

Substrate Preparation Notes

Assess suitability
Check that the Stone Wool panels are installed strictly in accordance with the cladding system installation manual. It is the responsibility of the Stone Wool installer to ensure cladding surface is true and flush before applying any coating system. They must be flush and plumb ensuring the best possible surface prior to application of the base coat. Uneven face alignment will require additional materials to achieve a flush and level facade.

Check that expansion joints are strictly in accordance with installation design guides, including the incorporation of discontinuous top-hat sections across joints and at corners. Expansion joints are recommended at (max) 3m height and 6m wide intervals and at all building weak points such as around openings (e.g. windows, doors and garage doors), horizontally between all floor levels, and at all interfaces of different building construction materials.

Clean surface
Remove any dust, laitance or salt by brush or broom and ensure surface is free on contaminants.

Basecoat
Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.

Treat joints
Clean out and fill all control joints with a suitable paintable polyurethane joint sealant. Care must be taken to ensure joint remains free of levelling or texture material during application, or joint is cleaned out prior to sealant application.
Install sealant in strict accordance with manufacturer recommendations and as neatly as possible – take great care not to smear the sealant on the façade side or edge of the expansion joint recess – use masking tape to protect edges. Failure to confine sealant to expansion joint recess only will lead to cracking of the texture coating over the smears. After sealant is cured apply a 6 to 8mm masking tape over the sealant.

Apply texture
Apply the specified texture coating to the entire area in accordance with the relevant product data and application sheet, removing all masking tape as soon as possible and well before the texture coating has skinned. Do not allow the texture coating to set over the control joint sealant.

Apply topcoat
When top coating the texture coating with an elastomeric topcoat such as AcraSkin, apply the topcoat to the entire joint, including sealant.
Base Sheet will be installed and fixed in accordance with substrate supplier's fixing and installation guidelines, including weather management systems (flashing & cavity) and be approved and certified to local building codes or other local regulations. All fixings will be non-corrosive and suitable for the exposure location.

Where a 15 year warranty is required for the StoneShield Cladding system, two coats of Acraskin is to be applied. Where a 10 year warranty is required, one coat of AcraSkin can be applied.

Raw sheet surface must not be left exposed to weather conditions which can cause panel to degrade and change surface properties.

Coating System Summary

• Preparation	Dulux Acratex RenderWall AcraPro P400
• 1st Coat	Dulux Acratex Green Render Sealer
• 2nd Coat	Dulux Acratex Coventry Coarse
• Preparation	Control Joint Mastic
• 3rd Coat	Dulux Acratex AcraSkin
• Optional	Dulux Acratex AcraSkin

Coating System

Preparation — Dulux Acratex RenderWall AcraPro P400

Coat Type	Datasheet
Preparation	**AUAC00142 Dulux Acratex RenderWall AcraPro P400**

Read the full Datasheet details at Dulux Acratex RenderWall AcraPro P400

Application Methods

Trowel **Hopper Gun**

MIA Render Pump

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.3	0.2	0.2
Wet Film Per Coat (microns)	3000	6000	6000
Dry Film Per Coat (microns)	3000	6000	6000
Recoat Time **	7-10days	Indefinite	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
0	**Not Applicable**

Coating Application Details

Hawk and Trowel, Render Pump, Hopper Gun.
Product usage Scaling factor = 1.7 kg (dry powder) per sqm per 1mm thick
(eg. a 6mm thick application requires (6 x 1.7) = 10.2 kg per sqm of RenderWall powder)
Dulux Acratex RenderWall AcraPro P400 can be applied by traditional Hawk & Trowel method or via Render Pump in single application from 2-6mm or up to 10mm thick in multiple applications.

Mixing
The water-liquid (gauging liquid) component should be first measured into suitable containers or mixing devices and the powder slowly

Mix Ratio (approx. 15L mixed Dulux Acratex RenderWall AcraPro P400)
20kg (1 full bag) of Dulux Acratex RenderWall AcraPro P400
Approx 3.0 litres of fresh clean water Refer to safety for handling instructions
Measure the water component into a 15L pail and add the powder while mixing with a suitable power Mixing Drill
Allow to stand for 3-5 minutes
Remix and adjust consistency with up to 0.5L additional water (once) relative to application requirement.

For Extruded Polystyrene (XPS) and other difficult substrates such as PIR, Rigid Thermoset Phenolic,
Pre-prime with AcraPrime XPS
Then apply an Adhesive key coat of RenderWall AcraPro P400 to ensure excellent adhesion properties (when mixed with AcraBond).

Gauging water mixing ratio
Water / AcraBond RenderWall Liquid Mix Ratio
• 5 Parts Water: 1 Part AcraBond
• Apply a (min.) 1mm adhesive coat prior to the mesh embedment layer using RenderWall AcraPro P400 using the above Gauging Water/AcraBond mix.

Additional Coating Details

Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.
NOTE: Where additional impact resistance is required install a
second mesh and basecoat layer.

SDS Number	SDS Link
DLX000402	**View SDS Link**

1st Coat — Dulux Acratex Green Render Sealer

Coat Type	Datasheet
1st Coat	**AUAC00013 Dulux Acratex Green Render Sealer**

Read the full Datasheet details at Dulux Acratex Green Render Sealer

Application Methods

Air Spray **Airless Spray** **Brush** **Roller** **Pad**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	8	8	8
Wet Film Per Coat (microns)	125	125	125
Dry Film Per Coat (microns)	43.75	43.75	43.75
Recoat Time **	2 hrs	indefinite	

V.O.C. Level
20 g/L

Meets GBCA V.O.C. Requirements?
Yes

Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of surface profile being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

SDS Number	SDS Link
DLX002555	**View SDS Link**

2nd Coat — Dulux Acratex Coventry Coarse

Coat Type	Datasheet
2nd Coat	**AUAC00081 Dulux Acratex Coventry Coarse**

Read the full Datasheet details at Dulux Acratex Coventry Coarse

Application Methods

Trowel **Hopper Gun**

Tex Spray. Coventry Coarse should be tinted in accordance with AcraTex Tint Guide to the specified membrane top coat colour (Or a colour as close as possible to the specified colour in accordance with product /base tint rules)

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.8	0.7	0.8
Wet Film Per Coat (microns)	1333	1467	1333

Dry Film Per Coat (microns)	1000	1100	1000
Recoat Time **	24 hours	Indefinite	

V.O.C. Level **< 35 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details
Trowel and Hawk finished with a plastic float
Product should be tinted & thoroughly mixed before use.
Refer to the Dulux AcraTex Application Manual for detailed application instructions.
Use masking to protect adjacent areas. The area should be patched and primed ready for final texture coat.
Dulux Acratex Coventry Coarse is applied by hawk and stainless steel trowel, then finished in a circular motion with the plastic finishing float to achieve an even granular appearance.

Two people are required for most areas - one person to apply the Coventry Coarse to the wall, the second to process / float finish.
Delivery must be to a uniform thickness.
Allow the material to stand for a short time before "rubbing up" with float to produce the desired pattern/texture.
Application must be in a brisk uniform fashion terminating when the whole area is complete, banded by a natural break such as an expansion joint, corner etc.
Application commenced on a single area must be completed uninterrupted.

Additional Coating Details
can be swapped for Green Render Sealer

SDS Number **194-85753 Coventry Coarse QTB DLX003092**	SDS Link **View SDS Link**
SDS Number **194-85757 Coventry Coarse Extra Bright DLX003105**	SDS Link
SDS Number **194-85944 Coventry Coarse Accent Base DLX003096**	SDS Link
SDS Number **194-85753 Coventry Coarse Accent Base WG DLX002659**	SDS Link

Preparation — Control Joint Mastic

It is recommended that all control joints be filled after the Texture coating system has been applied using a suitable (paintable) polyurethane joint sealant.
Care must be taken to ensure joint remains free of Texture material during application, or joint is cleaned out prior to sealant application.
Subsequently colour coating over the joint sealant can be accomplished with the specified system topcoat.
If the joints are sealed/filled first, the texture coating shall not be applied over such sealed joints.

3rd Coat — Dulux Acratex AcraSkin

Coat Type **3rd Coat**	Datasheet **AUAC00044 Dulux Acratex AcraSkin**

Read the full Datasheet details at Dulux Acratex AcraSkin

Application Methods
Airless Spray **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	4.1	2.1	3.1
Wet Film Per Coat (microns)	244	488	322

Dry Film Per Coat (microns)	125	250	165
Recoat Time **	4 Hours	Indefinite	

V.O.C. Level **< 46 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, Roller, Medium Textured Roller, Airless Spray.
When cutting in edges, brush and roll-in a continuous process to avoid differences in gloss level.
Application on single areas should be completed uniterrupted.
All independent tests are available on request.
Product should be thoroughly mixed before use.
Refer to the Dulux Acratex Application Manual for detailed application instructions.

Nap roller finish:
Apply 2 coats (minimum) using a 10 - 20mm Nap roller at 4 sq.m / litre

Low profile texture (requires higher material consumption):
Apply 1 coat with a low profile black Texture Roller at 2-3 sq.m / litre
Apply a 2nd (finishing coat) with a nap roller at 4 sq.m / litre

SDS Number **DLX001296**	SDS Link **View SDS Link**

Optional — Dulux Acratex AcraSkin

Coat Type **Optional**	Datasheet **AUAC00044 Dulux Acratex AcraSkin**

Read the full Datasheet details at Dulux Acratex AcraSkin

Application Methods

Airless Spray **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	4.1	2.1	3.1
Wet Film Per Coat (microns)	244	488	322
Dry Film Per Coat (microns)	125	250	165
Recoat Time **	4 Hours	Indefinite	

V.O.C. Level **< 46 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, Roller, Medium Textured Roller, Airless Spray.
When cutting in edges, brush and roll-in a continuous process to avoid differences in gloss level.
Application on single areas should be completed uniterrupted.
All independent tests are available on request.
Product should be thoroughly mixed before use.
Refer to the Dulux Acratex Application Manual for detailed application instructions.

