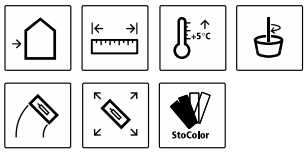
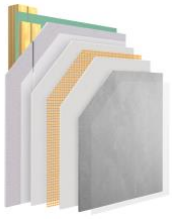
Sto Specification New Zealand

SS306 StoArmat Render System on Axon™ Panel Smooth

StoArmat Render System over James Hardie
Axon™ Panel Smooth
BRANZ Appraisal No. 488
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:	**StoArmat Render System 15-year Warranty with StoService Assurance**
StoArmat Render System on Axon™ fibre cement panel over timber/steel framed construction.	This specification details the application of the **StoArmat Render System over 9 mm thick Axon™ Panel Smooth** on a cavity over timber or steel framed construction complying with the NZBC incorporating: **Sto Putzgrund** primer, full coat of **StoArmat Classic meshed** reinforcement render, selected **Stolit coloured finishing render** coated in selected **StoColor facade paint.** **Note:** The **StoArmat Render System** has passed the **BRANZ Impact Test** at maximum drop height with no damage being recorded. The **Sto Armat render** system includes 4 mm of malleable, weathertight polymer render.
Select Finishing Render:	Select
Select Facade Coating:	Select
Sto Registration Number:	ie: 24.04_StoReg tec_sales_SS306_project address
Project Notes:	

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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 or site conditions.

The Main Contractor is to ensure that they are fully conversant with exterior legislation requirements, the project specifications and details, the fibre cement panel manufacturer's documents, current Sto specification and Sto 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 also responsible for the various sub-contractors 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 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 window and door joinery is installed in accordance with the project drawings, manufactures details and Sto details. Building tolerances should be within MBIE Guide to tolerances.

In conjunction with an Axon™ Panel Smooth installation QA, a **Sto Quality Assurance Document** is to be filled out as a record of the work undertaken by the panel installer and Sto Contractor.

Note: All products are to be installed and handled in accordance with their current Technical Data Sheets, Material Safety Data Sheets, Specifications and QA documents.

2.2 Timber Frame

Timber framing must comply with NZS 3604 for buildings or parts of a building within the scope limitations of NZS 3604. Buildings or parts of a building outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170. Studs must be at maximum 600 mm centres in Low, Medium, High and Very High Wind Zones and maximum 400 mm centres for Extra High Wind Zones and specifically designed buildings. Dwangs must be fitted flush between the studs at maximum 800 mm centres when the studs are at 600 mm centres and 1200 mm centres when the studs are at 400 mm centres. All framing shall be true in vertical and horizontal planes with attention to intersections between top plate, floor joists and bottom plate in multi-storey construction. Adequate timber framing including blocking shall be provided by the Main Contractor to facilitate cladding fixings for the designated wind zone, membrane upstands, dissimilar materials, and exterior fixtures on the cladding.

Note: Framing must be installed in accordance with James Hardie Specifications and details.

The level of timber treatment shall be in accordance with NZBC Acceptable Solution B2/AS1. Generally, this will require a minimum treatment level of H1.2. The moisture content of the timber frame shall be no more than 24% prior to installing the cladding system.

2.3 Steel Frame

Refer to James Hardie specifications for steel framing construction requirements.

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2.4 Insulation

Thermal resistance requirements of the building envelope shall be determined using the Schedule or Calculation methods of NZBC Acceptable Solution H1/AS1 for all housing and buildings up to 300 m^2 and NZBC Acceptable Solution H1/AS2 for buildings greater than 300 m^2, or the Modelling method in H1/VM1.

Refer to the StoTherm Masonry Foundation Specification for insulated foundation options.

2.5 Wall Underlay

A flexible wall underlay is suitable for use in NZS 3604 Wind Zones up to, and including, Very High. A rigid wall underlay is required in the Extra High Wind Zone and specific design wind pressures.

Flexible wall underlays complying with NZBC Acceptable Solution E2/AS1, Table 23 shall be installed in accordance with the underlay manufacturer's instructions. The underlay shall be installed horizontally and be continuous around corners. The underlay must be lapped minimum 75 mm at horizontal joints, and minimum 150 mm over studs at vertical joints. Where studs are at greater than 450 mm centres, a wall underlay support must be installed over the underlay at maximum 300 mm centres horizontally (or additional vertical cavity battens can be installed) to prevent bulging of the underlay into the cavity space.

