

MAXSTONE CLADDING SYSTEM TECHNICAL BULLETIN

FIXING OF MAXSTONE CLADDING RANGE TO WALL SUBSTRATES

The following schematic diagrams give some guidance in relation to the fixing systems needed for the Maxstone Cladding range.

Please refer to individual product specifications for correct laying practices and technical data.





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Maxstone Venetian White Cladding 150x550 Corner 150x550



Maxstone Strip Autumn Cladding 150x550 Corner 150x550



Maxstone Venetian Verde Cladding 150x550 Corner 150x550

Maxstone Strip Grey Stone Cladding 150x550 Corner 150x550

Maxstone Venetian Black Cladding 150x550 Corner 150x550

Maxstone Strip Black Stone Cladding 150x550 Corner 150x550

Maxstone Stone Autumn Modular Cladding Corner Solution Sill 200x600 Column 200x425

Maxstone Stone Granite Schist Cladding 200x550 Corner Solution Sill 200x600 Column 200x425

Maxstone Stone Black Stone Modular Cladding Corner Solution Sill 200x600 Column 200x425

MAXSTONE STONE STRIP/VENETIAN CLADDING LAYOUT

Please see below for the Maxstone Stone Strip and Venetian cladding layout. These styles come in two parts, the main body piece and the corner piece.

This product has a thickness of 5mm-25mm. Sizes are as follows: Body Piece: 150x550mm Interlocking Corner: 2 Pieces combined size 150x550mm

1 Piece - 400x150mm

1 Piece - 150x150mm

Maxstone cladding features interlocking shape to give a natural look once installed. This natural stone has natural variation from piece to piece, no 2 pieces are the same. As each piece is pre-formed to install like tiles, it save labour costs for you.

Variation in shade and caliber and imperfect edges is a character of Natural Stone and adds to the authentic look.

MAXSTONE STONE MODULAR CLADDING LAYOUT

Please see below for the Maxstone Stone Modular Cladding layout - these pieces are designed to randomly lay and have finished edges for external corners.

Stone is a natural product presenting variations which need to be worked with from time to time. Should the stone not interlock properly, options are:

- 1. To trim the stone internal edge closing any visible gap.
- 2. Point with your grey adhesive or the closest possible grout colour.

This product has a thickness of 25-40mm. It is sold by the box and contains below:

- 2 pcs 520x200mm
- 2 pcs 300x200mm
- 2 pcs 190x200mm

MAXSTONE CLADDING FIXING SUBSTRATE OPTIONS

Please see a list below of approved substrate systems that can be used alongside the Maxstone Cladding system.

MAXSTONE STONE CLADDING: IBS BUILDING PRODUCTS PRIMAflex or PRIMAaqua 9mm only. www.ibs.co.nz

MAXSTONE VENETIAN/STRIP CLADDING: BGC PLASTER BOARD (Can be used for Maxstone Venetian/Strip Cladding only) BGC Stonesheet 9mm www.bgcplaster.com

These systems must be installed in accordance with the manufacturers technical information. For full up-to-date specification and installation information please contact the manufacturer directly, or visit the above Websites.

MAXSTONE CLADDING TECHNICAL DIAGRAMS

Maxstone Cladding technical diagrams are available on our website. These show all installation details which can be given to builders or passed on to the council with your building plans.

These are available in both .pdf and .cad formats and can be found at: www.tilemax.co.nz/Maxstone_Cladding_Systems

When ParexGroup people come together to lend their hand to a project, success happens.

SPECIFICATION FOR Tilemax NZ

Job: General Specification 1st November 2016

Davco products are available for purchase through Tilemax Limited. Please see page 13 for store contact information. MAXSTONE CLADDING RANGE TECHNICAL BULLETIN - Version 5 2019 PAGE 6

INFORMATION PROVIDED:

Maxstone - (80kg per m2 at its maximum) cement backed Maxstone. Substrates -

PRIMAflex or PRIMAaqua 9mm <u>www.ibs.co.nz</u> BGC Stonesheet 9mm <u>www.bgcplaster.com</u>

QUALITY ASSURANCE:

ParexGroup's business activities located in Sydney, Brisbane, Melbourne and Perth are accredited to ISO 9001, as assessed by SAI Global.

Our products undergo rigorous Quality Control testing at our National Testing Laboratory in Sydney.

PREAMBLES:

This document is submitted on the understanding that the sub layers are sound, of regular construction and are not subject to undue/excessive thermal or structural movement.

The document, the guidance notes and other specific guidelines should be read in conjunction with the Application Guides, Technical Data Sheets, Material Safety Data Sheets and/or container labels. Product technical and material safety data sheets can be obtained from our website. <u>www.parexdavco.com.au</u>

The contractor shall be able to confirm satisfactory operative skill levels in the use of all specified ParexGroup materials to include: storage, mixing, application and curing. At the start of the contract, we recommend that a representative example of the works be established for use as a guide and point of reference.

