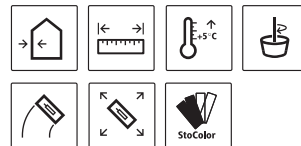


Sto Specification New Zealand

SS604 Stolit MP Bag Wash on Concrete Block Wall Construction

Stolit MP Bag Wash System over new or existing concrete block construction to CCANZ CP 01:2014
CAD Details www.sto.co.nz

Sto Registration: To register your project with Stoanz Ltd please email the completed specification to info@sto.co.nz



1. PROJECT DETAILS

Specifier:

Project and Address:

Project Owner:

Sto Warranty: **Stolit MP Bag Wash 10-year Warranty with StoService Assurance**

Stolit MP Bag Wash System on Concrete Block Construction: This specification details the **Stolit MP Bag Wash System** on concrete block wall construction in accordance with CCANZ CP 01:2014 incorporating: Preparation, **StoFlexyl waterproofing** on block openings, **Sto Putzgrund primer**, finished in selected **Stolit MP (MP, MP Natural, or RMP Sponge) coloured finishing render** troweled on or applied with a block brush or sponge then coated in the selected **StoColor facade paint**.

Select Finishing Render:

Select Facade Coating:

Sto Registration Number:
(Sto Use Only)

i.e. 24.01_StoReg tec_sales_SS206_project address

Project Notes:

Note: The **Stolit MP Bag Wash Render System** shall be applied on a dimensionally sound, structurally stable substrate.

Renderers available

Stolit MP fine adobe render

Stolit MP Natural salt & pepper sandy adobe render

Stolit RMP Sponge coarser salt & pepper sandy adobe render

Note Once applied the render is styled to the selected finish see CI 5.7

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2. CONSTRUCTION & DETAILING

2.1 Responsibility

All work in this section shall be the responsibility of the Main Contractor, unless previously agreed in writing. Stoanz Limited accepts no responsibility for defective workmanship in relationship to the application of the Sto System, or for defects in the design, construction, or condition of the building, either as built or in relation to the works.

The Main Contractor is to ensure that they are fully conversant with exterior legislation requirements, the project specifications, and details, current Sto specification and Sto CAD details (www.sto.co.nz) and any specific installation requirements relating to the Main Contractor's responsibilities before any works commence. The Main Contractor is responsible for the various subcontractors to ensure that all items relating to weathertightness, penetrations and dissimilar material junctions affecting the construction system are strictly in accordance with project specific details, manufacturer's instructions and Sto CAD details, i.e. items such as roofs, soffits, openings, lights and security fittings, electrical wiring, flashings, deck membranes dissimilar junctions etc. that abut, flash or penetrate the system. The Main Contractor shall also ensure that all exterior licensed work is carried out by LBP registered contractors and the joinery is installed in accordance with the project drawings, manufacturer's details and Sto CAD details.

A **Sto Quality Assurance Document** is to be filled out as a record of the work undertaken by the Sto Contractor.

2.2 Concrete Blocks

The concrete block installation including reinforcement and concrete infill shall be undertaken in strict accordance with the project drawings, specifications, and the block manufacturer's technical data. The blocks shall be laid true in both vertical and horizontal planes with all joinery and service openings correctly formed and waterproofed in accordance with Sto details. Control joints must be installed as per the project's structural drawings or block manufacturer's details to manage shrinkage and structural stress. It is recommended the ground floor slab to block junction should be rebated to provide a water stop, and interstorey floors should be poured within the block structure leaving the outer block shell to continue to avoid cracking. At least 28 days shall be allowed after concrete placement as per CCANZ CP 01:2014, for curing and stabilisation to take place before commencing the Sto Render System. All maximum tolerances shall be in strict accordance with NZS 4210, i.e. no more than 3 mm surface alignment deviation over a 1200 mm radius. The exterior surface shall be clean, dry and free of all surface contaminants before commencing and the Main Contractor is to ensure that any areas or details adjacent to the Sto Render System have been adequately waterproofed or flashed to avoid any water migration behind the render system.

2.3 Soffits

Soffits are normally fixed before the rendering commences with a 6-8 mm finishing bead of compatible MS Sealant applied after the mesh coat. The main contractor is to ensure any weatherproofing required on the blocks behind the soffits or adjacent surfaces is carried out before the soffits are installed. Note: Water can penetrate the soffits. Ensure that the block junction is waterproofed above and below the soffits, so it laps under the render system.

Plumbing piping should be set at a downward rake and all penetrations sealed using a compatible MS Sealant before and after rendering with flanges installed afterwards as required.

