



Substrate Preparation and Product Application Information

For RSA Coating Systems over Fibre Cement (FC) Sheeting

RSA strongly recommend the use of our 'full' *Acrylic Render*, *Trowel On* texture and *Impact Paint System* over FC substrates. We DO NOT recommend mixing and matching different products from other manufacturer's as part of a coating system - as they have not been tested for adhesion or cohesion with RSA products.

RSA only recommend finishing recessed FC sheeting with 2, 2.5 or 3mm *Trowel On* finished vertically 'Travertine' to minimise the effects of 'critical/glancing/sidelight' on the FC joints.

SEVEN STEPS TO A SUCCESSFUL COATING SYSTEM OVER FC SHEETING

1. Undertake masking and preparation as detailed on page two.
2. Check that the substrate installation is correct, paying particular attention to nailing/fixing patterns, ensuring sheet joints are 'butted tight' or are installed as per sheet manufacturer's instructions, and that control/movement/expansion joints are correctly placed. **Note:** These joints must be carried through the coating system. For detailed information refer to the sheet manufacturer's instructions.
3. Install RSA approved, UV resistant PVC corner beads and trims. 'Bed on' 2.5 or 3.5mm (triangle pattern) corner beads and trims using RSA *Set and Prep* and suitable straight edges, shimmy's or levels in accordance with *Set and Prep* instructions. Allow a minimum 2-4 hours drying time or leave until firm, prior to the application of subsequent coats.
4. On recessed sheet joints, lightly 'bed in' RSA 160 gsm reinforcing mesh to the top surface of RSA *Patch Coarse* adding 10% Cement (pre-mixed with water before adding to *Patch Coarse*). Allow to dry for a minimum of six hours (at 25°C and 50% humidity). Please refer to the detailed jointing information on page three.
5. Apply *Acrylic Render* at a minimum thickness of 1mm as a base/primer/key coat to the entire surface area. Allow to dry for 4-24 hours. Please refer to the detailed application information on page four.
6. Apply RSA 2, 2.5 or 3mm *Trowel On*. *Trowel On* must be finished vertically 'Travertine' to minimise the effects of 'critical/glancing/sidelight' on the FC joints. Allow to dry for 24-48 hours. Refer to the detailed application information on page four.
7. Apply two coats of RSA 955 *Impact Paint*. Prior to the application of RSA 955 *Impact Paint*, ensure the substrate and previous coatings contain less than 15% Wood Moisture Equivalent (WME). Please refer to detailed application information on page four.

COLOURS

CAUTION:- Only select and apply light colours over fibre cement substrates. We DO NOT recommend the selection or application of mid range to dark colours, refer page 6 for detailed information. Refer to page six for Colour Limitations.

Notes:- Control/expansion/movement joints in all substrates must be carried through the trowel-on coating system to a minimum width of 10mm. All RSA Acrylic products are technically suitable for application over FC sheeting, however we do not recommend finishing FC Sheeting with any texture other than *Trowel On* 'Travertine'. Over 20 years field experience has shown that other textures do not have the same ability to reduce the effects of 'critical/glancing/sidelight' on the FC joints.

Detailed application information follows.



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Step 1

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. Brush down the FC surface with a soft broom, prior to the application of any products. We recommend wearing a suitable mask whilst brooming down the surface.

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 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.

Step 2

SUBSTRATE CHECK

Ensure the substrate has been installed in accordance with the manufacturer's instruction manual and good building practices, paying particular attention to the positioning of control joints, sheet joint placement and fixing patterns. Ensure all sheet joints (other than control/expansion etc joints) are butted together. The success and integrity of the coating system is dependant on the quality and correct installation of the substrate. For detailed information please refer to the sheet manufacturer's instruction manual.

Step 3

CORNER BEADS AND TRIMS

(For detailed installation information, refer to the *Substrate Preparation and Product Application Information for RSA Set and Prep* document, as well as the *Set and Prep Data Sheet*)

RSA approved, triangle winged UV resistant PVC 2.5 or 3.5mm corner beads and trims **must** be installed and 'bedded on' using *RSA Set and Prep*, straightened up with 'shimmy's' or similar straight edges.



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MIXING OF ACRYLIC PATCHES, ACRYLIC RENDER, TROWEL ON AND 955 Impact Paint

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

- Be difficult to apply.
- Be difficult to float and finish.
- Be inconsistent in colour and texture.
- Not reach full strength and integrity.

1. Mix by vigorously stirring with a suitable mechanical mixer (drill and paddle) all non coloured products for a minimum of one minute.
2. Mix by vigorously stirring with a suitable mechanical mixer (drill and paddle) all tinted, coloured products for one minute. **It is critical to colour consistency that each pail be mixed for the same amount of time - one minute each.**

Step 4

APPLICATION OF *PATCH COARSE* FOR REINFORCING FC SHEET JOINTS

RSA Patch Coarse is used to set FC recessed sheet joints. *Patch Coarse* must be mixed using a mechanical mixer (drill and paddle) adding and stirring in a cement slurry consisting of water and 1.5kg of cement powder per 15 litres of patching compound – only once the cement is fully mixed with water should it be poured and mixed into the patching compound. **Note:** Do not mix more cement with *Patch Coarse* than can be used within 30 minutes.