Nap roller finish:
Apply 2 coats (minimum) using a 10 - 20mm Nap roller at 4 sq.m / litre

Low profile texture (requires higher material consumption):
Apply 1 coat with a low profile black Texture Roller at 2-3 sq.m / litre
Apply a 2nd (finishing coat) with a nap roller at 4 sq.m / litre

Additional Coating Details
Where 15 year warranty is required for the StoneShield Cladding system, two coats of Acraskin are to be applied.

SDS Number	SDS Link
DLX001296	**View SDS Link**

Coating System Notes
* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.
** Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.

Comments

Comments

- Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind). All preparation and painting must conform to AS2311: The Painting of Buildings
  Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point. Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period. Dry times apply to a single coat at recommended spread rate and at 25°C and 50% relative humidity Allow longer times under cool, moist, or still conditions and or when applied at high film builds. Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate. Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.

  When using Bright Reds, Oranges, Blues and Yellows or where very light (or dark) colours are applied over highly contrasting colours an extra coat maybe required. Dulux recommend full coating systems including a top coat. For **all** systems the texture and/or base coat should be tinted in accordance with AcraTex tint guide to the specified membrane top coat colour (or a colour as close as possible to the specified colour as product and tint rules allow). Application techniques should be adjusted to achieve the recommended DFT and finishing standard.

  To avoid "Picture Framing" of texture topcoats "wet on wet" cutting in and coating technique is recommended or apply multiple coats thinning the first coat. At commencement of coating system application to the substrate it shall be deemed that the applicator has certified that the surface which it is to be applied to is fit to receive the specified coating(s) system. When the applicator is preparing the site sample for approval they should advise the project superintendent if the substrate condition is not of sufficient standard to produce the specified finish.

  Where possible avoid dark colours - these will give raise to much higher surface temperature that may cause addition thermal stress and cooling demand to the building envelope and/ or require extra engineering considerations (greater building costs). Consult dulux on the potential to use InfraCOOL heat reflective coatings that will keep the surface cooler “like for like” colour. Glancing light joints and panel deformation may be clearly evident under glancing light, casting visible shadows of the minute and uneven projections of the joints. Glancing light is light that is nearly parallel to the surface of the wall and casts visible shadows and uneven projections of the joints. Just like rendered masonry/ jointed system any uneven projections will be highlighted and as such are outside the control / scope of this specification. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Glancing-Light.pdf**

  The coastal area is considered a marine environment and as such salt potentially can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice. Once to remove surface contaminants, and raise salts to the surface and then secondly to remove these salts. Due to the locality, weather conditions and lag time between applications of the coating system it may require the need to wash again, between coats.

  This specification is to be read in conjunction with dulux product data sheets, a dulux warranty can be provided on request when the **full** acratex system including a membrane topcoat/s is applied by a dulux acratex trained applicator, according to specification and at the specified spreading rates and to the surface preparation details described in the dulux acratex specification manual. The dynamics of the substrate is outside the control of dulux australia and as such joint deformation or cracking is excluded from warranty terms. Colour change is a natural part of a coating weathering and is excluded from warranty terms Refer warranty document for full terms and conditions.

  Fungi and algae can exist on virtually any surface (even glass) provided the right conditions for growth are met. Visible growth on painted surfaces is typically caused by contaminants present together with the presence of high enough levels of moisture to support growth. Agents in paints become ineffective where they cannot “touch” the growth source (eg where growth emanates from deposits on the film). Additionally the active agents are “consumed” in the process such that protection is time limited where conditions support ongoing growth performance is greatly improved with the inclusion of a membrane Top coat like acraShield, elastomeric 201 or acraSkin. Refer:
  http://www.dulux.com.au/specifier/our-brands/dulux-acratex/more-than-just-render The exterior texture coatings should be cleaned on a regular basis. This will help maintain your overall aesthetic appearance and preserve your acraTex texture coating system. Cleaning once every year will remove light soil as well as grime and airborne pollutants refer dulux acraTex care & maintenance guide
  http://www.dulux.com.au/specifier/our-brands/dulux-acratex/acratex-care-and-maintenance.

  When using this specification, the applicator shall maintain records in accordance with AS 3894 Parts 10, 11 and 12 and others as required by the project manager. These records shall be made available for inspection at any time by the project manager or authorised representative and submitted to the principal contractor upon completion of work.

  Surfactant leaching from exterior water-based coatings

Occasionally amber, clear or white spots/streaks are seen on a newly painted surface within the first few weeks after application. They usually appear after light rain or overnight dew and generally located in sheltered areas or areas with limited sun exposure. Under normal conditions surfactant contained in the tinted paint colour is slowly leached to the surface and washed away by rain leaving no trace and is a normal part of drying of any exterior water-based paint. Under certain atmospheric conditions and these surfactants leach or migrate to the paint surface, is concentrated forms and leaves clear or white deposits upon drying. These conditions include cool or humid weather or painting cold substrate and in most cases these marks on the wall surfaces are more noticeable on dark colours, such as browns or dark greens, etc.. The clear/white surfactants that have migrated to the wall surface areas will cause no down grading nor performance changes or long term durability concerns of the paint films integrity and unfortunately have become an appearance issue instead. They easily removed from the paint film within a week or so of their appearance by washing with warm water & commercial grade detergent or via Nifti or Spray'n'Wipe followed by rinsing with fresh clean water. Under severe conditions they may reappear once or twice until all the surfactant has been removed. It will be less noticeable each time, and can be removed in the same manner as before. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Leaching.pdf**

Further Information

Care & Maintenance Guide

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Duspec+ document does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Duspec+ is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Duspec+ document, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Duspec+ document, and as recommended on the applicable Dulux Product Data Sheet and Safety Data Sheets for the relevant products (available from www.duspecplus.com.au). Climatic conditions at application time can affect Duspec+ documentation suitability and product performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Specification cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.

AUAC03800 Dulux Acratex AcraShield Advance for StoneShield cladding system on New Stone Wool [Exterior]

Scope of Works

The Dulux Acratex StoneShield Cladding System is an alternative way to design & build. The StoneShield System delivers an alternative walling system to traditional masonry construction. It includes lightweight panels that are easily cut and fixed to timber or steel framing finished with a protective coating system. The StoneShield System is designed as a totally integrated, multi-layered, non-load bearing lightweight cladding system for facades. Delivering a weatherproof external building envelope that provides excellent thermal performance (R-Value) with continuous insulation (CI) to reduce thermal bridging and also offers noise reduction and fire rated (FRL) performance.

Refer to the StoneShield Cladding System Specification and Installation Manual for further information.
Contact Dulux Acratex for all supporting test certificates.

Where FRL and/or BAL levels specification are required, refer to Duspec: AUAC03797 Dulux Acratex AcraShield Advance for StoneShield in FRL and/or BAL levels on New Stone Wool [Exterior]

Coating system including:

RenderWall AcraPro P400 is a pre-blended high polymer cementitious base coat which provides positive adhesion to stable low absorbency substrates.

AcraTex 951 Coventry Coarse is a decorative, low build protective coating displaying excellent resistance to weathering and atmospheric chemicals. The finish will resemble that of a coarse granular render which is sponge floated

AcraTex AcraShield ® Advance is a high build water borne, highly flexible 100% acrylic elastomeric membrane weatherproofing coating with excellent water impermeability, carbonation resistance, chloride ion resistance, and resistance to mould and mildew. That can be applied by roller - conventional nap or low profile texture sleeves or airless spray to provide maximum crack bridging and anti-carbonation performance.

Substrate and Substrate Preparation

Substrate Notes

Stone wool is a mineral based cladding panel that is made from volcanic rock. Stone wool is produced by mixing volcanic rock with limestone before heating it to 1500 degrees. The molten rock is spun into a 'wool'. A binder and either an oil or a wetting agent is added depending on the application of the end product. The wool is compacted and a final heat treatment cures the binder giving the panel its physical properties.

Stone wool cladding panels are non-combustible and have thermal insulating properties that make it an ideal cladding material for multiple applications. It is currently widely used in External Thermal Insulation Composite Systems (ETICS) and can also be used as part of Codemark accredited cavity construction systems that can be used for residential, multi-residential and commercial construction.

ROCKWOOL Facaderock DD
ROCKWOOL Facaderock DD is a dual-density stone wool slab. Manufactured using dual-density technology, the outer surface of each slab features a distinctly higher density than the underside. This dual-density design includes a high-density top layer that helps minimize base coat consumption during installation and a lower-density inner layer that reduces board weight and allows it to better adapt to wall irregularities. This provides a firm and robust surface for the application of fixings, while the resilient underside can accommodate unevenness in the substrate.

Compliance with the Australia NCC
These range of ROCKWOOL products when properly specified and installed, demonstrate compliance with the following requirements:

Thermal
Complies with AS/NZS 4859.1 and meets the requirements of NCC through adherence to NCC 2022 Volume 1 Section J4D3 (1), NCC 2019 Volume 1 Section J1.2(a), NCC 2019 Volume 2 Section 3.12.1.1(a) and state-prescribed variations.

Fire Hazard Properties
Adheres to NCC 2019 Volume 1 Specification C1.10 Clause 7 and NCC 2022 Specification 7 Clause S7C7 for insulation materials. When tested to AS1530.3, these products conforms to the "Spread of Flame" and "Smoke Developed" requirements outlined in NCC 2022 Specification 7 Clause S7C7 and NCC 2019 Volume 1 Specification C1.10 Clause 7.

Non-Combustibility
Complies with the non-combustibility standards of NCC 2022 Volume 1 C2D2 and NCC 2019 Volume 1 C1.9(a) or satisfies the testing criteria outlined in AS 1530.1

Substrate Preparation Notes

Assess suitability
Check that the Stone Wool panels are installed strictly in accordance with the cladding system installation manual. It is the responsibility of the Stone Wool installer to ensure cladding surface is true and flush before applying any coating system. They must be flush and plumb ensuring the best possible surface prior to application of the base coat. Uneven face alignment will require additional materials to achieve a flush and level facade.