This specification is valid for one year from the date of issue at which point advice should be sought from ParexGroup to confirm validity.

ParexGroup must be contacted prior to any work if there are any unusual substrates, conditions or if there is any uncertainty regarding product suitability.

If any tiling is to take place, the Installer and Specifier are responsible for determining the suitability of these tiles to this application and ensuring they comply with AS4662 Ceramic tiles — Definitions, classification, characteristics and marking, prior to installation taking place. This specification cannot cover the suitability of tiles for intended use.

Ref: R1638 - RL

Note: The information in this specification is based solely on the information made available to ParexGroup at the time of writing. Compliance with the relevant standards is the responsibility of the Specifier and/or Installer.

SURFACE PREPARATION:

Examine surfaces to receive render / tile adhesives / waterproofing and the conditions under which these products will be installed.

Do not proceed with tiling works etc. until surfaces and conditions comply with the following requirements.

Note - Commencement of installation constitutes acceptance of site conditions.

This specification has restrictions with respect to temperature. During the application of all ParexGroup products, the installation must not be exposed to temperatures below 5° C or above 35° C. In particular; any external tiling, waterproofing, floor levelling, grouting or concrete repair installations must be protected from hot windy conditions and or rain and heavy frosts during application.

The surface should be structurally sound, dry and clean. This involves being free from movement, oils, greases, waxes, paints, curing compounds, release agents, sealers and any other loose contaminating materials. This can be done via mechanical abrasion that could involve such means as scabbling, grinding or captive shot blasting the areas to be tiled.

Ensure all nails and screw heads are flush and that there are no burs. It is required that all fibre sheets are level at the edges.

All surfaces to be rendered must be thoroughly cleaned down and adequate mechanical keying provided where necessary. A splash coat must initially be applied to the brick face, which consists of:

- 1 part Lanko 751
- 1 part water
- 2 parts neat cement.

The splash coat should be applied with a brush or broom, and must not exceed 2mm in thickness. Whilst the splash coat is still moist and tacky, the render must be laid. It is required that 1 part Lanko 751, 3 parts water be used as an added mixture in the render mix in place of water. This enhances adhesion, flexibility, tensile strength, impact/water resistance in the rendered wall. The use of plasticisers in the render mix is not permitted.

The render mixture should be:

- 1 part cement
- 3 4 parts clean washed sand

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• Mixed with liquid (1 part Lanko 751 to 3 parts water)

The finished render should be true, to within a tolerance of +/-2mm in 4m. It is essential it has a wood float finish and rapid drying of the render should be avoided.

EXPANSION JOINTS and SUPPORT ANGLES:

Expansion or Movement joints are required by Australian Standard AS3958.1 2007 for the following purposes.

- To separate the tiled surface from fixed elements such as columns or walls.
- To divide large tiled areas into smaller areas to compensate for induced strain from various causes in the installation.
- To interrupt the tiled surface to match existing movement joints in the substrate.

All expansion or movement joints (for floors and walls) must be carried through both the tile **AND** bedding material, to the background substrate. They must be filled with permanently deformable material such as silicone or polyurethane, and be resistant to chemical and physical attack.

- 1. Maxstone system <u>must</u> be supported with a stainless steel metal angle, mechanically fastened to the wall before the first course is laid.
- 2. The Maxstones should be stack laid on top of each other with no horizontal gaps.
- 3. If constructed above 2.4 metres in height, stainless steel angles must be installed at intervals of maximum 2.4m, including suitable stainless steel fixings. DO NOT use aluminium, brass or galvanised steel supports and / or fixings. Consult an engineer and the manufacturer of the stack stone system for specific details and instructions.
- 4. Check for contamination / epoxy coating on back of stack stone if present it MUST be removed.
- 5. Do not spot fix 98% coverage is the minimum requirement.
- 6. If there is any doubt, check / confirm the structural integrity and construction methods employed with a qualified façade engineer.
- 7. All perimeter and expansion joints are to be sealed with Davco Elite Silicone.

PRIMING:

Porous surfaces must be primed with Davco PrimeX.

Under hot, windy conditions (temp. above 30°C), it is essential to wet down any concrete substrates with clean water prior to priming, so that the primer does not flash dry. When wetting down the floor, do not allow the water to pool or pond on the surface. The

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substrate should appear matt, with no signs of glistening water evident prior to application of the primer. (See attached product data)

WATERPROOFING

Davco Dampfast 2-Part cementitious waterproofing membrane is the recommended membrane for this application. Dampfast is a class II membrane and should be applied in accordance with the manufacturer's specifications. (See attached product data)

TILE ADHESIVE:

All tiling works should be undertaken in accordance with the requirements of AS3958, Installation of Ceramic Tiles.