Generic rigid wall underlay materials shall be installed in accordance with E2/AS1 and be overlaid with a flexible wall underlay. Proprietary systems covered by a valid BRANZ Appraisal or CodeMark Certificate shall be installed in accordance with the manufacturer's instructions. Where rigid wall underlays are used, the fibre cement panel fixing length shall be increased by at least the thickness of the underlay.

Unlined gables or walls shall incorporate a rigid wall underlay or a flexible air barrier which meets the requirements of E2/AS1, Table 23.

Note: Ensure any items requiring fixing to the timber frame or items penetrating the wall underlay such as fixing brackets etc. are installed and flashing taped onto the wall underlay in accordance with E2/AS1.

2.6 Soffits

Soffits are normally fixed before the cladding is installed. The cladding cavity is closed off with cavity battens to provide support for cladding fixings and restrict air flow into the roof space.

2.7 Penetrations and Fittings - refer E2/AS1 Fig 68

Penetrations and fittings such as waste pipes, vents etc. shall slope to the exterior, be adequately supported by blocking and as required be sealed to the underlay with flexible flashing tape in accordance with E2/AS1 Fig 68, or with a proprietary penetration seal covered by a valid BRANZ Appraisal or CodeMark Certificate, prior to cladding installation. Exterior flange plates shall be installed as required around the penetration after the cladding has been installed.

Blocking must be installed for the fixing of taps, door hooks, lights, gas fittings, security alarms etc. Electrical wiring shall only penetrate the cladding and render system in a PVC conduit with a downwards rake of 5 degrees. MS sealant applied over a backing rod shall be used to seal around the conduit where it penetrates the cladding.

2.8 Aluminium Joinery

All joinery shall be detailed and fitted before the installation of the fibre cement cladding. Proprietary head flashings are supplied by the main contractor, shall extend minimum 20 mm past both joinery jambs, have stop ends in the cavity, a minimum 15-degree slope and be fixed prior to the installation of the fibre cement panel with flexible flashing tape securing the flashing upstand to the wall underlay.

All window and door joinery shall be positioned 3-4 mm off the fibre cement panel to allow for the **StoArmat uPVC Jamb and Sill flashings** to clip into the joinery and be adhered in place. Refer to the project specific details and current StoArmat details.

Note: The StoArmat sill flashing is cut 40 mm longer (20 mm each end) than the window, so it sits up under the jamb flashings with the sill back tab hook cut back 30 mm and the jambs tab hook cut back 8 mm, so it sits tight against the sill flashing (trim jamb/sill joinery rib to accommodate protruding screw heads). At the window head, the cavity is closed off with a uPVC vented cavity closure and a **Sto uPVC Clip On tray** is fitted over the fibre cement panel edge, (the back upstand can be snapped off) to achieve a straight line leaving a minimum 5 mm gap to the head flashing. A **Sto pre-meshed uPVC finishing edge** can be used but the panel edges and back edge should be pre-primed.

Note: Always refer to the **StoArmat Render System** details or project specific details before commencing. Air seals are required to be fitted by the window installer or the main contractor in accordance with E2/AS1, Paragraph 9.1.6, and the main contractor is to supply the aluminium head flashings. **Sto uPVC Clip On trays** are normally supplied by the Sto Contractor and are fitted by the panel installer. On some joinery, the sill flanges have drainage holes under the sill flange; ensure they remain clear.

2.9 Control of External Fire

The specified Sto renders have been tested to EN 13501-1 and have achieved an A2-s1, d0 rating. The StoArmat Render System has been tested to ISO 5660.1 and achieved a peak heat release rate of less than 100 kW/m^2 and total heat released of less than 25 MJ/m^2. The system is therefore suitable for use on buildings at any distance to the relevant boundary.

3. AXON™ PANEL SMOOTH INSTALLATION

3.1 Responsibility

Unless expressly agreed otherwise, work in this section shall be the responsibility of the **Main Contractor**. The **Sto Contractor** is to allow for the **Sto uPVC flashings** required and provide them to the main contractor.

3.2 Soaker Strips, Flashings, Tapes, Control, and Interstorey Joints.

Soaker strips, flashings, tapes, and control and interstorey joints shall be set out as per the Axon™ Panel Smooth Texture Coating Technical Specification from James Hardie, and where applicable the StoArmat details, and shall be correctly installed at the time of panel fixing.

3.3 Cavity Battens – James Hardie CLD Battens or Timber Battens

All exterior wall framing shall be battened in accordance with the selected batten layout as set out in the Axon™ Panel Smooth Technical Specification and details.

Cavity battens shall be installed over the wall underlay to the wall frame at maximum 600 mm centres (300 mm centres when the cavity batten is being used to support a flexible wall underlay), or at 400 mm centres, where the studs are at 400 mm centres.