Check that expansion joints are strictly in accordance with installation design guides, including the incorporation of discontinuous top-hat sections across joints and at corners. Expansion joints are recommended at (max) 3m height and 6m wide intervals and at all building weak points such as around openings (e.g. windows, doors and garage doors), horizontally between all floor levels, and at all interfaces of different building construction materials.

Clean surface
Remove any dust, laitance or salt by brush or broom and ensure surface is free on contaminants.

Basecoat
Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.

Treat joints
Clean out and fill all control joints with a suitable paintable polyurethane joint sealant. Care must be taken to ensure joint remains free of levelling or texture material during application, or joint is cleaned out prior to sealant application.
Install sealant in strict accordance with manufacturer recommendations and as neatly as possible – take great care not to smear the sealant on the façade side or edge of the expansion joint recess – use masking tape to protect edges. Failure to confine sealant to expansion joint recess only will lead to cracking of the texture coating over the smears. After sealant is cured apply a 6 to 8mm masking tape over the sealant.

Apply texture
Apply the specified texture coating to the entire area in accordance with the relevant product data and application sheet, removing all masking tape as soon as possible and well before the texture coating has skinned. Do not allow the texture coating to set over the control joint sealant.

Apply topcoat
When top coating the texture coating with an elastomeric topcoat such as AcraShield, apply the topcoat to the entire joint, including sealant.
Base Sheet will be installed and fixed in accordance with substrate supplier's fixing and installation guidelines, including weather management systems (flashing & cavity) and be approved and certified to local building codes or other local regulations. All fixings will be non-corrosive and suitable for the exposure location.

Raw sheet surface must not be left exposed to weather conditions which can cause panel to degrade and change surface properties.

Coating System Summary

• Preparation	Dulux Acratex RenderWall AcraPro P400
• 1st Coat	Dulux Acratex Green Render Sealer
• 2nd Coat	Dulux Acratex Coventry Coarse
• Preparation	Control Joint Mastic
• 3rd Coat	Dulux Acratex AcraShield Advance
• 4th Coat	Dulux Acratex AcraShield Advance

Coating System

Preparation — Dulux Acratex RenderWall AcraPro P400

Coat Type	Datasheet
Preparation	**AUAC00142 Dulux Acratex RenderWall AcraPro P400**

Read the full Datasheet details at Dulux Acratex RenderWall AcraPro P400

Application Methods

Trowel **Hopper Gun**

MIA Render Pump

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.3	0.2	0.2
Wet Film Per Coat (microns)	3000	6000	6000
Dry Film Per Coat (microns)	3000	6000	6000
Recoat Time **	7-10days	Indefinite	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
0	**Not Applicable**

Coating Application Details

Hawk and Trowel, Render Pump, Hopper Gun.
Product usage Scaling factor = 1.7 kg (dry powder) per sqm per 1mm thick
(eg. a 6mm thick application requires (6 x 1.7) = 10.2 kg per sqm of RenderWall powder)
Dulux Acratex RenderWall AcraPro P400 can be applied by traditional Hawk & Trowel method or via Render Pump in single application from 2-6mm or up to 10mm thick in multiple applications.

Mixing
The water-liquid (gauging liquid) component should be first measured into suitable containers or mixing devices and the powder slowly

Mix Ratio (approx. 15L mixed Dulux Acratex RenderWall AcraPro P400)
20kg (1 full bag) of Dulux Acratex RenderWall AcraPro P400
Approx 3.0 litres of fresh clean water Refer to safety for handling instructions
Measure the water component into a 15L pail and add the powder while mixing with a suitable power Mixing Drill
Allow to stand for 3-5 minutes
Remix and adjust consistency with up to 0.5L additional water (once) relative to application requirement.

For Extruded Polystyrene (XPS) and other difficult substrates such as PIR, Rigid Thermoset Phenolic,
Pre-prime with AcraPrime XPS
Then apply an Adhesive key coat of RenderWall AcraPro P400 to ensure excellent adhesion properties (when mixed with AcraBond).

Gauging water mixing ratio
Water / AcraBond RenderWall Liquid Mix Ratio
• 5 Parts Water: 1 Part AcraBond
• Apply a (min.) 1mm adhesive coat prior to the mesh embedment layer using RenderWall AcraPro P400 using the above Gauging Water/AcraBond mix.

Additional Coating Details

Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.
NOTE: Where additional impact resistance is required install a
second mesh and basecoat layer.

SDS Number	SDS Link
DLX000402	**View SDS Link**

1st Coat — Dulux Acratex Green Render Sealer

Coat Type	Datasheet
1st Coat	**AUAC00013 Dulux Acratex Green Render Sealer**

Read the full Datasheet details at Dulux Acratex Green Render Sealer

Application Methods

Air Spray **Airless Spray** **Brush** **Roller** **Pad**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	8	8	8
Wet Film Per Coat (microns)	125	125	125
Dry Film Per Coat (microns)	43.75	43.75	43.75
Recoat Time **	2 hrs	indefinite	

V.O.C. Level
20 g/L

Meets GBCA V.O.C. Requirements?
Yes

Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of surface profile being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

SDS Number	SDS Link
DLX002555	**View SDS Link**

2nd Coat — Dulux Acratex Coventry Coarse

Coat Type	Datasheet
2nd Coat	**AUAC00081 Dulux Acratex Coventry Coarse**

Read the full Datasheet details at Dulux Acratex Coventry Coarse

Application Methods

Trowel **Hopper Gun**

Tex Spray. Coventry Coarse should be tinted in accordance with AcraTex Tint Guide to the specified membrane top coat colour (Or a colour as close as possible to the specified colour in accordance with product /base tint rules)

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.8	0.7	0.8
Wet Film Per Coat (microns)	1333	1467	1333

Dry Film Per Coat (microns)	1000	1100	1000
Recoat Time **	24 hours	Indefinite	

V.O.C. Level **< 35 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details
Trowel and Hawk finished with a plastic float
Product should be tinted & thoroughly mixed before use.
Refer to the Dulux AcraTex Application Manual for detailed application instructions.
Use masking to protect adjacent areas. The area should be patched and primed ready for final texture coat.
Dulux Acratex Coventry Coarse is applied by hawk and stainless steel trowel, then finished in a circular motion with the plastic finishing float to achieve an even granular appearance.

Two people are required for most areas - one person to apply the Coventry Coarse to the wall, the second to process / float finish.
Delivery must be to a uniform thickness.
Allow the material to stand for a short time before "rubbing up" with float to produce the desired pattern/texture.
Application must be in a brisk uniform fashion terminating when the whole area is complete, banded by a natural break such as an expansion joint, corner etc.
Application commenced on a single area must be completed uninterrupted.

Additional Coating Details
can be swapped for Green Render Sealer

SDS Number **194-85753 Coventry Coarse QTB DLX003092**	SDS Link **View SDS Link**
SDS Number **194-85757 Coventry Coarse Extra Bright DLX003105**	SDS Link
SDS Number **194-85944 Coventry Coarse Accent Base DLX003096**	SDS Link
SDS Number **194-85753 Coventry Coarse Accent Base WG DLX002659**	SDS Link

Preparation — Control Joint Mastic

It is recommended that all control joints be filled after the Texture coating system has been applied using a suitable (paintable) polyurethane joint sealant.
Care must be taken to ensure joint remains free of Texture material during application, or joint is cleaned out prior to sealant application.
Subsequently colour coating over the joint sealant can be accomplished with the specified system topcoat.
If the joints are sealed/filled first, the texture coating shall not be applied over such sealed joints.

3rd Coat — Dulux Acratex AcraShield Advance

Coat Type **3rd Coat**	Datasheet **AUAC00020 Dulux Acratex AcraShield Advance**

Read the full Datasheet details at Dulux Acratex AcraShield Advance

Application Methods
Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	6	4.5	6
Wet Film Per Coat (microns)	167	222	167

Dry Film Per Coat (microns)	75	100	75
Recoat Time **	2 Hours	indefinite	

V.O.C. Level **Refer to specific data sheets AUCA00085 AcraShield Advance Low Gloss AUAC00049 AcraShield Advance Matt AUAC00153 AcraShield MIOX AUAC00119 AcraShield Aluminium**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.
Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.

Dulux Acratex Acrashield may be applied by brush, roller or airless spray.
A 10-20mm nap roller is used depending on the type of texture being overcoated.
Typical Airless Spray set up is: Graco Ultra 500 using 0.019-0.021 spray tip at approx. 1000 psi.

SDS Number **DLX003010 AcraShield Advance Matt**	SDS Link **View SDS Link**
SDS Number **DLX003011 AcraShield Advance Low Gloss**	SDS Link **View SDS Link**
SDS Number **DLX003153 AcraShield MIOX**	SDS Link **View SDS Link**
SDS Number **DLX003150 AcraShield Aluminium**	SDS Link **View SDS Link**

4th Coat — Dulux Acratex AcraShield Advance

Coat Type **4th Coat**	Datasheet **AUAC00020 Dulux Acratex AcraShield Advance**

Read the full Datasheet details at Dulux Acratex AcraShield Advance

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	6	4.5	6
Wet Film Per Coat (microns)	167	222	167
Dry Film Per Coat (microns)	75	100	75
Recoat Time **	2 Hours	indefinite	

V.O.C. Level **Refer to specific data sheets AUCA00085 AcraShield Advance Low Gloss AUAC00049 AcraShield Advance Matt AUAC00153 AcraShield MIOX AUAC00119 AcraShield Aluminium**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.
Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.

Dulux Acratex Acrashield may be applied by brush, roller or airless spray.
A 10-20mm nap roller is used depending on the type of texture being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.019-0.021 spray tip at approx. 1000 psi.

SDS Number **DLX003010 AcraShield Advance Matt**	SDS Link **View SDS Link**
SDS Number **DLX003011 AcraShield Advance Low Gloss**	SDS Link **View SDS Link**
SDS Number **DLX003153 AcraShield MIOX**	SDS Link **View SDS Link**
SDS Number **DLX003150 AcraShield Aluminium**	SDS Link **View SDS Link**

Coating System Notes
* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.
** Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.

