

COATING SYSTEM SPECIFICATION: MCS 171117-1

ACE GREY EPS PANEL

Render & Acrylic Texture



Overview¹

ACE Grey EPS Panels are a polystyrene foam panel system that are Australian made and distributed. ACE Grey EPS Panels are strong, lightweight providing excellent insulation. This makes them ideally suited for use as external cladding for application to both timber and steel framed constructions in addition to application over solid concrete and masonry walls.

ACE Grey EPS Panels are M grade and fire retardant. Combining form and function, ACE grey EPS Panels provide a weather resistant, seamless rendered finish which provides continuous thermal insulation across the entire wall surface.

High Level Thermal Energy Performance¹

Wall insulation now requires increasingly higher R-Values to meet Australian energy efficiency requirements of the BCA. One method to achieve this is by installing ACE Grey EPS insulated wall cladding.

Once rendered, ACE Grey EPS Panels are lightweight and strong, able to withstand the effects of wind, rain and sun whilst maintaining its outstanding thermal performance.

More information and details are available from www.acepolystyrene.com.au or by calling Ace Polystyrene Products Pty Ltd on (02) 9791 1188.

Materials Required

- > ACE Grey EPS Panels in either 75 or 100 mm thickness
- > Approved flashing tape for weatherproofing window and door openings.
- > PVC or aluminium starter channels for providing a neat and durable lower edge.
- > Class 3 galvanised screws for fastening sheets. See ACE Grey EPS Panel technical manual.
- > 48 mm plastic washers
- > Approved adhesive for bonding all panel edges during installation.
- > Alkali-resistant fibreglass (ARFG) mesh (160 gsm minimum.) for embedding in the first coat of render (must not be self-adhering type and must be embedded close to the render surface, offset from face of panel).
- > PVC/aluminium + fibreglass combination angles for application to external corners.
- > Macrender® HBS. Used for both 1st and 2nd render coats.
- > MAC Primer for application to finished rendered surface prior to the application of a decorative finish coat - optional but highly recommended for optimum performance.
- > Mactexture decorative textured finish coat in selected grade and colour - Optional if painted (2 x coats) rendered finish is required.
- > MAC Satin membrane for protective, low maintenance finish coat.

ACE Grey EPS Panel Installation

- > Install ACE Grey EPS Panels in strict accordance with ACE Polystyrene Technical Manual.

Table 1.1 Coating Application Schedule - In Order of Application

PRODUCT	PURPOSE	SPREAD RATE / FILM THICKNESS	NOTES	WARRANTY
ACE Grey EPS Panels 75 mm / 100 mm	Provides cladding and insulation.		Install as per ACE Polystyrene Technical manual. www.acepolystyrene.com.au	7 YEAR WARRANTY PROVIDED BY ACE
Macrender® HBS	Provides adhesion to base panels and encases reinforcing mesh. This coat, fully reinforced with ARFG mesh, provides the key strength of the coating system.	3 mm - 6 mm approx.	Required all systems. Includes embedded FG mesh, external angles and all reinforcing strips. <u>Mesh must be installed close to the render surface, offset from the EPS panel face.</u>	7 YEAR WARRANTY PROVIDED BY MAC
Macrender® HBS	Provides added thickness and strength to coating system whilst providing the appropriate surface finish for subsequent coats in the system.	2 mm approx. Total thickness for both render coats min 5 mm in total.	Required on all systems. No reinforcing in this coat. Finish quality to be appropriate for selected system from this point on.	
MAC Prime	To provide a sound, weather resistant base and alkalinity barrier for application of texture/paint finish.	Approx. 5 m ² / litre	Can be thinned 20% with clean water immediately prior to application. Stir thoroughly before use. Optional but recommended.	
Mactexture acrylic textured finish	Provides a decorative textured finish and added durability of the coating system.	Varies greatly depending on selected textured finish. See product specific data for further information.	1 coat. Optional if surface finish is approved for painting by client.	
MAC Satin acrylic membrane	Improved resistance to moisture ingress, fading and dirt pick-up. Also provides a degree of crack-bridging ability.	Approx. 4 m ² / litre.	2 coats required. Selected colour must have an LRV greater than 45%	

Prior to Rendering

ACE Grey EPS Panel Installation

- › ACE Grey EPS Panel must be rendered soon after installation. Exposure of raw EPS to UV may cause breakdown of the EPS surface making it difficult to render. Consult ACE Polystyrene for details.
- › Install ACE Grey EPS Panel as per technical documentation. The ACE Grey EPS Panel Technical Manual is available for download at www.acepolystyrene.com.au
- › All abutting sheet joints must be fully glued with liquid or foam polyurethane construction sealant/adhesive.
- › Flashing tape applied from joinery to building wrap on wall studs as per ACE Grey EPS Panel requirements.

Preparation for Render Application

- › After sheet installation, ensure all washer heads are fastened flush with the surface of the ACE Grey EPS Panels.
- › The ACE Grey EPS Panels must be clean and free from any impurities which may adversely affect the bond strength of the acrylic textured coating system.

- › Remove any loose, chalky or flakey material by brushing as required.

Render & Coating Application

Render Coat Application

- › Apply Macrender® HBS to the ACE Grey EPS Panel with an angled 6mm notched trowel. Overlay with fibreglass mesh and work lightly into the wet render ensuring EPS surface is fully covered. Ensure mesh is sitting near the render surface, not close to the ACE Grey EPS Panel surface. Overlap fibreglass mesh junctures in accordance with ACE polystyrene technical specifications (nominally 100 mm minimum). Ensure render surface finish is suitable for the application of a second coat of render.
- › Corners at openings including window and door frames must be diagonally reinforced with 400 mm x 200 mm fibreglass bandages embedded in the first Macrender® HBS coat. This is in addition to the full fibre glass mesh embedded in the first render coat.
- › Apply a second coat of Macrender® HBS ensuring the minimum specified render thickness has been achieved.
- › Control and movement joints must be placed as per ACE Polystyrene Technical Manual or engineers recommendation and must not be bridged by the render or texture coating system.
- › Allow rendered surface to cure for a minimum of 4 days prior to priming or texture coating. If priming, allow MAC Prime to completely dry to a non-tacky finish prior to application of finish coats.

Finish Coat Application

- › Apply selected trowel-on or roll-on textured finish in chosen colour as per product specific product data sheet. Allow to dry for a minimum 24 hours prior to painting.
- › Apply two coats of MAC Satin acrylic membrane (low sheen or matt) in selected colour. *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 greater than 45%. Consult MAC or ACE Polystyrene to seek confirmation of colour suitability.*

Materials Warranty

- › The ACE Grey EPS Panel system comprising the cladding sheets and fixings is covered by ACE Polystyrene under the ACE Grey EPS Panel system warranty. Contact ACE Polystyrene for further details or visit www.acepolystyrene.com.au
- › When applied in accordance with the above specification, MAC warrants the coating system (reinforced render, textured finish and membrane) for a period of seven (7) years against peeling and delamination. This warranty does not cover workmanship or product failure caused as a result of, but not limited to, hydrostatic pressure, entrapped moisture or structural stresses and structural/substrate movement. See warranty for details.

¹ Information and literature provided by ACE Polystyrene Products Pty Ltd.

IMPORTANT NOTE:

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. Suitability of this product should be independently determined prior to use. Warranty is limited to the replacement of any materials proven to be faulty. MAC will not warrant job defects caused as a result of but not limited to, structural/substrate movement or entrapped moisture.

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