MGO - COMPOSITE PANEL

Application to MgO faced structural composite panel systems.

Applies to: MgO faced structural composite panel systems.

Date modified: 22/10/2019 11:18:07 am

Warranty	15 years from time of application. When applied in accordance with the above specification, MAC will provide a 15 year materials warranty against peeling and delamination. This warranty does not cover workmanship or product failure caused as a result of hydrostatic pressure, entrapped moisture or structural/substrate/joint movement. See warranty for details.
Substrate Preparation / General	Substrate/base boards/panels should be installed in strict accordance with substrate manufacturer's technical documentation. Acrylic paints, primers and textured finishes not to be applied to any substrate with a moisture content of greater the 10% wood moisture equivalent (WME), or with an alkalinity reading (pH) of greather than 10. Ensure sufficient curing peiod for cement based surfaces has been reached. All surfaces must be clean and free from any impurities which may adversely affect the bond strength of primers, renders and applied finishes. All horizontal surfaces such as, fence caps and window sills must be installed with a minimum 10 degree fall to facilitate drainage of water and eliminate ponding. Ensure all capping and weatherproofing has been installed to ensure moisture cannot attack the finished coating from within the wall system and ensure all down pipes are reconnected after render/coating application.
Substrate Preparation / Specific	Raw/unsealed FC/MgO/Composite sheet must first be primed prior to application of coating system. Unsealed sheet may have a loose, micro-fibrous surface finish which will inhibit adequate surface adhesion of the specified base coat. Factory sealed base sheet may not require priming. Check with manufacturer prior to coating.

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Control Joints	Control/movement joints must be positioned and detailed as per substrate manufacturer's recommendation. Control/movement joints must not be bridged by the base coat or finish coat system. Unless otherwise specified by substrate manufacturer or consulting engineer, MAC requires the placement of control/movement joints at 5 metre (maximum) centres and at stress points such as in line with openings (window / doors), at all horizontal multi-levels, and at all interfaces of non-identical building construction materials.	
LRV	Dark colours must be avoided to reduce risk of thermal cracking in the coating system caused by severe heat build-up. Selected colour must have an LRV (Light Reflectance Value) greater than 45%. Consult MAC to seek confirmation of colour suitability.	
Priming Pro-Prime	Apply with brush, roller or suitable spray equipment to clean and dry substrate prior to application of base coat. **Allow primer to dry completely (minimum 24 hours) prior to overcoating with high polymer basecoat renders only.** Do not thin this product prior to application.	**Coverage:** *Approx 6-10 m2 per litre.*
Trims & Angles External trims and angles embedded with Dri-Patch	For install of all external metal angles, trims and expansion trims. All trims must be non-corrosive for durabilty in exterior conditions. Refer to product data sheet prior to use. Trowel Dri-Patch onto panel and embed aluminium/fibreglass combination angles into wet material. Skim over ensuring mesh is no longer visible. All trims must be embedded and meshed into into the wall by minimum of 100 mm. Allow to dry thoroughly prior to application of base render.	

MGO - COMPOSITE PANEL continued...

Base Coat - FR Reinforced Site mixed Macpatch Coarse + Macrender® HBS Alkali resistant FG mesh 160 gsm min.	Clean surface thoroughly, ensuring all contaminants are removed from the surface prior to rendering. Create the base mix by preparing a Macpatch Coarse/Macrender HBS blend at a 50/50 ratio. Prepare 20 kg of Macrender® HBS with 3-4 lites clean water to achieve correct trowelling consistency. Split into 2 x 15 litre pails and top up each half pail with 7.5 litres Macpatch Coarse. Blend thoroughly to achieve a homoginouos mix. Apply site mixed Macpatch Coarse/Macrender® HBS to the surface, embedding 1200 mm (ARFG) alkali resistant fibreglass reinforcing mesh (160 gsm min.) into the wet material across the entire wall surface. Where FG sheets meet, ensure a minimum 100 mm overlap is provided. Some contractors prefer to use an angled 6 mm notched trowel to better gauge the application thickness. Ensure mesh is embedded near the face of the render and not the substrate surface itself. Do not press the mesh hard against the substrate surface.FG mesh will provide little to no benefit if pressed hard against the wall surface. Once embedded, trowel over the mesh, ensuring it is fully embedded and not visible. The use of self adhesive reinforcing mesh is not acceptable. Try to keep taped joints as flush with the surface as possible to reduce the risk of ridges along the joints in the finished coating.	**Coverage:** *3-4 m2 per 17 litre pre-mix.*
Base Coat Site mixed Macpatch Coarse + Macrender® HBS	Create the base mix by preparing a Macpatch Coarse/Macrender HBS blend at a 50/50 ratio. Prepare 20 kg of Macrender® HBS with 3-4 lites clean water to achieve correct trowelling consistency. Split into 2 x 15 litre pails and top up each half pail with 7.5 litres Macpatch Coarse. Blend thoroughly to achieve a homoginouos, lump-free mix. Apply site mixed Macpatch Coarse/Macrender® HBS to the surface at a thickness between 3-6 mm. Once sufficiently firm, float to a finish sutible for application of next component of selected coating system. Allow to dry a minimum of 4 days prior to application of coating system.	**Coverage:** *3-4 m2 per 17 litre pre-mix.*

