Substrate Preparation and Product Application Information

Method Statement

For RSA Coating Systems Over AAC Lightweight Panel

N.B. These systems are NOT suitable for AAC Lightweight Block. Please refer to separate Application Guidelines over AAC Lightweight Block.

Depending on the chosen system or Level of Finish there are three basic options for Application over AAC Lightweight Panel:

1. Render and Acrylic System - EP Render Base

Each System is prepared as detailed below. Detailed application guidelines for each system follows the preparation section.

RSA strongly recommend the use of our ‘full’ render, texture and protective coating systems over AAC Hebel. We DO NOT recommend mixing and matching different products from different manufacturer’s as part of a coating system - as they have not been tested for adhesion or cohesion with RSA products.

PREPARATION

Cleaning:- Ensure all surfaces to be coated are sound, clean, dry, free from dust, oil, release agents, loose material, efflorescence and/or other contaminants. Remove all Hebel adhesive dags and protrusions and brush surfaces down with a stiff broom prior to the application of products.

Masking:- For all surfaces not to be coated (windows, doors, roofs, finished floors etc) we recommend masking, covering or otherwise protecting the surface prior to any application.

Note: For masking, we recommend only the use of high quality long life masking products.

Cleaning During Application:- Should any RSA product get onto surfaces that are not to be coated, clean the surface immediately with clean water. It is the applicator’s responsibility to use the correct cleaning technique and product/s for each surface and to ensure the product is removed without damaging the surface.

Note: The clean up process must be carried out during each stage of the application of product/s.

SUBSTRATE CHECK

Ensure the substrate meet all Australian Standards and have been installed in accordance with the manufacturer's instructions and in accordance with good building practices, paying particular attention to the positioning of control joints. The success and integrity of the coating system is dependant on the quality and installation of the substrate.

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SUBSTRATE PREPARATION AND HYDRATION

Correct treatment of the building substrate and hydration of cement based products assists the development of high early hardness, reduces the likelihood of 'shrinkage cracking', and assists the render to achieve full strength and long term integrity when applied correctly. The hydration process starts prior to the application of render coats by using the correct substrate preparation technique.

It is absolutely critical to correctly seal AAC Lightweight Panel surfaces prior to the application of EP Render coats, as this limits water loss from the render to the substrate. In turn, it also keeps the water in the freshly applied render (reducing the likelihood of 'plastic shrinkage cracking') and eliminates the need to cure the render after application.* See CURING section.

Sealing

AAC Lightweight Panel must be sealed with a 1:1 mix of RSA Render Bond and water (e.g. Into a 15 litre bucket pour 6 litres of water and add to the water 6 litres of Render Bond and stir with a mechanical mixer). Best results are achieved when the sealer is applied at least 24 hours prior to the render application.

1. Mix equal parts of water and RSA Render Bond (e.g. 6 litres of water to 6 litres of Render Bond) and stir in with a mechanical mixer to make an economical sealer.
2. Liberally apply the sealer by roller, brush or pressure/spray pack to the AAC Lightweight Panel substrate.
3. The sealer must be allowed to dry for a minimum of 2 hours, however best results are achieved (and allows more working time of the EP Render) when the sealer is applied at least 24 hours prior to the application of render.

CORNER BEADS AND TRIMS

For detailed installation information refer to the RSA document - Substrate Preparation and Application for Bead, Mesh, Trim and Skim Applications Using Set and Prep.

3.5 to 6mm corner beads and trims can be installed, or may be required as part of a substrate coating specification. In either case RSA Set and Prep must be used to install high quality, RSA approved, UV resistant PVC corner beads and trims

MIXING EP RENDER and MR60 Render

Note:- If the mixing process is not followed the render may:-

- Set up fast and be difficult to apply.
- 'Go off' too quickly on the wall.
- Be difficult to float and finish.
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MIXING EP RENDERS (Cont.)

1. For pump use, mix the render according to the pump manufacturer's recommendations. If the machine requires you to add dry mix please do so. For wet mix machines refer to point two below.
2. Slowly add EP or MR60 Render to 3.7 - 4 litres of clean potable water whilst vigorously stirring with a suitable mechanical mixer (drill and paddle).
3. Mix the render for at least three minutes to activate additives.
4. Allow EP to stand for a minimum of five minutes to ensure that the chemical reaction of additives occurs.
5. Remix the render for one minute whilst adjusting the consistency via addition of water or render as required.