Comments

Comments

- Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind). All preparation and painting must conform to AS2311: The Painting of Buildings
  Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point. Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period. Dry times apply to a single coat at recommended spread rate and at 25°C and 50% relative humidity Allow longer times under cool, moist, or still conditions and or when applied at high film builds. Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate. Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.

  When using Bright Reds, Oranges, Blues and Yellows or where very light (or dark) colours are applied over highly contrasting colours an extra coat maybe required. Dulux recommend full coating systems including a top coat. For **all** systems the texture and/or base coat should be tinted in accordance with AcraTex tint guide to the specified membrane top coat colour (or a colour as close as possible to the specified colour as product and tint rules allow). Application techniques should be adjusted to achieve the recommended DFT and finishing standard.

  To avoid "Picture Framing" of texture topcoats "wet on wet" cutting in and coating technique is recommended or apply multiple coats thinning the first coat. At commencement of coating system application to the substrate it shall be deemed that the applicator has certified that the surface which it is to be applied to is fit to receive the specified coating(s) system. When the applicator is preparing the site sample for approval they should advise the project superintendent if the substrate condition is not of sufficient standard to produce the specified finish.

  Where possible avoid dark colours - these will give raise to much higher surface temperature that may cause addition thermal stress and cooling demand to the building envelope and/ or require extra engineering considerations (greater building costs). Consult dulux on the potential to use InfraCOOL heat reflective coatings that will keep the surface cooler “like for like” colour. Glancing light joints and panel deformation may be clearly evident under glancing light, casting visible shadows of the minute and uneven projections of the joints. Glancing light is light that is nearly parallel to the surface of the wall and casts visible shadows and uneven projections of the joints. Just like rendered masonry/ jointed system any uneven projections will be highlighted and as such are outside the control / scope of this specification. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Glancing-Light.pdf**

  The coastal area is considered a marine environment and as such salt potentially can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice. Once to remove surface contaminants, and raise salts to the surface and then secondly to remove these salts. Due to the locality, weather conditions and lag time between applications of the coating system it may require the need to wash again, between coats.

  This specification is to be read in conjunction with dulux product data sheets, a dulux warranty can be provided on request when the **full** acratex system including a membrane topcoat/s is applied by a dulux acratex trained applicator, according to specification and at the specified spreading rates and to the surface preparation details described in the dulux acratex specification manual. The dynamics of the substrate is outside the control of dulux australia and as such joint deformation or cracking is excluded from warranty terms. Colour change is a natural part of a coating weathering and is excluded from warranty terms Refer warranty document for full terms and conditions.

  Fungi and algae can exist on virtually any surface (even glass) provided the right conditions for growth are met. Visible growth on painted surfaces is typically caused by contaminants present together with the presence of high enough levels of moisture to support growth. Agents in paints become ineffective where they cannot “touch” the growth source (eg where growth emanates from deposits on the film). Additionally the active agents are “consumed” in the process such that protection is time limited where conditions support ongoing growth performance is greatly improved with the inclusion of a membrane Top coat like acraShield, elastomeric 201 or acraSkin. Refer: **http://www.dulux.com.au/specifier/our-brands/dulux-acratex/more-than-just-render** The exterior texture coatings should be cleaned on a

regular basis. This will help maintain your overall aesthetic appearance and preserve your acraTex texture coating system. Cleaning once every year will remove light soil as well as grime and airborne pollutants refer dulux acraTex care & maintenance guide **http://www.dulux.com.au/specifier/our-brands/dulux-acratex/acratex-care-and-maintenance.**

When using this specification, the applicator shall maintain records in accordance with AS 3894 Parts 10, 11 and 12 and others as required by the project manager. These records shall be made available for inspection at any time by the project manager or authorised representative and submitted to the principal contractor upon completion of work.

Surfactant leaching from exterior water-based coatings
Occasionally amber, clear or white spots/streaks are seen on a newly painted surface within the first few weeks after application. They usually appear after light rain or overnight dew and generally located in sheltered areas or areas with limited sun exposure. Under normal conditions surfactant contained in the tinted paint colour is slowly leached to the surface and washed away by rain leaving no trace and is a normal part of drying of any exterior water-based paint. Under certain atmospheric conditions and these surfactants leach or migrate to the paint surface, is concentrated forms and leaves clear or white deposits upon drying. These conditions include cool or humid weather or painting cold substrate and in most cases these marks on the wall surfaces are more noticeable on dark colours, such as browns or dark greens, etc.. The clear/white surfactants that have migrated to the wall surface areas will cause no down grading nor performance changes or long term durability concerns of the paint films integrity and unfortunately have become an appearance issue instead. They easily removed from the paint film within a week or so of their appearance by washing with warm water & commercial grade detergent or via Nifti or Spray'n'Wipe followed by rinsing with fresh clean water. Under severe conditions they may reappear once or twice until all the surfactant has been removed. It will be less noticeable each time, and can be removed in the same manner as before. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Leaching.pdf**

Further Information

Care & Maintenance Guide

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.

AUAC03801 Dulux Acratex AcraSkin for StoneShield in FRL and/or BAL levels on New Stone Wool [Exterior]

Scope of Works

The Dulux Acratex StoneShield Cladding System is an alternative way to design & build. The StoneShield System delivers an alternative walling system to traditional masonry construction. It includes lightweight panels that are easily cut and fixed to timber or steel framing finished with a protective coating system. The StoneShield System is designed as a totally integrated, multi-layered, non-load bearing lightweight cladding system for facades. Delivering a weatherproof external building envelope that provides excellent thermal performance (R-Value) with continuous insulation (CI) to reduce thermal bridging and also offers noise reduction and fire rated (FRL) performance.

Refer to the StoneShield Cladding System Specification and Installation Manual for further information.
Contact Dulux Acratex for all supporting test certificates.

Coating system including:

RenderWall AcraPro P400 is a pre-blended high polymer cementitious base coat which provides positive adhesion to stable low absorbency substrates.

Acratex 951 Coventry Coarse is a decorative, low build protective coating displaying excellent resistance to weathering and atmospheric chemicals. The finish will resemble that of a coarse granular render which is sponge floated

Acratex AcraSkin® is a high build water borne, highly flexible 100% acrylic elastomeric membrane weatherproofing coating with excellent water impermeability, carbonation resistance, chloride ion resistance, and resistance to mould and mildew. That can be applied by roller - conventional nap or low profile texture sleeves or airless spray to provide maximum crack bridging and anti-carbonation performance.

Substrate and Substrate Preparation

Substrate Notes

Stone wool is a mineral based cladding panel that is made from volcanic rock. Stone wool is produced by mixing volcanic rock with limestone before heating it to 1500 degrees. The molten rock is spun into a 'wool'. A binder and either an oil or a wetting agent is added depending on the application of the end product. The wool is compacted and a final heat treatment cures the binder giving the panel its physical properties.

Stone wool cladding panels are non-combustible and have thermal insulating properties that make it an ideal cladding material for multiple applications. It is currently widely used in External Thermal Insulation Composite Systems (ETICS) and can also be used as part of Codemark accredited cavity construction systems that can be used for residential, multi-residential and commercial construction.

ROCKWOOL Facaderock DD
ROCKWOOL Facaderock DD is a dual-density stone wool slab. Manufactured using dual-density technology, the outer surface of each slab features a distinctly higher density than the underside. This dual-density design includes a high-density top layer that helps minimize base coat consumption during installation and a lower-density inner layer that reduces board weight and allows it to better adapt to wall irregularities. This provides a firm and robust surface for the application of fixings, while the resilient underside can accommodate unevenness in the substrate.

Compliance with the Australia NCC
These range of ROCKWOOL products when properly specified and installed, demonstrate compliance with the following requirements:

Thermal
Complies with AS/NZS 4859.1 and meets the requirements of NCC through adherence to NCC 2022 Volume 1 Section J4D3 (1), NCC 2019 Volume 1 Section J1.2(a), NCC 2019 Volume 2 Section 3.12.1.1(a) and state-prescribed variations.

Fire Hazard Properties
Adheres to NCC 2019 Volume 1 Specification C1.10 Clause 7 and NCC 2022 Specification 7 Clause S7C7 for insulation materials. When tested to AS1530.3, these products conforms to the "Spread of Flame" and "Smoke Developed" requirements outlined in NCC 2022 Specification 7 Clause S7C7 and NCC 2019 Volume 1 Specification C1.10 Clause 7.

Non-Combustibility
Complies with the non-combustibility standards of NCC 2022 Volume 1 C2D2 and NCC 2019 Volume 1 C1.9(a) or satisfies the testing criteria outlined in AS 1530.1

Substrate Preparation Notes

Assess suitability
Check that the Stone Wool panels are installed strictly in accordance with the cladding system installation manual. It is the responsibility of the Stone Wool installer to ensure cladding surface is true and flush before applying any coating system. They must be flush and plumb ensuring the best possible surface prior to application of the base coat. Uneven face alignment will require additional materials to achieve a flush and level

facade.

Check that expansion joints are strictly in accordance with installation design guides, including the incorporation of discontinuous top-hat sections across joints and at corners. Expansion joints are recommended at (max) 3m height and 6m wide intervals and at all building weak points such as around openings (e.g. windows, doors and garage doors), horizontally between all floor levels, and at all interfaces of different building construction materials.

Clean surface
Remove any dust, laitance or salt by brush or broom and ensure surface is free on contaminants.

Basecoat
Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.

Treat joints
Clean out and fill all control joints with a suitable paintable polyurethane joint sealant. Care must be taken to ensure joint remains free of levelling or texture material during application, or joint is cleaned out prior to sealant application.
Install sealant in strict accordance with manufacturer recommendations and as neatly as possible – take great care not to smear the sealant on the façade side or edge of the expansion joint recess – use masking tape to protect edges. Failure to confine sealant to expansion joint recess only will lead to cracking of the texture coating over the smears. After sealant is cured apply a 6 to 8mm masking tape over the sealant.

For FRL and BAL systems, a fire rated paintable polyurethane sealant is required for caulking control joints and all openings and penetrations. Refer to the StoneShield manual for further information.