The Main Contractor is required to familiarise themselves with all of the Sto installation details before works commence to ascertain their obligations. For Sto CAD installation details, visit www.sto.co.nz.

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3. SURFACE PREPARATION

3.1 Responsibility

All the work in this section relating to the **Stolit MP Bag Wash System** shall be the responsibility of the **Sto Contractor** including supplying **Sto uPVC accessories** as required. The laying of the concrete blocks is to be undertaken by a licensed building practitioner (LBP) concrete block layer who shall sign off the finished concrete block work on completion. The contractors must ensure adequate masking / protection of all adjacent dissimilar materials is undertaken before commencing.

3.2 Aluminium joinery

All joinery shall be fixed over **StoFlexyl waterproofing**, allowing for a 5 mm offset from the face of the rebate leaving a 5 mm gap at the sill prior to render application. Before fixing joinery, fill any holes in the rebates and use **StoFlexyl** to waterproof the rebates mixed correctly (1:1 with fresh cement) and brushed on in two coats to the head, jamb and **internal rebate** of the blocks, including the rebate step while the **exterior sills** are to be **StoFlexyl meshed** with the mesh taken 40 mm up the jambs. Sealing the joinery perimeter with MS sealant at the head and jambs after the mesh coat then forms the primary seal while the **sill** is left open with a 5 mm drainage gap. To complete the waterproofing process, **air seals** are required to be installed around all interior joinery to rebate openings.

Note: Timber joinery is also fixed over StoFlexyl.

Note: StoFlexyl meshed waterproofing has been tested by BRANZ to AS/NZS 4858. Air seals and sealant work (primer is required where the sealant contacts StoFlexyl) is the responsibility of the window installer.

3.3 Sealant

All sealant junctions between the render and adjacent surfaces or dissimilar materials shall be jointed with compatible **MS Sealant** applied in accordance with the manufacturer's Technical Data Sheets.

Note: Some manufacturers require primers for PVC, porous substrates, and other dissimilar materials or membranes.

3.4 Detailing

Any details must be in accordance with the project drawings & Sto concrete block details available from www.sto.co.nz.

3.5 Penetrations

Penetrations such as waste pipes and fixtures shall be adequately flashed and waterproofed prior to the render installation. Any electrical wiring that penetrates the render shall be encased in an appropriately sized uPVC conduit installed at a minimum 5° downwards rake.

Note: All penetrations through the render must be adequately sealed with MS Sealant applied as a minimum 6 mm sealant bead using PEF backing rod or Sto joint seal tape.

3.6 Rebated Concrete Foundations

A solid concrete foundation is required with a minimum 50 mm rebate below the concrete floor slab.

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The rebate is waterproofed with a brush coat of **StoFlexyl** or other approved liquid waterproofing. All rendered horizontal wall surfaces should have a minimum 10° fall (5° with block caps) and have **StoFlexyl waterproofing** brush applied. All **StoFlexyl waterproofing** is to be over coated in **Stolit MP Classic** render.

Any floor slabs that are brought through the blocks, and non-rebated ground floor slabs/block junctions, shall have **StoFlexyl meshed waterproofing** applied from 100 mm above and below the transition before the render system commences. Foundation splash zones shall have a brush coat of **StoFlexyl** waterproofing applied from 100 mm above ground level.

Note: StoFlexyl meshed waterproofing has been tested by BRANZ to AS/NZS 4858 as required by CCANZ CP 01:2014 and E2/AS1.

3.7 Control Joints

Control joints as designated by the project drawings or engineer must be incorporated in the concrete block.

Vertical control joints are normally required every 6 lineal metres on walls, where the height of the wall changes by more than 20%; at foundation expansion joints, and dissimilar material junctions.

3.8 Architectural Profiles and Shapes

Architectural shapes used to create decorative detailing shall be correctly cut to size and fitted using **StoFlexyl Adhesive** notch towelled to the back of the shape prior to placing. As required, construction fixings are used to mechanically fix large or heavy shapes, but care is required to avoid distortion. Joints are butted together using **StoFlexyl** and any control joints must be mirrored through the profile. Profiles shall be pre-meshed or receive a **Stolit MP** mesh coat and are placed after the **Stolit MP** mesh coat with perimeter edges meshed to the wall.

4. EXISTING CONSTRUCTION PREPARATION

4.1 Responsibility

All work in this section shall be the responsibility of the **Sto Contractor**, unless otherwise expressly agreed. The **Sto Contractor** shall check that the existing substrates and building elements are acceptable for the rendering process before proceeding. Adequate protection of all dissimilar materials and adjacent surfaces must be undertaken before commencing.

