SPECIFICATION

Plasterpol
eps facade system

Project information

Date:

Project name:

Project address:

Specification prepared for:

Specifier:

Selected Supercoat finishing texture:

Scope & Limitations

SCOPE

The Plasterpol EPS Drained & Ventilated Facade System is suitable for use as an external wall facade system for timber framed buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- constructed with timber framing complying with the NZBC; and,
- with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
- situated in NZS 3604:2011 Building Wind Zones up to, and including 'Very High'.

The Plasterpol EPS Drained & Ventilated Facade System is also suitable for use as an external wall facade system for steel framed buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, with regards to building height and floor plan area; and
- constructed with steel framing complying with the NZBC; and,
- with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
- situated in NZS 3604:2011 Building Wind Zones up to, and including 'Very High'.

The Plasterpol EPS Drained & Ventilated Facade System shall be used with aluminium window and door joinery that meets the requirements of NZS 4211 for the relevant Building Wind Zone. Installation of the Plasterpol EPS Drained & Ventilated Facade System shall be carried out only by trained and approved Plasterpol EPS Facade System Installers and Supercoat™ Coating System Applicators.

› Scope & Limitations cont.

LIMITATIONS

The Plasterpol EPS Drained & Ventilated Facade System shall only be installed on vertical surfaces (except for tops of parapets, sills and balustrades, which shall have a minimum 5º slope and be waterproofed in accordance with the Technical Literature). The Plasterpol EPS Drained & Ventilated Facade System shall not be used on a single storey wall closer than 1.0m to a boundary. The Plasterpol EPS Drained & Ventilated Facade System shall not be used on walls over 7.0m high more than 1.0m of a boundary for all purpose groups except SA and SD.

› General

This specification is for the application of the Plasterpol EPS drained & ventilated façade system. The system consists of 50mm EPS panels fixed to timber or steel framing over high density polystyrene battens or Cavibat battens to form a 20mm drained cavity. The EPS is then coated with a range of reinforced SupercoatTM renders, finishing textures and Supercoat's high build acrylic paint systems.

This specification must be read in conjunction with the Plasterpol design and installation guide and appraisal certificate.

› Health and safety

When cutting or drilling the EPS panel, this must be carried out in an open air or well ventilated area. Dust masks, eye protection and gloves MUST be worn. All aspects of cutting or drilling must comply with the latest regulations of the occupational health and safety division.

› Responsibility

It is the responsibility of the Main contractor & subcontractors involved in any exterior work to install the system in accordance with the project drawings, Plasterpol Facade System Design Guide, detailed drawings and specification.

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 buildings outside the scope of NZS 3604 must be specifically designed in accordance with NZS 3603 and NZS 4203 (AS/NZS 1170). Timber grade and treatment shall be in accordance with the requirement's set out in NZS 3602. The moisture content of the timber must be 18% before cladding installation. Studs must be at a maximum 600 mm centres, dwangs/nogs at 800mm centres fixed flush with the studs. Framing must be straight and true in alignment. The Main contractor shall provide blocking or additional studs if required at openings, joints, corners and soffits etc.

Steel Frame

Steel framing must be specifically designed to meet the requirements of NZBC, (Nash 3405:2006). The minimum framing specification is "C" section, the steel thickness must be a minimum of .55mm, and have a total section size of the studs and dwangs at 76mm web and 40mm flange. Steel framed buildings situated within NZS 3604 defined wind zones up to and including 'very high' shall have Studs at a maximum 600 mm centres, dwangs/nogs at 800mm centres fixed flush with the studs. All other building studs must be at a maximum of 400mm centres.

Framing must be straight and true in alignment. The Main contractor shall provide additional dwangs or studs if required at openings, joints, corners and soffits etc.

Building underlay

Flexible wall underlay is installed in NZS 3604 wind zones up to very high. A Rigid underlay is required in extra high wind zones and specific designs. Gables must be lined or include an air barrier that meets the requirements of NZBC E2/AS1. All underlays and tapes meeting the requirement of E2/AS1 shall be returned into opening, lapped, flashing taped and installed as per the manufactures instructions prior to the cladding installation. All penetrations must be taped onto the building underlay in accordance with E2/AS1.