Apply texture
Apply the specified texture coating to the entire area in accordance with the relevant product data and application sheet, removing all masking tape as soon as possible and well before the texture coating has skinned. Do not allow the texture coating to set over the control joint sealant.

Apply topcoat
When top coating the texture coating with an elastomeric topcoat such as AcraSkin, apply the topcoat to the entire joint, including sealant.
Base Sheet will be installed and fixed in accordance with substrate supplier's fixing and installation guidelines, including weather management systems (flashing & cavity) and be approved and certified to local building codes or other local regulations. All fixings will be non-corrosive and suitable for the exposure location.

Where a 15 year warranty is required for the StoneShield Cladding system, two coats of Acraskin is to be applied. Where a 10 year warranty is required, one coat of AcraSkin can be applied.

Raw sheet surface must not be left exposed to weather conditions which can cause panel to degrade and change surface properties.

Coating System Summary

• Preparation	Dulux Acratex RenderWall AcraPro P400
• 1st Coat	Dulux Acratex Green Render Sealer
• 2nd Coat	Dulux Acratex Coventry Coarse
• Preparation	Control Joint Mastic
• 3rd Coat	Dulux Acratex AcraSkin
• Optional	Dulux Acratex AcraSkin

Coating System

Preparation — Dulux Acratex RenderWall AcraPro P400

Coat Type	Datasheet
Preparation	**AUAC00142 Dulux Acratex RenderWall AcraPro P400**

Read the full Datasheet details at Dulux Acratex RenderWall AcraPro P400

Application Methods

Trowel **Hopper Gun**

MIA Render Pump

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.3	0.2	0.2
Wet Film Per Coat (microns)	3000	6000	6000
Dry Film Per Coat (microns)	3000	6000	6000
Recoat Time **	7-10days	Indefinite	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
0	**Not Applicable**

Coating Application Details

Hawk and Trowel, Render Pump, Hopper Gun.
Product usage Scaling factor = 1.7 kg (dry powder) per sqm per 1mm thick
(eg. a 6mm thick application requires (6 x 1.7) = 10.2 kg per sqm of RenderWall powder)
Dulux Acratex RenderWall AcraPro P400 can be applied by traditional Hawk & Trowel method or via Render Pump in single application from 2-6mm or up to 10mm thick in multiple applications.

Mixing
The water-liquid (gauging liquid) component should be first measured into suitable containers or mixing devices and the powder slowly

Mix Ratio (approx. 15L mixed Dulux Acratex RenderWall AcraPro P400)
20kg (1 full bag) of Dulux Acratex RenderWall AcraPro P400
Approx 3.0 litres of fresh clean water Refer to safety for handling instructions
Measure the water component into a 15L pail and add the powder while mixing with a suitable power Mixing Drill
Allow to stand for 3-5 minutes
Remix and adjust consistency with up to 0.5L additional water (once) relative to application requirement.

For Extruded Polystyrene (XPS) and other difficult substrates such as PIR, Rigid Thermoset Phenolic,
Pre-prime with AcraPrime XPS
Then apply an Adhesive key coat of RenderWall AcraPro P400 to ensure excellent adhesion properties (when mixed with AcraBond).

Gauging water mixing ratio
Water / AcraBond RenderWall Liquid Mix Ratio
• 5 Parts Water: 1 Part AcraBond
• Apply a (min.) 1mm adhesive coat prior to the mesh embedment layer using RenderWall AcraPro P400 using the above Gauging Water/AcraBond mix.

Additional Coating Details

Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.
NOTE: Where additional impact resistance is required install a
second mesh and basecoat layer.

SDS Number	SDS Link
DLX000402	**View SDS Link**

1st Coat — Dulux Acratex Green Render Sealer

Coat Type	Datasheet
1st Coat	**AUAC00013 Dulux Acratex Green Render Sealer**

Read the full Datasheet details at Dulux Acratex Green Render Sealer

Application Methods

Air Spray **Airless Spray** **Brush** **Roller** **Pad**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	8	8	8
Wet Film Per Coat (microns)	125	125	125
Dry Film Per Coat (microns)	43.75	43.75	43.75
Recoat Time **	2 hrs	indefinite	

V.O.C. Level
20 g/L

Meets GBCA V.O.C. Requirements?
Yes

Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of surface profile being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

SDS Number	SDS Link
DLX002555	**View SDS Link**

2nd Coat — Dulux Acratex Coventry Coarse

Coat Type	Datasheet
2nd Coat	**AUAC00081 Dulux Acratex Coventry Coarse**

Read the full Datasheet details at Dulux Acratex Coventry Coarse

Application Methods

Trowel **Hopper Gun**

Tex Spray. Coventry Coarse should be tinted in accordance with AcraTex Tint Guide to the specified membrane top coat colour (Or a colour as close as possible to the specified colour in accordance with product /base tint rules)

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.8	0.7	0.8
Wet Film Per Coat (microns)	1333	1467	1333

Dry Film Per Coat (microns)	1000	1100	1000
Recoat Time **	24 hours	Indefinite	

V.O.C. Level **< 35 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Trowel and Hawk finished with a plastic float
Product should be tinted & thoroughly mixed before use.
Refer to the Dulux AcraTex Application Manual for detailed application instructions.
Use masking to protect adjacent areas. The area should be patched and primed ready for final texture coat.
Dulux Acratex Coventry Coarse is applied by hawk and stainless steel trowel, then finished in a circular motion with the plastic finishing float to achieve an even granular appearance.

Two people are required for most areas - one person to apply the Coventry Coarse to the wall, the second to process / float finish.
Delivery must be to a uniform thickness.
Allow the material to stand for a short time before "rubbing up" with float to produce the desired pattern/texture.
Application must be in a brisk uniform fashion terminating when the whole area is complete, banded by a natural break such as an expansion joint, corner etc.
Application commenced on a single area must be completed uninterrupted.

Additional Coating Details

can be swapped for Green Render Sealer

SDS Number **194-85753 Coventry Coarse QTB DLX003092**	SDS Link **View SDS Link**
SDS Number **194-85757 Coventry Coarse Extra Bright DLX003105**	SDS Link
SDS Number **194-85944 Coventry Coarse Accent Base DLX003096**	SDS Link
SDS Number **194-85753 Coventry Coarse Accent Base WG DLX002659**	SDS Link

Preparation — Control Joint Mastic

It is recommended that all control joints be filled after the Texture coating system has been applied using a suitable (paintable) polyurethane joint sealant.
Care must be taken to ensure joint remains free of Texture material during application, or joint is cleaned out prior to sealant application.
Subsequently colour coating over the joint sealant can be accomplished with the specified system topcoat.
If the joints are sealed/filled first, the texture coating shall not be applied over such sealed joints.

For FRL and BAL systems, a fire rated paintable polyurethane sealant is required for caulking control joints and all openings and penetrations.
Refer to the StoneShield manual for further information.

3rd Coat — Dulux Acratex AcraSkin

Coat Type **3rd Coat**	Datasheet **AUAC00044 Dulux Acratex AcraSkin**

Read the full Datasheet details at Dulux Acratex AcraSkin

Application Methods

Airless Spray **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	4.1	2.1	3.1

Wet Film Per Coat (microns)	244	488	322
Dry Film Per Coat (microns)	125	250	165
Recoat Time **	4 Hours	Indefinite	

V.O.C. Level **< 46 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, Roller, Medium Textured Roller, Airless Spray.
When cutting in edges, brush and roll-in a continuous process to avoid differences in gloss level.
Application on single areas should be completed uniterrupted.
All independent tests are available on request.
Product should be thoroughly mixed before use.
Refer to the Dulux Acratex Application Manual for detailed application instructions.

Nap roller finish:
Apply 2 coats (minimum) using a 10 - 20mm Nap roller at 4 sq.m / litre

Low profile texture (requires higher material consumption):
Apply 1 coat with a low profile black Texture Roller at 2-3 sq.m / litre
Apply a 2nd (finishing coat) with a nap roller at 4 sq.m / litre

SDS Number **DLX001296**	SDS Link **View SDS Link**

Optional — Dulux Acratex AcraSkin

Coat Type **Optional**	Datasheet **AUAC00044 Dulux Acratex AcraSkin**

Read the full Datasheet details at Dulux Acratex AcraSkin

Application Methods

Airless Spray **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	4.1	2.1	3.1
Wet Film Per Coat (microns)	244	488	322
Dry Film Per Coat (microns)	125	250	165
Recoat Time **	4 Hours	Indefinite	

V.O.C. Level **< 46 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

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Apply 2 coats (minimum) using a 10 - 20mm Nap roller at 4 sq.m / litre

Low profile texture (requires higher material consumption):
Apply 1 coat with a low profile black Texture Roller at 2-3 sq.m / litre

Apply a 2nd (finishing coat) with a nap roller at 4 sq.m / litre
Additional Coating Details Where 15 year warranty is required for the StoneShield Cladding system, two coats of Acraskin is to be applied.

SDS Number	SDS Link
DLX001296	**View SDS Link**

Coating System Notes
* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.
** Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.

Comments

Comments

- Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind). All preparation and painting must conform to AS2311: The Painting of Buildings
  Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point. Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period. Dry times apply to a single coat at recommended spread rate and at 25°C and 50% relative humidity Allow longer times under cool, moist, or still conditions and or when applied at high film builds. Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate. Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.

  When using Bright Reds, Oranges, Blues and Yellows or where very light (or dark) colours are applied over highly contrasting colours an extra coat maybe required. Dulux recommend full coating systems including a top coat. For **all** systems the texture and/or base coat should be tinted in accordance with AcraTex tint guide to the specified membrane top coat colour (or a colour as close as possible to the specified colour as product and tint rules allow). Application techniques should be adjusted to achieve the recommended DFT and finishing standard.

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  The coastal area is considered a marine environment and as such salt potentially can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice. Once to remove surface contaminants, and raise salts to the surface and then secondly to remove these salts. Due to the locality, weather conditions and lag time between applications of the coating system it may require the need to wash again, between coats.