PRODUCT INFORMATION

EP Render can be applied in one or multiple coats depending on substrate requirements. For single coat applications, it is important to note that if floating is done too early:-
- shrinkage may occur - highlighting AAC Lightweight Panel joints, substrate imperfections and promoting ‘plastic shrinkage cracks’ in the finish. Note: Control/ Expansion/movement joints in all substrates must be carried through the trowel-on coating system to a minimum width of 10mm.
- the bond of the render to the substrate may be reduced or can be eliminated completely resulting in unsound ‘drummy’ sections of render. .

Render and Texture Systems – EP Render Base

- **AAC Lightweight Panel Sealer** – RSA Render Bond diluted 50/50 with clean potable water.
- **Base Coat** - RSA EP Render, wet bed 160gsm fiberglass mesh to entire surface area
- **Flexible Acrylic Texture**
- **Protective Coating** - Two coats of RSA Rapid Shield Matt

1. 3 to 6mm corner beads and trims should be installed using RSA Set and Prep.
2. As a one coat application, apply 4-8mm of EP Render by trowel or pump. Flatten the render using darbies, screeds or long trowels as preferred, or as outlined in project specifications, to required straightness/trueness’.
3. When firm, float finish the EP Render Note: Should a second coat of EP Render be required, a ‘tight 1-2mm coat’ may be applied the same day (when first coat is firm but still ‘green’). Allow EP Render to harden for a minimum of 24 hours prior to the application of selected trowel-on acrylic.
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APPLICATION PROCEDURES (Cont.)

4. Apply selected RSA Flexirender or trowel-on texture ensuring a minimum 1mm dry film thickness (DFT) of trowel-on acrylic is applied.

5. Apply two coats of selected RSA protective coating such as RSA Lightweight Panel. Prior to the application of RSA protective coatings or roll on coatings the substrate must contain less than 15% Wood moisture Equivalent (WME).

APPLICATION OF RSA ACRYLIC TROWEL-ON TEXTURE

1. Apply RSA Acrylic Trowel-On Texture to rendered surface and finish as per chosen Texture Product Data Sheet.

2. Application must achieve a minimum Dry Film Thickness of 1mm. (two coats of finer textures may be required.

3. Allow a minimum of 48 hours for RSA Trowel-On Texture to completely cure prior to over-coating.

APPLICATION OF PROTECTIVE COATING

Apply two coats of selected flexible or elastomeric coating such as RSA Rapid Shield Matt ensuring combined coats achieves a dry film thickness of a minimum 130 microns.

Note:- A primer coat prior to the application of RSA Protective Coatings will achieve superior results.

*CURING

Due to the sealing or hydrating of the substrate prior to application of RSA Renders, curing is only necessary when it is applied in hot, dry (low humidity) and/or windy conditions and where high early/overnight hardness of the finish has not been achieved. In these instances it is necessary to assist the curing process by soaking the render once or twice a day for the first two days.

OVER-COATING

When over-coating with RSA acrylic texture, application may commence 24 hours after completion of RSA Renders.
Prior to the application of a protective coating the substrate must contain less than 15% WME.
CLEAN UP

Clean all equipment immediately with water.

LIMITATIONS

When applied, the products cannot be expected to straighten unlevel substrates. The product will not remedy poor quality substrate installations. RSA products are not a substitute for good solid plastering trade practices. It is the plasterer’s responsibility to assess each project to determine 'best practice'. If in doubt, phone 07 3412 8111.

PRECAUTIONS

- RSA products should only be applied when weather conditions allow.
- Protect freshly applied products from high winds, freezing and temperatures below 5°C for 48 hours after application. The products should also be protected from rain for up to 48hrs after application.
- RSA products should only be applied within a temperature range of 10-35°C.

DISCLAIMER: The information relating to the application of the above products is given in good faith based on our current knowledge and experience of the product when properly stored, handled and applied. We cannot guarantee the product will be suitable, effective or safe when used for any purpose other than the stated uses. To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no liability for loss or injury caused by improper use, incompetent preparation, inexpert or negligent application, or ordinary wear and tear.

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