Rigid wall underlay shall be laminated wood or fibre cement sheeting that complies with NZBC Acceptable solution E2/AS1table 23 or an appraised rigid underlay for the use of a rigid air barrier.

› Soffits

In most cases soffits are to be fixed before the Plasterpol system installation with an allowance made to close off the cavity with framing or battens to eliminate airflow into the roof space. Inclined soffits require a flashing at the soffit to cladding junction.

› Window and door Joinery

All windows and doors shall be installed before the installation of the Plasterpol system. Windows and doors shall be 25mm from the face of the framing to the back of the flange.

› Head flashings

Aluminium head flashings are to be fitted by the main contractor and flashing taped onto the wall underlay. The head flashing shall extend 6mm past each side of the joinery jambs (12mm in total). The head flashing shall have a 20mm stop end, a minimum 35mm upstand (or for extra high wind zones a minimum 60 upstand) with a 15 degree slope and 10mm cover over the joinery flange. A Plasterpol PVC base cap is to be fitted above the Aluminium head flashing by the Plasterpol contractor.

› Penetrations

All penetrations shall be flashed with flashing tape to the wall underlay or with an approved flange sealed in accordance with E2/AS1. All penetrations through the Plasterpol facade system shall be foamed and sealed with Plasterpol approved MS sealant. Suitable uPVC conduit must be used when electrical wiring etc. penetrate the Plasterpol system. Penetrations into the Plasterpol system shall be on a minimum 5 degree downward fall to the exterior.

› Plasterpol system components

Plasterpol EPS panels size:	2400 x 1200 x 50mm
Plasterpol panel material:	Grade H EPS sheet Platinum Grade H EPS sheet
Battens:	20 x 40mm High density polystyrene or 19 x 42 Cavibat battens
Plasterpol fixings:	Timber Frame - 100 x 4mm, hot dipped galvanised, flat head nails with 43mm dia. plastic washers Steel Frame - 90mm x 10g, self-drilling, AS 3566, Corrosion class 3 screws with 43mm dia plastic washers
Plasterpol flashings:	Plasterpol approved stick on PVC sill flashing Plasterpol approved stick on PVC Jamb flashing Plasterpol approved PVC base cap
Vents:	100 x 50mm Aluminium Vent
Adhesives:	Sabre Fix PS or Nail power Construction Adhesive
Sealants:	Sabre seal MS Façade or Holdfast Fix all MS 220Lm
Tanking:	Supercoat tanking membrane
Plaster system:	Supercoat Multitex render Alkaline resistant Super mesh Pre meshed corners & base beads Selected Supercoat skimming render Selected Supercoat texture Supercoat surface sealer Selected Supercoat high build Protective paints Supercoat tanking membrane Supercoat tanking membrane key coat

› Product storage

Plasterpol EPS panels must be stored on full length pallets with protective packaging. Bagged product/dry goods must be stored on a pallet off the ground in a dry area protected from the weather. Acrylic products must be stored in a sealed pail in frost free conditions. UPVC flashings must be stored out of direct sunlight on a flat surface.

› Framing

Prior to the Plasterpol façade system installation the Plasterpol contractor shall check the framing to assess whether additional blocking is required and that the framing is straight and true.

› Plasterpol Battens

Exterior framing shall be battened using very high density polystyrene (Class VH minimum density 28kg/m3) battens or Cavibat battens to create a 20mm cavity. All battens shall be laid out as per the Plasterpol EPS façade system design and installation guide and details. Horizontal battens must be a maximum 100mm in length and fitted with a minimum 5 degree slope. Additional battens are required as necessary at external and internal corners, openings and cladding junctions. Battens are fixed using suitable Plasterpol approved glue or 30mm galvanised flat head nails.