MGO - COMPOSITE PANEL continued...

Textured Finish Mactexture Crystal Plus Trowel-on Mactexture Rustic Roll-on	Refer to product data sheet prior to application. Prior to selection of colour, check this document thoroughly for mention of LRV restrictions (i.e. application of dark colours). Apply selected trowel-on or roll-on textured finish in selected colour as per product specific product data sheet. Allow to dry for a minimum 24 hours prior to painting. Hard dry may take longer than 24 hours under extremely damp, moist or humid conditions.	**Coverage:** *Approx. 9-12 m2 per 15 litre trowel-on.* *Approx. 20-40 m2 per 15 litre.*
Membrane - Sealer Application MAC Satin Flex 100% acrylic membrane	Refer to product data sheet prior to application. Prior to selection of colour, check this document thoroughly for mention of LRV restrictions (i.e. application of dark colours). With roller or suitable spray equipment, apply two coats of MAC Satin Flex 100% acrylic membrane in selected colour. Cutting-in prior to coating application may result in “picture framing”. Always cut in just ahead of or during main application, maintaining a “wet-edge” at all times. Two (2) coats required.	**Coverage:** *Approximately 4 m2 per litre per coat. 2 coats required*

Disclaimer

Melbourne Acrylic Coatings Victoria Pty Ltd, its staff and distributors will not accept responsibility for any failure caused as a result of factors beyond our control including but not limited to onsite handling, preparation or application of this product.

Application of this product should only be performed by qualified trades people trained in the use of this type of product. Information supplied in this publication is based on our testing and experience and is given in good faith.

Where used outside of the scope detailed above, suitability of this product should be independently determined prior to use.

MAC will not warrant job defects caused as a result of but not limited to, structural/substrate movement or entrapped moisture. Building movement and structural dynamics is beyond the scope and control of MAC. Accordingly, stresses and joint/substrate movement cannot be contained by the application of the decorative finished detailed in the above specification. Fibreglass mesh reinforcing will provide little to no benefit if adhered directly to, or embedded hard against the substrate. Always ensure reinforcing mesh is embedded in the outer half of the basecoat where the coating face can be better reinforced.

In some circumstances, surface undulations, joints and panel deformation may be visible under glancing light conditions. This will result in the sun casting visible shadows over the joints in the wall. These imperfections may be extremely difficult to detect during application or at all other times. Glancing light occurs at certain times of the day when the sun's rays are nearly parallel to the surface. This will cause the casting of long and exaggerated shadows across the wall surface, most evident across taped or reinforced joints. As hand applied finishes are always susceptible to the minor undulations which cause these effects, glancing light issues are outside the control and/or scope of this specification.

MAC shall not be liable for surface staining, degradation or loss of adhesion resulting from contact with moisture from behind the face of the finished coating. Ensure cappings and downpipes are installed/replaced immediately after the application of the render/coating.

All metal components used within the system are to be non-corrosive in composition. Cut ends of metal components should be treated with a suitable rust inhibiting primer prior to overcoating with render and coating system. MAC accepts no responsibility for corrosion of components used within the coating system.

Colour change (fading and chalking) is a natural part of the weathering of applied acrylic finishes and is excluded from all warranty terms. No warranty is provided against coating failure or degradation where LRV (light reflectance values) specifications have not been adhered to.

Under certain climatic conditions, shadows present on freshly coated walls during application and curing (i.e. those cast by scaffolding) can result in a permanent shadow effect in the fully dried product. Always avoid application in direct sunlight and provide shade screens where possible.

Sufficient quantity of texture coating or paint/membrane required to complete a project must be purchased in a single order to minimise the risk of colour and or texture inconsistency. Always cross-batch drums on site prior to application to optimise colour/texture uniformity.

MGO - STUD WALL

Render and texture coating system to magnesium oxide (MgO) base board facing over timber or steel stud wall constructions.

Applies to: Magnesium oxide (MgO) base boards including Ezy-Lite.

Date modified: 22/08/2019 4:02:30 pm

Warranty

10 years from time of application.