4.2 Existing Substrate

All existing surfaces are to be checked to ensure they are dimensionally sound and load bearing. Cracks are to be cleaned out and any loose, drummy, or spalling concrete removed. Corroded reinforcing must be refurbished and coated in a corrosion inhibiting coating, and the area repaired with the Sto concrete repair system. Work to repair spalling concrete work is to be carried out as a variation or PC sum unless previously identified and scheduled. Painted surfaces must be well adhered and any adhesion impairing surfaces require removal or an adhesion promoting coating or mortar.

4.3 Fixtures and Fittings

Where possible, the main contractor shall have removed all fittings and fixtures such as downpipes, rainwater heads, handrails, lights etc. which shall be re fitted securely after the system is finished ensuring all connections are watertight.

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Wall junctions shall be waterproofed with 3 mm thick EPDM washers to create a watertight seal around fixings.

Note: Pipes, wiring and lights must be appropriately fitted and sealed.

4.4 Chemical Treatment

All surfaces to be refurbished are to be treated with a chemical solution to remove all moss, mould, and any contaminants ensuring the stipulated reaction times are observed before washing off all residues during the cleaning process.

4.5 Cleaning

All surfaces to be treated shall be water blasted using a 3000psi machine to remove all loose material, contaminants and debris supplemented by mechanical, chemical or hand scraping to remove all friable, defective or adhesion impairing material, etc. to establish a clean sound load bearing substrate. Cracks or failed joints are to be stripped out as necessary to remove all defective material. Any coatings that delaminating or are adhesion impairing will require removal.

Note: When using a water blaster due care must be taken to avoid the building elements or adjacent surfaces being damaged from excessive pressure or water ingress. As required rinse down cleaned areas to ensure any salts or contaminants are removed before commencing work.

4.6 Crack Addressment

All stable cracks over 1.0 mm shall be raked clean, sealed with **Stoplex W** and filled with **StoGold Fill** and left to dry. Once dry any cracks over 1.0 mm are to be reinforced with **Sto adhesive joint mesh** before applying another coat of **StoGold Fill** ready for the render system.

4.7 Physical Damage

Any existing damaged areas are to be repaired using Stoanz **Repair Mortar** or **LevelLite** basecoat.

4.8 Control Joints

Any existing control joints are to be expressed through the finished system using **Sto uPVC Control Joints**.

4.9 Sealant Beads

All new sealant beads associated with the cladding system shall be a compatible **MS Sealant** applied in accordance with the manufacturer's Technical Data Sheets. Existing sealant beads around the joinery, fittings, and penetrations shall be checked and reinstalled as required before commencing with the refurbishment process.

4.10 Existing Joinery

All joinery shall have **StoFlexyl meshed waterproofing** installed around the rebates prior to the render application. All existing joinery should have been checked and any leaks, or evidence of water seepage shall have been addressed prior to refurbishing the exterior.

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5. STOLIT MP BAG WASH SYSTEM

5.1 Responsibility

All work in this section shall be the responsibility of the **Sto Contractor** who must assure themselves that the surfaces to be rendered are dry, free of contamination and satisfactory before work commences. Adequate protection of all adjacent surfaces shall be undertaken prior to commencing.

5.2 Selection

Rendering shall be carried out in stages over the concrete block wall incorporating. Preparation, **StoFlexyl Waterproofing**, **Sto Putzgrund primer**, selected **Stolit MP** render brush applied with a block brush and coated in selected **StoColor facade paint**.

5.3 Materials

Stoanz Ltd supplies all the following materials:

Sto Putzgrund primer	Selected Stolit MP render
StoFlexyl Waterproofing	Selected StoColor façade paint

5.4 Sto Putzgrund primer

To clean, dry, prepared surfaces, apply one full coat of **Sto Putzgrund** by brush and roller at an approximate coverage of 8m² per litre and leave to dry.

5.6 Sealant Installation

After the primer has dried, all junctions between joinery and adjacent dissimilar surfaces and around penetrations shall be sealed with **MS Sealant** in accordance with the manufacturer’s Technical Data Sheets. Some manufacturers require primers for PVC or porous substrates.

Note: Some types of joinery have drainage holes under the sill flange ensure these remain clear. Where sealant is being applied directly over **StoFlexyl waterproofing**, the StoFlexyl must be primed to promote adhesion in accordance with the sealant manufacturer’s instructions.