› Sill and Jamb Flashings

All joinery is fitted with Plasterpol PVC stick on sill and jamb flashings before the panel is installed. The sill flashing is connected to the jamb flashing using a corner soaker and is sealed together using Plasterpol approved MS sealant. The jamb flashing is to finish tight under the stop ended aluminium head flashing. The Plasterpol EPS panel is fixed to the sill and jamb flashings using suitable Plasterpol approved sealant/glue.

› Foundation (flush with framing)

Where the framing is flush with the foundation a vented Plasterpol approved base cap is installed after the panel installation 50mm minimum below the bottom plate.

› Foundation (rebated slab)

A Rebate in the foundation must be 50mm minimum below floor level or supporting frame and 65mm wide +- 5mm. The rebate shall be waterproofed using in Supercoat tanking membrane. Vents must be positioned every 1000mm^2 per metre or run at the base of the panel to provide ventilation.

› Plasterpol EPS panel installation

Once the battens have been fixed to the studs, fix the bottom row of Plasterpol EPS panels vertically starting 50mm below the floor level or supporting frame, with vertical joints occurring on the studs.

Panels are butt joined except at corners where one panel overlaps the other.

Panels are fixed to the studs & dwangs at maximum 300mm centres in Low, Medium and High Wind Zones and 200mm centres in the Very High Wind Zone

Vertical control joints must be placed at a maximum of 20.0m centres aligned with any control joint in the structural framing, where building frame movement is likely, or where the system abuts other construction. Where vertical control joints are to be inserted the Builder shall ensure that double studs are fixed in place so that the Plasterpol Pre-Mesh Control Joint can be glued in place.

Note: the main contractor is to ensure that areas/junctions adjacent to the panels have been flashed/waterproofed to stop water getting behind the cladding.

Horizontal control joints in walls clad with Plasterpol™ shall be located at a maximum of 7m vertical centres, however, horizontal control joints may be located at each mid-floor level as below.

Inter-storey Junctions above 2 Storeys or 7.0m High

Inter-storey drained control joints shall be provided at inter-storey junctions including gables.

Inter-storey Junctions for buildings of 2 Storeys or below 7.0m High

In unseasoned timber walls only, the inter-storey control joints shall be provided at all inter-storey junctions where unseasoned timber is used.

In seasoned timber or steel framed walls only, no interstorey control joints need be used

› Sealant

All junctions between the Plasterpol EPS facade system and other materials are to be sealed using Plasterpol system MS sealant in accordance with the manufactures TDS.

› Supercoat™ Plaster system (Multitex Basecoat render)

Ensure the panels are clean, dry, and free of contaminants and flashed before application of a Supercoat Multitex keycoat render. Apply the render with a hawk and trowel at an approximate thickness of 5mm.

Immediately embed alkali resistant Supermesh into the basecoat render, the drops of mesh do not need to overlap but should butt tightly together unless the mesh joint is over a vertical panel joint, in this case the mesh would need to overlap a minimum of 75mm. Pre mesh corner beads, base beads/finishing angles shall be used where required. Narrow widths or stress points require an additional butterfly of soft mesh. Run a straight edge over the plastered wall surface pulling back any excess plaster and filling in any hollows. Allow base render to dry/cure before the application of subsequent coats. All rendered horizontal surfaces must have a minimum fall of 15 degrees and coated in Supercoat tanking membrane key coat.

› Supercoat Plaster system (Skimming render)

Apply a coat of selected Supercoat Skimming render at approximately 2mm thick over the base render with a hawk and trowel, cross facing the wall surface leaving a flat even plane surface. Once dry remove any dags/ridging with a rasp.

› Supercoat Surface sealer

Apply a coat of Supercoat surface sealer with a brush/roller to a clean and dry rendered surface. Surface sealer is to be used after the last cementitious layer prior to subsequent acrylic layers. Refer to the Supercoat Surface sealer TDS.

Tick the green box to select a finishing texture

› Supercoat finishing texture (Supersponge)

☐ Supersponge 1mm texture ☐ Supersponge 1.5mm texture

Apply Supersponge with a steel trowel to the exterior rendered surfaces, pull back tight to the aggregate thickness. Finish using a plastic float in a circular motion to achieve a consistent pattern.