The timber studs shall receive cavity battens in accordance with the James Hardie CLD or timber batten Axon™ Panel Smooth Technical Specification and Details.

Note: Framing set out and fixing must comply with the Axon™ Panel Smooth manufacturer's details, technical data, QA and specifications.

3.4 9 mm Axon™ Panel Smooth

The Axon™ Panel Smooth cladding shall be installed in accordance with the details and instructions contained in the Axon™ Panel Smooth Texture Coating Technical Specification from James Hardie using their QA schedule. Before starting, check framing is true and straight in both horizontal and vertical planes and take care to ensure that nailing patterns are maintained, and panel edges are not damaged during panel installation. Where panels are to be continued over interstorey junctions, care shall be taken that the horizontal and vertical planes are maintained. The panels must hang down minimum 35 mm past the cavity batten for the **StoArmat ClipOn tray**. As required, the ClipOn back can snap off to accommodate 15 mm overhang at window heads etc.

Note: If panel fixing and layout is doubtful, a James Hardie Representative should be contacted for a site inspection and approval before any render work is undertaken.

3.5 Horizontal Sheet Joints (not control or inter-storey joints)

Where a wall height (with continuous studs) is taller than the standard panel height, horizontal Axon™ Panel Smooth edges shall be rebated on site to create a rebated joint.

Note: Rebated horizontal joints must not be used at floor joists or gable ends. Refer to Paragraph 3.6 below.

3.6 Vertical Sheet Joints (not control joints)

When installing the sheets, all vertical sheet joints shall be detailed in accordance with the James Hardie Axon™ Panel Smooth Technical Specification and details relevant to the cavity batten system selected.

3.7 Control and Inter-Storey Joints

All control and interstorey joints as designated by the project documentation and drawings or Axon™ Panel Smooth Texture Coating Technical Specification from James Hardie must be followed. Refer to the StoArmat CAD details for specific control joint design details. Vertical control joints are required to be placed at maximum 5.4 m centres or as specifically detailed. Horizontal control joints are required at interstorey junctions or every 5.4 m vertically on continuous studs. Continuous cavity heights are limited to the lesser of 2-storeys or 7 m in height before an inter-storey drained flashing joint is required.

Note: Sto uPVC 8 mm flexible vertical control joints and Sto 12 mm interstorey joints, StoArmat ClipOn trays and **StoArmat Joinery flashings** are available from Stoanz Limited for control joints, interstorey joints and joinery flashings.

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3.8 Fixings

Ensure that all fixings as specified by James Hardie have the appropriate corrosion resistance, are correctly sized and securely fastened without over driving the fixings into the panel.

3.9 Back Priming

Back-priming of panels must be carried out in accordance with the panel manufacturer's requirements. The Main Contractor shall be responsible for back priming of panels with an acrylic primer prior to their installation.

3.10 Sealant Beads

All sealant associated with the system shall be a compatible **MS Sealant** applied in accordance with the manufacturer's Technical Data Sheet. A primer is required on **StoFlexyl surfaces** and as required on PVC, porous substrates, and dissimilar materials.

3.11 Surface Cleaning

The Contractor shall ensure that all contaminants and dust are removed from the panel surfaces before rendering.

3.12 Balustrade Caps (Note: Metal caps are required on parapets)

Any horizontal rendered surfaces must have a minimum 10º fall and have **StoFlexyl waterproofing** membrane installed. On **balustrades, StoFlexyl** must be correctly mixed (drill mix 1:1 with **fresh** cement) and applied with a layer of Sto mesh embedded into the **StoFlexyl**, which is then floated to a level surface attaining a total minimum film thickness of 1.5 mm. Extend the membrane 75 mm up or down adjacent vertical surfaces (see StoArmat CAD details) and allow to dry overnight. All **StoFlexyl waterproofing** is to be over coated in **StoArmat** meshed reinforcement render.

Note: StoFlexyl meshed waterproofing has been evaluated by BRANZ to meet the waterproof membrane requirements of **AS/NZS 4858** as required by E2/AS1 for membranes used with render systems.

Note: E2/AS1 compliant metal cap flashings are required on parapet tops.

3.13 Architectural Shapes and Profiles

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**, with any control joints mirrored through the profile. Profiles shall be pre-meshed or receive a **StoArmat** mesh coat and are placed over the **StoArmat render** mesh coat with the perimeter edges meshed to the wall unless a gap is required along the bottom edge, e.g., where the profile covers a control or interstorey joint.

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4. STOARMAT RENDER SYSTEM

4.1 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.