When applied in accordance with the above specification, MAC will provide a 10 year materials warranty against peeling and delamination. This warranty does not cover workmanship or product failure caused as a result of hydrostatic pressure, entrapped moisture or structural/substrate/joint movement.

See warranty for details.

Substrate Preparation / General

Substrate/base boards/panels should be installed in strict accordance with substrate manufacturer's technical documentation. Acrylic paints, primers and textured finishes not to be applied to any substrate with a moisture content of greater the 10% wood moisture equivalent (WME), or with an alkalinity reading (pH) of greather than 10. Ensure sufficient curing peiod for cement based surfaces has been reached.

All surfaces must be clean and free from any impurities which may adversely affect the bond strength of primers, renders and applied finishes.

All horizontal surfaces such as, fence caps and window sills must be installed with a minimum 10 degree fall to facilitate drainage of water and eliminate ponding.

Ensure all capping and weatherproofing has been installed to ensure moisture cannot attack the finished coating from within the wall system and ensure all down pipes are reconnected after render/coating application.

Control Joints

Control/movement joints must be positioned and detailed as per substrate manufacturer's recommendation.

Control/movement joints must not be bridged by the base coat or finish coat system.

Unless otherwise specified by substrate manufacturer or consulting engineer, MAC requires the placement of control/movement joints at 5 metre (maximum) centres and at stress points such as in line with openings (window / doors), at all horizontal multi-levels, and at all interfaces of non-identical building construction materials.

MGO - STUD WALL continued...

LRV	Dark colours must be avoided to reduce risk of thermal cracking in the coating system caused by severe heat build-up. Selected colour must have an LRV (Light Reflectance Value) greater than 45%. Consult MAC to seek confirmation of colour suitability.	
Priming Macprime or Macprime HP	Apply with brush, roller or suitable spray equipment to all unsealed surfaces prior to application of base render. Allow primer to dry completely to a non-tack finish prior to over-coating. Not required where surface if factory pre-primed with a compatible product. Check with a manufacturer for details. Do not thin this product prior to application.	**Coverage:** *Approx. 6 m2 per litre.*
Base Coat - FR Reinforced Site mixed Macpatch Coarse + Macrender® + FG mesh (full cover)	Clean surface thoroughly, ensuring all contaminants are removed from the surface prior to rendering. With a power mixer, blend 15 lts of Macpatch Coarse with 2 litres of Macrender powder. Blend to create a smooth, lump free paste. Apply site mixed Macpatch Coarse/Macrender® to the panel at a thickness of approximately 3 mm, embedding 1200 mm (ARFG) alkali resistant fibreglass reinforcing mesh lightly into the wet material surface across the entire wall area. Where FG sheets meet, ensure a minimum 100 mm overlap is provided. Some contractors prefer to use an angled 8 mm notched trowel to better gauge the application thickness. Ensure mesh is embedded near the face of the render and not pressed against the substrate surface itself. Once embedded, trowel over the mesh, ensuring it is fully embedded. **The use of self adhesive reinforcing mesh is not acceptable.** Try to keep taped joints as flush with the surface as possible to reduce the risk of ridges along the joints in the finished coating.	**Coverage:** *3-4 m2 per 17 litre pre-mix.*
Base Coat Site mixed Macpatch Coarse + Macrender®	Clean surface thoroughly, ensuring all contaminants are removed from the surface prior to rendering. With a power mixer, blend 15 lts of Macpatch Coarse with 2 litres of Macrender powder. Blend to create a smooth, lump free paste. Apply site mixed Macpatch Coarse/Macrender® to the panel, at a thickness of approximately 2 - 3 mm over base coat and float to a smooth surface. Build up over fibreglass reinforced systems of greater than 3 mm will require the use of an additional layer of fibreglass mesh. This will ensure the reinforcing mesh will remain near the surface where it is at its most effective. Ensure, finish is suitable to accept the application of the selected textured coat.	**Coverage:** *3-4 m2 per 17 litre pre-mix*

MGO - STUD WALL continued...

Textured Finish Mactexture Crystal Plus Trowel-on Mactexture Rustic Roll-on	Refer to product data sheet prior to application. Prior to selection of colour, check this document thoroughly for mention of LRV restrictions (i.e. application of dark colours). Apply selected trowel-on or roll-on textured finish in selected colour as per product specific product data sheet. Allow to dry for a minimum 24 hours prior to painting. Hard dry may take longer than 24 hours under extremely damp, moist or humid conditions.	**Coverage:** *Approx. 9-12 m2 per 15 litre trowel-on.* *Approx. 20-40 m2 per 15 litre.*
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