› Supercoat finishing texture (Supercryl Acrylic texture)

☐ Supercryl 1mm texture ☐ Supercryl 2mm texture

Apply Supercryl Acrylic texture with a steel trowel to the exterior rendered surfaces, pull back tight to the aggregate thickness. Finish using a plastic float in a circular motion to achieve a consistent pattern. Note: Supercoat Surface sealer is required to be applied before application of the Supercryl.

› Supercoat finishing texture (Superadobe)

☐ Superadobe

Apply Superadobe with a steel bull nose trowel to the exterior rendered surfaces. Superadobe can be applied in various thicknesses to achieve light to heavy undulation. The surface can be sponged off to achieve the desired look. It is recommended a sample is provided and signed off by the client/agent before applying the Superadobe.

Tick the green box to select a finishing texture

› Supercoat finishing texture (Hoppertex Acrylic texture)

■ Hoppertex

Spray the Hoppertex acrylic texture with a hopper gun using an 8mm tip. Set the PSI to achieve the required stippled effect (fine/heavy). It is recommended a sample is provided and signed off by the client/agent before applying the Hoppertex. Note: Surface sealer is required to be applied before application of the Hoppertex.

› Supercoat finishing (Superstucco)

■ Superstucco

Superstucco is a cement base plaster for heavy aggregate finishes up to a maximum of 12mm applied using a Tyrolean gun. It is recommended a sample is provided and signed off by the client/agent before applying the Superstucco.

› Curing of products

The curing time will vary due to product type, thickness, temperature, humidity and application methods. It is the Supercoat applicators responsibility to ensure the product is applied in accordance with the manufactures TDS and is allowed adequate drying time before subsequent layers. The plaster must cure for a minimum of 2-3days and be dry before painting can commence (refer to Supercoat product TDS).

› MS Sealant

Once the texture has cured and Surface sealed (if a cementitious texture is used) all rendered junctions between joinery, soffit, other materials and penetrations shall be sealed with Plasterpol approved MS sealant.

› Supercoat Acrylic High build protective paint coatings

A minimum 2 coats of Supercoat Acrylic paint tinted to a selected colour is applied by brush or roller to protect the exterior plastered surface at approximately 6m2 per litre per coat.

› Maintenance

The Supercoat™ plaster system should be regularly cleaned at least annually and detergent wash. Have the entire coated area inspected by a Registered Plasterpol system applicator to identify any maintenance requirements to ensure weather tightness. Undertake all necessary repairs immediately. Inspections of the complete cladding surface must be carried out at least annually at the end of summer. Because of settling after disturbances to the ground during construction, and the slow moisture-loss shrinkage of concrete slabs, it is recommended that six-monthly inspections be made for the first three years. Any cracks or damaged areas, including flashings and seals that have deteriorated, must be repaired immediately to ensure the integrity of the building envelope is maintained. Any damage to the substrate must be repaired in accordance with the substrate manufacturer's instructions followed by re-plastering and recoating to the same standard as the original Supercoat™ Plaster System application. If chemical free framing timber has been used, it is imperative that the maintenance of the cladding system is followed rigorously.

As part of the Warranty conditions the paint coat(s) will need to be re-applied at least every 10 years as specified in the Plasterpol customer care guide. For exposed locations washing and re-painting may be required more frequently. Failure to correctly maintain the system may void warranties.

› Important information

- No substitutions are permitted for Plasterpol EPS façade systems and Supercoat coating systems.
- Refer to Plasterpol and Supercoat product design guides and TDS in all cases. Do not deviate from the product instructions, failure to do so may cause irreparable damage.

› Plasterpol 15 year system Warranty

Plasterpol EPS façade system when installed in accordance with its current design and installation guide and specifications is guaranteed to be free of defect in material and manufacture for 15 years (from the date of completion).

Workmanship is guaranteed by the personnel who performs the work for a period of 8 years.

› Disclaimer

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