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  http://www.dulux.com.au/specifier/our-brands/dulux-acratex/more-than-just-render The exterior texture coatings should be cleaned on a regular basis. This will help maintain your overall aesthetic appearance and preserve your acraTex texture coating system. Cleaning once every year will remove light soil as well as grime and airborne pollutants refer dulux acraTex care & maintenance guide
  http://www.dulux.com.au/specifier/our-brands/dulux-acratex/acratex-care-and-maintenance.

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Further Information

Care & Maintenance Guide

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Duspec+ document does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Duspec+ is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Duspec+ document, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Duspec+ document, and as recommended on the applicable Dulux Product Data Sheet and Safety Data Sheets for the relevant products (available from www.duspecplus.com.au). Climatic conditions at application time can affect Duspec+ documentation suitability and product performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Specification cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.

AUAC03797 Dulux Acratex AcraShield Advance for StoneShield in FRL and/or BAL levels on New Stone Wool [Exterior]

Scope of Works

The Dulux Acratex StoneShield Cladding System is an alternative way to design & build. The StoneShield System delivers an alternative walling system to traditional masonry construction. It includes lightweight panels that are easily cut and fixed to timber or steel framing finished with a protective coating system. The StoneShield System is designed as a totally integrated, multi-layered, non-load bearing lightweight cladding system for facades. Delivering a weatherproof external building envelope that provides excellent thermal performance (R-Value) with continuous insulation (CI) to reduce thermal bridging and also offers noise reduction and fire rated (FRL) performance.

Refer to the StoneShield Cladding System Specification and Installation Manual for further information.
Contact Dulux Acratex for all supporting test certificates.

Coating system including:

RenderWall AcraPro P400 is a pre-blended high polymer cementitious base coat which provides positive adhesion to stable low absorbency substrates.

AcraTex 951 Coventry Coarse is a decorative, low build protective coating displaying excellent resistance to weathering and atmospheric chemicals. The finish will resemble that of a coarse granular render which is sponge floated

AcraTex AcraShield ® Advance is a high build water borne, highly flexible 100% acrylic elastomeric membrane weatherproofing coating with excellent water impermeability, carbonation resistance, chloride ion resistance, and resistance to mould and mildew. That can be applied by roller - conventional nap or low profile texture sleeves or airless spray to provide maximum crack bridging and anti-carbonation performance.

Substrate and Substrate Preparation

Substrate Notes

Stone wool is a mineral based cladding panel that is made from volcanic rock. Stone wool is produced by mixing volcanic rock with limestone before heating it to 1500 degrees. The molten rock is spun into a 'wool'. A binder and either an oil or a wetting agent is added depending on the application of the end product. The wool is compacted and a final heat treatment cures the binder giving the panel its physical properties.

Stone wool cladding panels are non-combustible and have thermal insulating properties that make it an ideal cladding material for multiple applications. It is currently widely used in External Thermal Insulation Composite Systems (ETICS) and can also be used as part of Codemark accredited cavity construction systems that can be used for residential, multi-residential and commercial construction.

ROCKWOOL Facaderock DD
ROCKWOOL Facaderock DD is a dual-density stone wool slab. Manufactured using dual-density technology, the outer surface of each slab features a distinctly higher density than the underside. This dual-density design includes a high-density top layer that helps minimize base coat consumption during installation and a lower-density inner layer that reduces board weight and allows it to better adapt to wall irregularities. This provides a firm and robust surface for the application of fixings, while the resilient underside can accommodate unevenness in the substrate.

Compliance with the Australia NCC
These range of ROCKWOOL products when properly specified and installed, demonstrate compliance with the following requirements:

Thermal
Complies with AS/NZS 4859.1 and meets the requirements of NCC through adherence to NCC 2022 Volume 1 Section J4D3 (1), NCC 2019 Volume 1 Section J1.2(a), NCC 2019 Volume 2 Section 3.12.1.1(a) and state-prescribed variations.

Fire Hazard Properties
Adheres to NCC 2019 Volume 1 Specification C1.10 Clause 7 and NCC 2022 Specification 7 Clause S7C7 for insulation materials. When tested to AS1530.3, these products conforms to the "Spread of Flame" and "Smoke Developed" requirements outlined in NCC 2022 Specification 7 Clause S7C7 and NCC 2019 Volume 1 Specification C1.10 Clause 7.

Non-Combustibility
Complies with the non-combustibility standards of NCC 2022 Volume 1 C2D2 and NCC 2019 Volume 1 C1.9(a) or satisfies the testing criteria outlined in AS 1530.1

Substrate Preparation Notes

Assess suitability
Check that the Stone Wool panels are installed strictly in accordance with the cladding system installation manual. It is the responsibility of the Stone Wool installer to ensure cladding surface is true and flush before applying any coating system. They must be flush and plumb ensuring the best possible surface prior to application of the base coat. Uneven face alignment will require additional materials to achieve a flush and level

facade.

Check that expansion joints are strictly in accordance with installation design guides, including the incorporation of discontinuous top-hat sections across joints and at corners. Expansion joints are recommended at (max) 3m height and 6m wide intervals and at all building weak points such as around openings (e.g. windows, doors and garage doors), horizontally between all floor levels, and at all interfaces of different building construction materials.

Clean surface
Remove any dust, laitance or salt by brush or broom and ensure surface is free on contaminants.

Basecoat
Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.

Treat joints
Clean out and fill all control joints with a suitable paintable polyurethane joint sealant. Care must be taken to ensure joint remains free of levelling or texture material during application, or joint is cleaned out prior to sealant application.
Install sealant in strict accordance with manufacturer recommendations and as neatly as possible – take great care not to smear the sealant on the façade side or edge of the expansion joint recess – use masking tape to protect edges. Failure to confine sealant to expansion joint recess only will lead to cracking of the texture coating over the smears. After sealant is cured apply a 6 to 8mm masking tape over the sealant.

For FRL and BAL systems, a fire rated paintable polyurethane sealant is required for caulking control joints and all openings and penetrations. Refer to the StoneShield manual for further information.

Apply texture
Apply the specified texture coating to the entire area in accordance with the relevant product data and application sheet, removing all masking tape as soon as possible and well before the texture coating has skinned. Do not allow the texture coating to set over the control joint sealant.

Apply topcoat
When top coating the texture coating with an elastomeric topcoat such as AcraShield, apply the topcoat to the entire joint, including sealant.
Base Sheet will be installed and fixed in accordance with substrate supplier's fixing and installation guidelines, including weather management systems (flashing & cavity) and be approved and certified to local building codes or other local regulations. All fixings will be non-corrosive and suitable for the exposure location.

Raw sheet surface must not be left exposed to weather conditions which can cause panel to degrade and change surface properties.

Coating System Summary

• Preparation	Dulux Acratex RenderWall AcraPro P400
• 1st Coat	Dulux Acratex Green Render Sealer
• 2nd Coat	Dulux Acratex Coventry Coarse
• Preparation	Control Joint Mastic
• 3rd Coat	Dulux Acratex AcraShield Advance
• 4th Coat	Dulux Acratex AcraShield Advance

Coating System

Preparation — Dulux Acratex RenderWall AcraPro P400

Coat Type	Datasheet
Preparation	**AUAC00142 Dulux Acratex RenderWall AcraPro P400**

Read the full Datasheet details at Dulux Acratex RenderWall AcraPro P400

Application Methods

Trowel **Hopper Gun**

MIA Render Pump

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.3	0.2	0.2
Wet Film Per Coat (microns)	3000	6000	6000
Dry Film Per Coat (microns)	3000	6000	6000
Recoat Time **	7-10days	Indefinite	

V.O.C. Level	Meets GBCA V.O.C. Requirements?
0	**Not Applicable**

Coating Application Details

Hawk and Trowel, Render Pump, Hopper Gun.
Product usage Scaling factor = 1.7 kg (dry powder) per sqm per 1mm thick
(eg. a 6mm thick application requires (6 x 1.7) = 10.2 kg per sqm of RenderWall powder)
Dulux Acratex RenderWall AcraPro P400 can be applied by traditional Hawk & Trowel method or via Render Pump in single application from 2-6mm or up to 10mm thick in multiple applications.

Mixing
The water-liquid (gauging liquid) component should be first measured into suitable containers or mixing devices and the powder slowly

Mix Ratio (approx. 15L mixed Dulux Acratex RenderWall AcraPro P400)
20kg (1 full bag) of Dulux Acratex RenderWall AcraPro P400
Approx 3.0 litres of fresh clean water Refer to safety for handling instructions
Measure the water component into a 15L pail and add the powder while mixing with a suitable power Mixing Drill
Allow to stand for 3-5 minutes
Remix and adjust consistency with up to 0.5L additional water (once) relative to application requirement.

For Extruded Polystyrene (XPS) and other difficult substrates such as PIR, Rigid Thermoset Phenolic,
Pre-prime with AcraPrime XPS
Then apply an Adhesive key coat of RenderWall AcraPro P400 to ensure excellent adhesion properties (when mixed with AcraBond).

Gauging water mixing ratio
Water / AcraBond RenderWall Liquid Mix Ratio
• 5 Parts Water: 1 Part AcraBond
• Apply a (min.) 1mm adhesive coat prior to the mesh embedment layer using RenderWall AcraPro P400 using the above Gauging Water/AcraBond mix.

Additional Coating Details

Apply a basecoat layer subject to system specification in accordance with the relevant product data and application sheet, using a stainless steel trowel to fully cover the panel surface with a 2–3 mm (min.) cover. Embed Exsulite Alkali Resistant Mesh into the 'wet' freshly applied Acratex Basecoat layer, then immediately apply an additional layer of Acratex Basecoat to completely cover and encapsulate the mesh, with a minimum of 2mm cover and an overall minimum total thickness of 5mm, ensuring mesh is "sandwiched" wet on wet between base coat layers.
Do not install mesh directly against or push mesh directly onto the panel surface.
NOTE: Where additional impact resistance is required install a
second mesh and basecoat layer.