Note: All products are to be handled and installed in accordance with their current Technical Data Sheet, Material Safety Data Sheet, Specifications and QA documents.

Note: Ensure the surfaces of all Axon™ Panel Smooths have been cleaned before commencing.

4.2 Selection

Rendering shall be carried out in stages over correctly installed and detailed panels incorporating: **Sto Putzgrund primer, StoArmat Classic** mesh reinforced render and the **selected Stolit** coloured finishing render coated with the **selected StoColor** facade paint or **S-Protect SC sealer** for Stolit MP or Milano.

4.3 Materials

Stoanz Ltd supplies the following materials:

Sto Putzgrund primer	**StoArmat Classic meshed reinforcement render**
Selected Stolit coloured finishing renders	**Sto uPVC ClipOn trays, pre-meshed corner angles, finishing edges and drip edges.**
Selected StoColor facade paint or S-Protect sealer	**StoFlexyl waterproofing**

4.4 Panel Priming

Apply one full coat of **Sto Putzgrund** by brush or roller at the approximate spreading rate of 7-8 m² per litre to the total surface area to be rendered ensuring all rebated panel joints are coated.

4.5 Sto uPVC Flashings

The **Sto uPVC ClipOn tray** is used to align the bottom edge of the fibre cement panels at the foundations, roofs, decks, window heads and anywhere the panels require a bottom tray. The trays are adhered in place with construction adhesive. If required, the back upstand has a 15 mm tear mark to enable fitting behind the panels with reduced clearance, e.g., at window joinery heads.

StoArmat uPVC Joinery flashings are used to flash joinery jambs and sills, unless an Inseal tape has been used behind the joinery. Interstorey joints are detailed as per the panel manufacturer's details and a **Sto uPVC 12mm interstorey control joint** is used to cover the panel joint as per the Sto details. Alternatively, an Architectural profile can be used over a flashing or H mould joint.

4.6 Control Joints

Control or interstorey joints as designated by the project drawings or panel manufacturer's technical data must be followed. Control joints must be installed in the **StoArmat** mesh coat using the **Sto uPVC 8.0 mm vertical control joints or 12 mm interstorey joints** ensuring the mesh coat does not overlay the joint.

4.7 Vertical Panel Joints

Joints in the cladding panels are filled using **StoArmat Classic** ensuring the joint is level with the surrounding panel surface before leaving to dry overnight.

4.8 Rebated Horizontal Panel Joints

Rebated horizontal joints in the Axon™ Panel Smooths are filled using **StoArmat Classic** reinforced with **Sto Jointing Tape** embedded into the **StoArmat render**, ensuring the joint is level with the surrounding sheet surface before leaving to dry.

4.9 StoArmat Classic Reinforcement Render
StoArmat Classic HD with hardener for accelerated drying in cold damp weather are also available.

To clean, dry, jointed, and primed surfaces, apply an even coat of **StoArmat Classic** render by hawk and trowel at approximately 2.0 mm thick. While the **StoArmat Classic** is still wet, lightly apply **Sto reinforcing mesh** ensuring adjacent drops of mesh are overlapped by a minimum 75 mm and float the surface to ensure the mesh has been embedded in and allow to dry. Once dry, apply a further coat of **StoArmat Classic** at approximately 1.5 mm thick (minimum overall DFT 2.5 mm) by hawk and trowel to cover the mesh and leave an even surface free of voids or deviations.

Once dry, remove any slight ridging etc. of the **StoArmat Classic** with a Sto rasp ready for subsequent top coating. All application procedures for the **StoArmat** must be in accordance with the Sto Technical Data Sheets. Always install **Sto pre-meshed uPVC edges** on lintels, **Sto pre-meshed** corner angles on external corners and **Sto pre-meshed finishing edges** as detailed.

4.10 Sealant Installation

All junctions or detailing between the render mesh coat and dissimilar materials shall be sealed with compatible exterior MS Sealant in accordance with the manufacturer's Technical Data Sheets. **Note:** Some manufacturers require primers for PVC, porous substrates, dissimilar materials and some coatings.

Note: 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. The joinery sills must remain unsealed and open to permit ventilation of the window trim cavity.

4.11 Stolit Float Finish Renders (refer to header for selected finish)
Stolit K texture is available in a flat 1.0, 1.5, 2.0, 3.0 mm aggregate as selected.

- **Stolit K coloured finishing render as selected**

Apply the selected **Stolit K** coloured finishing render to prepared rendered surfaces with a stainless-steel trowel, gauging to the thickness of the aggregate size. Finish with a plastic float to the requisite pattern and allow to dry (normally

overnight). The spreading rate shall be approximately 12 m^2 per pail (1.0 mm), 9 m^2 per pail (1.5 mm), 7 m^2 per pail (2.0 mm) and 4 m^2 per pail (3.0 mm).