5.7 Selected Stolit MP Finished Renders (refer to front page for selected finish)

Stolit MP fine coloured finish, MP Natural salt & pepper sand, RMP Sponge coarser salt & pepper sand

- **Selected Stolit MP, MP Natural, and RMP Sponge coloured finishing render**

The selected **Stolit MP** coloured finishing renders thinned to workable consistency and are applied in one (1) or two (2) coats. A basecoat of the selected **Stolit MP** is applied and allowed to dry and as necessary to match the selected finish a second coat of **Stolit MP** is applied. The selected finish can be trowel applied and styled with – block brush, sponge, Sto rake, texture roller, jute sacking, etc to create the selected finish.



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5.8 StoColor façade paint (refer to front page for selected finish)

All **Stolit MP rendered** surfaces shall receive a minimum two (2) coats of selected **StoColor Maxicryl, or StoColor Dryonic** façade paint tinted to the selected colour and applied by brush and roller at approximately 6-7 m² per litre.

Note: Always maintain wet edges between cutting in and roll in tight to ensure an even film build is maintained. Refer **Section 7. StoService** for recoating requirements.

6. GENERAL NOTES

6.1 Colour

As selected by the client or specifier Stoanz Limited recommends that the selected colour must have a minimum Light Reflectance Value of 25%. Where a colour less than 25% LRV but above 10% is selected, the render system is finished with two coats of **StoColor Dryonic a Sto iQ coating with X-Black technology additive** to avoid thermal stress.

StoColor Dryonic façade paint with Sun blocker and fast dry film biomimetics. is available in the StoColor range, with other colours available depending on formulation.

7. STOSERVICE ASSURANCE

7.1 StoService Assurance - Refer to StoService Documents for a comprehensive guide.

It is the owner's responsibility to clean the Sto System annually by low pressure washing or hosing down to remove surface contaminants with special attention to sheltered areas, as required, use a proprietary house wash sprayed on first with a low-pressure garden spray in accordance with the manufacturer's instructions. The owner is also responsible for organising the maintenance in accordance with the 3-yearly StoService Schedule available online at www.sto.co.nz.

After cleaning, a visual inspection is to be undertaken by the person undertaking the annual maintenance to check for any physical damage or faults in the exterior building elements, to ensure any damage or faults are identified and repaired.

To assist the property owner in establishing a regular maintenance cycle, the property owners email address can be registered with service@sto.co.nz. Stoanz Limited will then provide 2½ yearly reminder notices that the property is due for the 3-yearly StoService.

Depending on the prevailing environmental conditions and the service record, recoating of the paint finish is normally required at the 10 years where two coats were applied to maintain long-term integrity. This is carried out using a **StoColor Coating System** applied in accordance with a Sto specification. Where a colour change is required, Stoanz Limited should be consulted.



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8. WARRANTY

8.1 Stolit MP Bag Wash 10-year Warranty with StoService Assurance

When the **Sto Bag Wash Render System** is applied in accordance with the Sto specification, Sto details and Sto Quality Assurance schedule, a warranty is available to cover the Sto System for 10 (ten) years from the date of practical completion, provided maintenance requirements as set out in the StoService Schedule are followed.

This is to comply with the relevant clauses in the New Zealand Building Code for this type of building element.

The Sto Warranty is supplied by Stoanz Limited to the Sto Contractor who signs off the work on completion of the project. Stoanz Limited confirms the materials supplied have been appraised and are fit for purpose provided that:

- (a) All specified work is carried out by a registered Sto Contractor who must complete the Sto Quality Assurance Schedule, submits the Sto Warranty Request, and sign off the five-year PS3 Workmanship Warranty.
- (b) All work is carried out in accordance with this Specification, or any written amendments issued by Stoanz Limited.
- (c) The warranty does not cover situations where the render system is subjected to damage, physical disturbance, chemical contamination, or interference.
- (d) The substrate under the render finish must be structurally sound. Cracks in the substrate that reflect through the render are not covered by the StoWarranty.

9. DISCLAIMER

9.1 Disclaimer

The information contained in this specification is based on our findings, experience, testing and certification at the revision date. End users are still responsible for establishing the suitability of the specified products regarding their intended use. No liability is undertaken for use of this information outside of Stoanz Limited parameters or for the substrates, design, construction, and project site conditions that are outside of Stoanz Limited's control. Where a Sto registered contractor applies Stoanz purchased products in accordance with the Sto Specifications, Material Technical Data Sheets and Sto Details, a Sto Material Warranty document is available, but the installation of the materials remains the responsibility of the Sto Contractor who provides the PS3 Warranty. Any warranty is conditional on the system being maintained and serviced in accordance with the StoService documentation. Stoanz reserves the right to alter or update information and formulations at any time without prior notice.