SDS Number	SDS Link
DLX000402	**View SDS Link**

1st Coat — Dulux Acratex Green Render Sealer

Coat Type	Datasheet
1st Coat	**AUAC00013 Dulux Acratex Green Render Sealer**

Read the full Datasheet details at Dulux Acratex Green Render Sealer

Application Methods

Air Spray **Airless Spray** **Brush** **Roller** **Pad**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	8	8	8
Wet Film Per Coat (microns)	125	125	125
Dry Film Per Coat (microns)	43.75	43.75	43.75
Recoat Time **	2 hrs	indefinite	

V.O.C. Level
20 g/L

Meets GBCA V.O.C. Requirements?
Yes

Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of surface profile being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

SDS Number	SDS Link
DLX002555	**View SDS Link**

2nd Coat — Dulux Acratex Coventry Coarse

Coat Type	Datasheet
2nd Coat	**AUAC00081 Dulux Acratex Coventry Coarse**

Read the full Datasheet details at Dulux Acratex Coventry Coarse

Application Methods

Trowel **Hopper Gun**

Tex Spray. Coventry Coarse should be tinted in accordance with AcraTex Tint Guide to the specified membrane top coat colour (Or a colour as close as possible to the specified colour in accordance with product /base tint rules)

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	0.8	0.7	0.8
Wet Film Per Coat (microns)	1333	1467	1333

Dry Film Per Coat (microns)	1000	1100	1000
Recoat Time **	24 hours	Indefinite	

V.O.C. Level **< 35 g/L untinted**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details
Trowel and Hawk finished with a plastic float
Product should be tinted & thoroughly mixed before use.
Refer to the Dulux AcraTex Application Manual for detailed application instructions.
Use masking to protect adjacent areas. The area should be patched and primed ready for final texture coat.
Dulux Acratex Coventry Coarse is applied by hawk and stainless steel trowel, then finished in a circular motion with the plastic finishing float to achieve an even granular appearance.

Two people are required for most areas - one person to apply the Coventry Coarse to the wall, the second to process / float finish.
Delivery must be to a uniform thickness.
Allow the material to stand for a short time before "rubbing up" with float to produce the desired pattern/texture.
Application must be in a brisk uniform fashion terminating when the whole area is complete, banded by a natural break such as an expansion joint, corner etc.
Application commenced on a single area must be completed uninterrupted.

Additional Coating Details
can be swapped for Green Render Sealer

SDS Number **194-85753 Coventry Coarse QTB DLX003092**	SDS Link **View SDS Link**
SDS Number **194-85757 Coventry Coarse Extra Bright DLX003105**	SDS Link
SDS Number **194-85944 Coventry Coarse Accent Base DLX003096**	SDS Link
SDS Number **194-85753 Coventry Coarse Accent Base WG DLX002659**	SDS Link

Preparation — Control Joint Mastic

It is recommended that all control joints be filled after the Texture coating system has been applied using a suitable (paintable) polyurethane joint sealant.
Care must be taken to ensure joint remains free of Texture material during application, or joint is cleaned out prior to sealant application.
Subsequently colour coating over the joint sealant can be accomplished with the specified system topcoat.
If the joints are sealed/filled first, the texture coating shall not be applied over such sealed joints.

For FRL and BAL systems, a fire rated paintable polyurethane sealant is required for caulking control joints and all openings and penetrations.
Refer to the StoneShield manual for further information.

3rd Coat — Dulux Acratex AcraShield Advance

Coat Type **3rd Coat**	Datasheet **AUAC00020 Dulux Acratex AcraShield Advance**

Read the full Datasheet details at Dulux Acratex AcraShield Advance

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	6	4.5	6

Wet Film Per Coat (microns)	167	222	167
Dry Film Per Coat (microns)	75	100	75
Recoat Time **	2 Hours	indefinite	

V.O.C. Level **Refer to specific data sheets AUCA00085 AcraShield Advance Low Gloss AUAC00049 AcraShield Advance Matt AUAC00153 AcraShield MIOX AUAC00119 AcraShield Aluminium**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.
Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.

Dulux Acratex Acrashield may be applied by brush, roller or airless spray.
A 10-20mm nap roller is used depending on the type of texture being overcoated.
Typical Airless Spray set up is: Graco Ultra 500 using 0.019-0.021 spray tip at approx. 1000 psi.

SDS Number **DLX003010 AcraShield Advance Matt**	SDS Link **View SDS Link**
SDS Number **DLX003011 AcraShield Advance Low Gloss**	SDS Link **View SDS Link**
SDS Number **DLX003153 AcraShield MIOX**	SDS Link **View SDS Link**
SDS Number **DLX003150 AcraShield Aluminium**	SDS Link **View SDS Link**

4th Coat — Dulux Acratex AcraShield Advance

Coat Type **4th Coat**	Datasheet **AUAC00020 Dulux Acratex AcraShield Advance**

Read the full Datasheet details at Dulux Acratex AcraShield Advance

Application Methods

Air Spray **Airless Spray** **Brush** **Roller**

	Min	Max	Recommended
Theoretical Spread Rate (m²/L)	6	4.5	6
Wet Film Per Coat (microns)	167	222	167
Dry Film Per Coat (microns)	75	100	75
Recoat Time **	2 Hours	indefinite	

V.O.C. Level **Refer to specific data sheets AUCA00085 AcraShield Advance Low Gloss AUAC00049 AcraShield Advance Matt AUAC00153 AcraShield MIOX AUAC00119 AcraShield Aluminium**	Meets GBCA V.O.C. Requirements? **Not Applicable**

Coating Application Details

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.
Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.

Dulux Acratex Acrashield may be applied by brush, roller or airless spray.
A 10-20mm nap roller is used depending on the type of texture being overcoated.
Typical Airless Spray set up is: Graco Ultra 500 using 0.019-0.021 spray tip at approx. 1000 psi.

SDS Number **DLX003010 AcraShield Advance Matt**	SDS Link **View SDS Link**
SDS Number **DLX003011 AcraShield Advance Low Gloss**	SDS Link **View SDS Link**
SDS Number **DLX003153 AcraShield MIOX**	SDS Link **View SDS Link**
SDS Number **DLX003150 AcraShield Aluminium**	SDS Link **View SDS Link**

Coating System Notes
* Practical Spreading Rate will vary from the quoted Theoretical Spreading Rate due to factors such as method and condition of application and surface roughness.
** Recoat times are quotes for 25°c and 50% relative humidity, these may vary under different conditions.

Comments

Comments

- Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind). All preparation and painting must conform to AS2311: The Painting of Buildings
  Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point. Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period. Dry times apply to a single coat at recommended spread rate and at 25°C and 50% relative humidity Allow longer times under cool, moist, or still conditions and or when applied at high film builds. Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate. Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.

  When using Bright Reds, Oranges, Blues and Yellows or where very light (or dark) colours are applied over highly contrasting colours an extra coat maybe required. Dulux recommend full coating systems including a top coat. For **all** systems the texture and/or base coat should be tinted in accordance with AcraTex tint guide to the specified membrane top coat colour (or a colour as close as possible to the specified colour as product and tint rules allow). Application techniques should be adjusted to achieve the recommended DFT and finishing standard.

  To avoid "Picture Framing" of texture topcoats "wet on wet" cutting in and coating technique is recommended or apply multiple coats thinning the first coat. At commencement of coating system application to the substrate it shall be deemed that the applicator has certified that the surface which it is to be applied to is fit to receive the specified coating(s) system. When the applicator is preparing the site sample for approval they should advise the project superintendent if the substrate condition is not of sufficient standard to produce the specified finish.

  Where possible avoid dark colours - these will give raise to much higher surface temperature that may cause addition thermal stress and cooling demand to the building envelope and/ or require extra engineering considerations (greater building costs). Consult dulux on the potential to use InfraCOOL heat reflective coatings that will keep the surface cooler “like for like” colour. Glancing light joints and panel deformation may be clearly evident under glancing light, casting visible shadows of the minute and uneven projections of the joints. Glancing light is light that is nearly parallel to the surface of the wall and casts visible shadows and uneven projections of the joints. Just like rendered masonry/ jointed system any uneven projections will be highlighted and as such are outside the control / scope of this specification. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Glancing-Light.pdf**

  The coastal area is considered a marine environment and as such salt potentially can shorten the life of the coating systems. Care needs to be taken to wash down all areas twice. Once to remove surface contaminants, and raise salts to the surface and then secondly to remove these salts. Due to the locality, weather conditions and lag time between applications of the coating system it may require the need to wash again, between coats.

  This specification is to be read in conjunction with dulux product data sheets, a dulux warranty can be provided on request when the **full** acratex system including a membrane topcoat/s is applied by a dulux acratex trained applicator, according to specification and at the specified spreading rates and to the surface preparation details described in the dulux acratex specification manual. The dynamics of the substrate is outside the control of dulux australia and as such joint deformation or cracking is excluded from warranty terms. Colour change is a natural part of a coating weathering and is excluded from warranty terms Refer warranty document for full terms and conditions.

  Fungi and algae can exist on virtually any surface (even glass) provided the right conditions for growth are met. Visible growth on painted surfaces is typically caused by contaminants present together with the presence of high enough levels of moisture to support growth. Agents in paints become ineffective where they cannot “touch” the growth source (eg where growth emanates from deposits on the film). Additionally the active agents are “consumed” in the process such that protection is time limited where conditions support ongoing growth performance is greatly improved with the inclusion of a membrane Top coat like acraShield, elastomeric 201 or acraSkin. Refer:

http://www.dulux.com.au/specifier/our-brands/dulux-acratex/more-than-just-render The exterior texture coatings should be cleaned on a regular basis. This will help maintain your overall aesthetic appearance and preserve your acraTex texture coating system. Cleaning once every year will remove light soil as well as grime and airborne pollutants refer dulux acraTex care & maintenance guide **http://www.dulux.com.au/specifier/our-brands/dulux-acratex/acratex-care-and-maintenance.**

When using this specification, the applicator shall maintain records in accordance with AS 3894 Parts 10, 11 and 12 and others as required by the project manager. These records shall be made available for inspection at any time by the project manager or authorised representative and submitted to the principal contractor upon completion of work.