- **StoColor façade paint**

It is recommended that all **Stolit K** surfaces receive two (2) coats of **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. One (1) coat is acceptable though it will need recoating more frequently. Refer **Section 6** for recoating requirements.

Note: Maintain wet edges between cutting in and roll in tight to achieve an even film build.

4.12 Selected Stolit MP Finished Renders (refer to front page for selected finish) Stolit MP fine coloured finish or MP Natural salt & pepper sand finish

- **Selected Stolit MP or MP Natural coloured finishing render**

Stolit MP and **MP Natural** are coloured finishing renders applied in two (2) coats. A basecoat of the selected **Stolit MP** or alternatively, depending on the finish, **Stolit K 1.0 mm** tinted to the selected colour, is applied, and allowed to dry. The finishing coat of **Stolit MP or MP Natural,** is then applied, float finished and randomly lightly sponged. Alternatively, the finish can be float finished, sponged, or smooth finished with a stainless steel Marmorino trowel to the selected pattern. The spreading rate of the **Stolit MP** or **MP Natural** is approximately 12-14 m^2 per pail.

- **S-Protect SC Invisible Silane Sealer (clear sealer)**

To the selected **Stolit MP**, apply an even coat of **S-Protect SC** hydrophobic sealer (clear invisible silane sealer) in a flood coat using a low-pressure sprayer and Sto block brush to work the product into the Stolit render, avoiding runs, and brushing in any lingering drips etc. so they don't show up. Surfaces must be well coated, and it is recommended to work in a pattern preferably out of the sun to ensure that there are no misses as the sealer is invisible once dry.

Note: All joinery, glazing and adjacent surfaces must be masked off to prevent the **S-Protect SC** contaminating the surfaces. Any excess product must be removed after 15 minutes to avoid a surface film forming that can be difficult to remove. Refer **Section 6** for recoating requirements.

- **StoColor façade paint (paint finish if selected)**

If selected, it is recommended that all **Stolit MP** surfaces receive two (2) coats of **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. One (1) coat is acceptable though it will need recoating more frequently. Refer **Section 6** for recoating requirements.

Note: Maintain wet edges between cutting in and roll in tight to achieve an even film build.

4.13 Stolit Smooth Finish Render

- **Stolit Milano coloured finishing render**

Stolit Milano is a smooth pre-coloured finish applied in two (2) or three (3) coats. A basecoat of **Stolit Milano** tinted to the selected colour is applied and allowed to dry before the finishing coats of **Stolit Milano** are applied and steel troweled, floated or lightly randomly sponged to the selected pattern. The spreading rate of the Stolit Milano is approximately 16-18 m^2 per pail.

- **S-Protect SC Invisible Silane Sealer (clear sealer)**

To **Stolit Milano**, apply an even coat of **S-Protect SC** hydrophobic sealer (clear invisible silane sealer) in a flood coat using a low-pressure sprayer and Sto block brush to work the product into the Stolit render, avoiding runs and brushing in any lingering drips etc. so they don't show up. Surfaces must be well coated, and it is recommended to work in a pattern preferably out of the sun to ensure that there are no misses as the sealer is invisible once dry.

Note: All joinery, glazing and adjacent surfaces must be masked off to prevent the **S-Protect SC** contaminating the surfaces. Any excess product must be removed after 15 minutes to avoid a surface film forming that can be difficult to remove. Refer **Section 6** for recoating requirements.

5. GENERAL NOTES

5.1 Colour

As selected by the client or specifier, Stoanz Limited recommends that the selected colour have a minimum Light Reflectance Value (LRV) of 35%. Where a colour less than 35% LRV but above 25% 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.

6. STOSERVICE ASSURANCE

6.1 StoService - 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 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 defects 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 is normally required at 10 to 12½ years where two coats paint were applied, or 8-years where one coat of paint or S-Protect silane sealer was applied, to maintain long-term integrity. This is carried out using a **StoColor Coating System** or **S-Protect System** applied in accordance with a Sto specification. Where a colour change is required, Stoanz Limited should be consulted.

7. WARRANTY

7.1 StoArmat 15-year Warranty with StoService Assurance

When the **StoArmat Render System** is applied in accordance with the Sto specification, Sto details and Sto PS3 Quality Assurance schedule, a warranty is available for the Sto System for fifteen (15) 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, submit 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, structural stress, substrate cracking, or interference.

8. DISCLAIMER

8.1 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.