The recommended tile adhesive for the building façade is Davco SMP Evo mixed 1:1 with Davco Davelastic and water. This should be applied with a minimum 12 mm notched trowel and back buttering of each tile before installation into the notched adhesive. Please refer to data sheets for the SMP Evo Tile Adhesive and Davco Davelastic regarding the mixing procedure).

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MAXSTONE STONE CLADDING BASE FIXING

Aluminium/stainless steel L-profile trim is to be used at the base point or second course of your installation as it will assist to hold the shear weight of the stone.

<u>Maxstone Stone Cladding:</u> 30mm x 50mm x 1.6mm <u>Maxstone Venetian/Strip Cladding:</u> 20mm x 20mm x 1.6mm

When installing the aluminium/ss L-Profiles: Please refer to Fig. 1 below.

To fix the L-Profile, run a bead of neutral cure silicone around the back of the L-Profile (Picture framing it).

Fix to the wall with 65mm stainless steel screws at 400mm centres along the length of the trim in the studs. After drilling the holes, fill first with neutral cure silicone before inserting the screws.

Mix and use waterproofing/adhesive as per supplier installation procedure.

NB:

- For Paved Surfaces, cladding must finish 100mm above the ground to allow for a weep hole (As per NZS 3604 or NZBC E2, Clause 9.1.3.2)

- For Non-Paved Surfaces (eg. Grass), the cladding needs to finish 150mm above the ground to allow for a weep hold (As per NZS 3604 or NZBC E2, Clause 9.1.3.2)

- For situations where a flush threshold is required or the standard distance to paved ground cannot be met, Accrete Design (www.accrete.co.nz) will be able to supply a grate and drain to suit the cladding system if required for specification. This is called: level threshold two stage system.

MAXSTONE STONE CLADDING INSTALLATION METHOD

When installing your Stone facade, it is important to take the time to bed your stone correctly. Please use the following method to ensure correct stone adhesion.

<u>1.</u> Correct adhesion is achieved by first burning adhesive into the substrate and finishing it with a flat screed (Fig. 1 + 2).

2. The flat surface is then to be notched with a 12 or 15mm trowel.

3. Generously back butter your stone (Fig. 3).

<u>4.</u> As you bed each piece of stone, push it down and move the product from left to right. This motion will ensure coverage and see adhesive mold around the edge of the stone. This will bond the Z-lock stone pieces as they come together (Fig 4).

5. A wet paint brush should be used to smooth any product over flow ensuring all joints are evenly filled with mortar. If the joints are not fully fulled, then pipe or gun additional mortar in the joints - **Do not leave joints unfilled** (Fig. 5).

Fig. 2: Flat screed the adhesive.

Fig. 3: generously back butter the stone.

substrate

Fig. 4: Bed each piece of stone, letting adhesive come though.

Fig. 4: Ensure all joints are evenly filled with adhesive - no gaps.

TILEMAX STORE CONTACT INFORMATION

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Takapuna - AKL

Phone: (09) 443 5633 Email: takapuna@showerwell.co.nz Address: Showerwell Home Products, 117 Wairau Road, Takapuna

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Phone: (09) 845 8212 Email: sales@showerwell.co.nz Address: Showerwell Home Products, 15 Gordon Road, St Lukes (Morningside)

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Petone - Hutt City

Phone: (04) 568 5570 Email: Petone@tilemax.co.nz Address: 27 Te Puni Street, Petone, Hutt City

Thorndon - Wellington

Phone: (04) 499 4415 Email: wellington@tilemax.co.nz Address: 37 Old Hutt Road, Thorndon, Wellington

See the full range at: www.tilemax.co.nz

Christchurch

Phone: (03) 343 3893 Email: chch@tilemax.co.nz Address: 280 Annex Rd, Middleton, Christchurch

Queenstown

Phone: 021742629 Karl Email: queenstown@tilemax.co.nz Address: Mobile Showroom Available, Showroom opening 2020!

IMPORTANT:

PROUDLY 100% NZ OWNED AND

OPERATED

This technical bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the IBS PRIMAflex or the BGC Stonesheet. It is however, an official specification for Davco adhesives (official documentation can be obtained from Tilemax). Since each project potentially differs in exposure/condition, specific requirements may vary from the information contained herein. For recommendations for specific applications/installations, please contact your nearest Tilemax Store.

DISCLAIMER:

The information presented in this technical bulletin is, to the best of our knowledge, true and accurate. No warranty is implied or given to its accuracy in describing the installation of the PRIMAflex product (this can be found at www.ibs.co.nz). The information on the Davco product is warrantable as per the above paragraph. Users are asked to check that the literature in their possession is the latest issue.

This specification is subject to change. Current information is supplied from December 2019