Surfactant leaching from exterior water-based coatings
Occasionally amber, clear or white spots/streaks are seen on a newly painted surface within the first few weeks after application. They usually appear after light rain or overnight dew and generally located in sheltered areas or areas with limited sun exposure. Under normal conditions surfactant contained in the tinted paint colour is slowly leached to the surface and washed away by rain leaving no trace and is a normal part of drying of any exterior water-based paint. Under certain atmospheric conditions and these surfactants leach or migrate to the paint surface, is concentrated forms and leaves clear or white deposits upon drying. These conditions include cool or humid weather or painting cold substrate and in most cases these marks on the wall surfaces are more noticeable on dark colours, such as browns or dark greens, etc.. The clear/white surfactants that have migrated to the wall surface areas will cause no down grading nor performance changes or long term durability concerns of the paint films integrity and unfortunately have become an appearance issue instead. They easily removed from the paint film within a week or so of their appearance by washing with warm water & commercial grade detergent or via Nifti or Spray'n'Wipe followed by rinsing with fresh clean water. Under severe conditions they may reappear once or twice until all the surfactant has been removed. It will be less noticeable each time, and can be removed in the same manner as before. Refer **http://www.dulux.com.au/pdf/tech-advice/DLX_TECH_Leaching.pdf**

Further Information

Care & Maintenance Guide

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.

AUAC00013 Dulux Acratex Green Render Sealer

Introduction

Part A
19420802

Description and Image

Dulux Acratex Green Render Sealer is a Water Based Primer/ Sealer designed principally for the preparation of fresh "green" masonry surfaces to minimise unsightly white salts or "efflorescence" migrating through the applied coating system and speed project coating schedules by reducing the traditional concrete/render "Alkalinity passivation" wait period.
Acratex Green Render Sealer deigned to reduce the normal site mixed cement render "28 day / Bagged Render 7-10 days wait cycle"

Green Render Sealer can be applied over 2 day old cement render providing moisture content has stabilised.

Dulux Acratex Green Render Sealer is also an excellent general purpose primer with excellent adhesion to masonry surfaces and correctly cleaned and prepared previously painted acrylic surfaces.

Features and Benefits

- Superior water and alkali resistance
- Seals and Primes masonry surfaces
- Penetrating binder
- Water based,
- Fast track coating
- Ensures good, uniform adhesion of topcoat
- Consolidates masonry surfaces
- Low VOC
- Reduces Scaffolding Hire costs

Standards And Certifications

NATA Accredited: National Association of Testing Authorities	Certified System: Quality ISO 9001	Certified System: Environment ISO 14001	

Standards and Certifications

For details on these standards and certifications please reference the 'Approvals' section at the beginning of this document.
Please contact your DuluxGroup representative for specific information on ESD credits / points.

Uses

Green Render Sealer can be used over all masonry surfaces to provide excellent system adhesion and integrity with long term durability.
The primer forms a barrier over alkali substrates limiting the reaction with atmospheric Carbon Dioxide thus reducing the formation of unsightly white deposits or "efflorescence" on the surface typically associated with coating of highly alkaline "Fresh" masonry.
The primer allows for reduced substrate curing time prior to coating, thus fast tracking project work and reducing overall project costs and construction time.

Typical Specifications

Typical System

Title:
Typical system for New Brick/Blockwork [Exterior]

Preparation Guide
Refer : AUAC02452 Dulux Acratex AcraSkin Low Gloss / Coventry Fine / Green Render Sealer / RenderWall Acrabuild on New Concrete block, brick, masonry [Exterior]

Coat	Product	Spread Rate (m²/L):	WFT (micron):	DFT (micron):
Prep Coat	**RenderWall AcraBuild**	**0.3**	**4000**	**4000**
1st Coat	**Green Render Sealer**	**8**	**125**	**44**
Intermediate	**Coventry Fine**	**0.8**	**1250**	**1009**
2nd Coat	**968 AcraSkin**	**4.1**	**244**	**125**
3rd Coat	**968 AcraSkin**	**4.1**	**244**	**125**
			Minimum System DFT:	**5303**

Performance Guide

Salt **Resists migration of soluable salts**	Heat Resistance **N/A - not tested**
Water **Highly water resistant**	Solvent **N/A - Not tested**
Abrasion **N/A - not tested**	Acid **N/A - not tested**

Alkali
Excellent Alkali Resistance - Suitable over "green masonry" after 2 days of idea curing conditions. Under adverse conditions allow 14 days.

Typical Properties

V.O.C. Content
20 g/L

Clean Up

Clean up water DO NOT THIN

Meets GBCA V.O.C. Requirements?
Yes

Total Volatile Organic Content (TVOC) values are calculated in accordance to the stated methodology within Green Star Technical Manuals. The TVOC content is theoretically calculated as the sum total of the known VOC values of the product's raw material components. These materials include the base paint plus additional low VOC tinter required for non-factory packaged colours.

Application Methods

Air Spray **Airless Spray** **Brush** **Roller** **Pad**

Specifications	Solids by Volume
	35

	Min	Max	Recommended
Wet Film Per Coat (microns)	125	125	125
Dry Film Per Coat (microns)	43.75	43.75	43.75
Theoretical Spread Rate (m²/L)	8	8	8

Drying Time

	Min	Max	Recommended
Recoat Time (min/hours)	2 hrs	indefinite	

Typical Property Notes
Brush, Roller and Airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of texture being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

Application Guide

Surface Preparation

Ensure alkaline surfaces have been aged for at least 2 days.
Concrete / Cement Render curing times may require extended curing times dependant on cure conditions.
All surfaces must be cured (substrate has reached a stable moisture content), clean, sound and free of all contaminates such as form oils, release agents, mortar splashes, mould and algae. Surface imperfections misalignments and protrusions must be levelled and patched and completely flush to surrounding surfaces. Metal, tie wire, etc. on surface must be removed or treated against corrosion.

Application:
Refer to the Acratex Texture Coatings Applicators Training Manual for detailed instructions.
Green Render Sealer may be applied by airless spray, roller or brush.
Applications must form a continuous "barrier" film to maximise efflorescence blocking.

Application Procedure and Equipment

Brush, roller and airless spray
Brush and roll at the same time to avoid picture framing.

Product should be thoroughly mixed before use. Refer to the Dulux Acratex Application Manual for detailed instructions.
A 10-20mm nap roller is used depending on the type of surface profile being overcoated.

Typical Airless Spray set up is: Graco Ultra 500 using 0.017-0.019 spray tip at approx. 1000 psi.

Health and Safety

SDS Number	SDS Link
DLX002555	https://go.lupinsys.com/duluxgroup/harms/public/materials/fee62a9c4b8013f1e9ea398e9cbbcca2-published/individual

Using Safety Precautions
Refer Material Safety Data Sheet for full detail.
Ensure protection from splashes to exposed skin and eyes.
Ensure adequate ventiliation.

Please refer to SDS Link. In case of emergency, please call 1800 220 770.

Precautions and Limitations

This product data sheets shall be read in conjunction with the Dulux specification.
To ensure colour uniformity and for optimum performance, Dulux recommend a full coating system including a Membrane topcoat.
For **all** systems, the Texture &/or Base Coat should be tinted in accordance with Tint Guide to the specified topcoat colour (or a colour as close as possible to the specified colour as product and Acratex tint rules allow).

Important: Not all colours are suitable for exterior use.
Ensure that you have adequate tinted stock to complete the job in one application.
All material must be thoroughly cross-mix to ensure tint uniformity.
It is recommended to hold a volume of finish material for future maintenance touch-ups

Practical spreading rates will vary from quoted theoretical figures depending on substrate porosity, surface roughness, overspray losses, application methods and environmental conditions (e.g. wind).
- Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point.
- Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period.
- Dry times apply to a single coat at recommended spread rate and at 25°C and 50% Relative Humidity
- Allow longer times under cool, moist, or still conditions and or when applied at high film builds.
- Protect from dew, rain and frost for 48 hours when apply at the recommended spread rate.
- Avoid application in hot, windy conditions or on hot surfaces cool the surface by hosing with water and paint the cool damp surface.
- The exterior texture coatings should be cleaned on a regular basis.
- This will help maintain your overall aesthetic appearance and preserve your Acratex Texture coating system.

Cleaning once every year will remove light soil as well as grime and airborne pollutants refer Dulux Acratex Care & Maintenance Guide.

Transport and Storage

Line Shade /Pack A	Shipment Name
19420802	**Water Based Paint**

Size:	Weight:
15L	**18kg**

Disclaimer

Unless Dulux has provided you with a customised, project-specific specification, this Data Sheet does not represent that any particular product or product system will be suitable for your project.

Any information provided in this Data Sheet is given in good faith and is believed by Dulux to be correct at the time of publication. Products and coating systems can be expected to perform as indicated in this Data Sheet, provided the substrate is in good condition, the coatings are applied by a suitably experienced and skilled applicator, and the preparation, application and maintenance is followed strictly as set out in this Data Sheet, and as recommended on the applicable Safety Data Sheets for the relevant products, available from www.duspecplus.com.au. Climatic conditions at application time can affect product suitability and performance.

The correct colour or colour match is the responsibility of the applicator. Colours will change over time and Dulux does not guarantee that the same colour newly mixed will match a colour applied earlier which has been subjected to weathering or other change elements. No product colour is guaranteed against colour change.

Where any liability of Dulux in respect of this Data Sheet cannot by law be excluded, Dulux's liability is limited, as permitted by law and at Dulux's option, to resupply of the relevant products or services or to reimbursing the cost of those products or services.

WHERE LEAD MAY BE PRESENT: The asset manager is responsible for verifying the presence of lead and determining whether to remove or encapsulate the lead. If lead is present, the work must be done in strict accordance with AS 4361 Parts 1 and 2 and Worksafe Australia guidelines.

Learn more at **acratex.com.au**
or call Acratex Customer Service **13 23 77**

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