1. Using a steel trowel or broad knife, 'run in' *Patch Coarse* to fill the recessed FC joints and immediately 'bed in' RSA approved 160gms/m² alkaline resistant mesh.
2. When the first coat is touch dry (approx. four hours), apply a second coat of *Patch Coarse* (to approximately a small trowel width), entirely concealing the mesh and feathering out the edges. Allow a minimum of two hours drying time prior to the application of *Acrylic Render*.

Note: RSA do not recommend the use of adhesive mesh tape due to its lack of strength and tear resistance. **Experience with sticking the mesh tape directly onto the board has shown that the coating system will fail.** However, where a double reinforcement of joint is preferable we recommend using the adhesive mesh tape stuck directly onto the FC board joints before completing steps 1 and 2 above. **Further Note:- *Patch Coarse* cannot be sanded.**

APPLICATION OF RSA ACRYLIC RENDER AND TROWEL ON - HAND TROWEL AND MACHINE SPRAY APPLICATION

RSA Acrylic Render and *Trowel On* are ideal for all hand trowel and spray applications and are designed to be easy to apply, float and finish. **Note:** It is important to consult with the spray machine manufacturer to ensure it's suitability for the application of RSA sand and stone enhanced products.



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Step 5

Acrylic Render is applied by steel trowel and to a minimum thickness of 1mm. When the *Acrylic Render* starts to 'firm up' float with either a plastic or polystyrene float. *Acrylic Render* can be applied up to 2.5mm per coat where filling of 'low spots/hollows' is required.

Step 6

Trowel On is generally applied by steel trowel to the thickness of the largest stone size. The final pass of the steel trowel must be horizontal. Finish *Trowel On* with a polystyrene 'striker' float ensuring the 'Travertine/Vertical Scratch' is running plumb. For a premium finish, lightly run over (downward motion only) the finish with a plastic float when the *Trowel On* is starting to 'firm up'.

ROLL ON APPLICATIONS OF 955 IMPACT PAINT

Step 7

RSA 955 *Impact Paint* is suitable for application by brush and roller. **Note:** It is imperative to ensure that rolling and brushing is carried out simultaneously. If this is not done, a picture framing effect may be seen on finished work. Picture framing is a phenomenon created by more paint being applied at the cross over points of brush and roller application such as the soffit/eave. If these areas are not blended while the paint is wet the paint film thickness will build, creating higher sheen levels at these points. To speed up application of *Impact 955*, ensure all surfaces abutting the wall that are not to be coated, are well masked or protected.

FIRST COAT:- Whilst one or more crew members are 'cutting/brushing in', one or more (if building is 2 storey or higher) crew members should be rolling up to the 'cutting in'. It is imperative to roll and brush wet-on-wet only during each coat. Allow the first coat to dry for 3-6 hours before applying the second coat.

SECOND COAT:- Second and subsequent coats to be applied as per the first coat instructions.

PLANNING AND TIMING ARE THE KEYS TO HIGH QUALITY, SEAMLESS FINISHES.

- When applying RSA *Acrylic Render*, *Trowel On* and *955 Impact Paint*, it is important to know your limitations, including the amount of square metres you can apply and finish without unsightly joint or lap marks. This will be dependent on many factors such as substrate porosity, climate, accessibility, crew size, application experience and so on.
- We therefore recommend that the working time of product/s be assessed for each project prior to application. This can be done by timing workability on a sample board or on small, less visible areas of the project. In the warmer months, work in the shade and/or work during cooler times of the day if possible. This will increase working time, allow easier application and assist in achieving a seamless finish.



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- It is imperative to maintain a 'wet edge' whilst applying RSA *Acrylic Render*, *Trowel On* and *955 Impact Paint*. Finish complete surface areas without stopping. Application can be stopped at corners, moldings, expansion joints, or if necessary, advise the client of the need to form 'dummy' joints to (rather than risking unsightly join or lap marks). When recommencing application from 'stop points', care must be taken to avoid the product overlapping previously completed work.
- Application spread rates and dry film thickness as detailed below and on product data sheets must be adhered to, to achieve technical integrity and longevity of products and coating system.

DRYING

Drying of acrylic products is affected by air temperature, wind, exposure to direct sunlight, humidity and substrate porosity. Therefore, when exposed to direct sunlight (at 34°C, 30% humidity in medium to strong winds) a 1mm trowel-on product could be expected to dry (and be shower proof) in as little as two hours. When applying the same 1mm trowel-on (at 6 C, 60% humidity during still, overcast conditions), the product could take up to 24 hours to become shower proof.

For thorough drying of acrylic products, allow approximately 24 hours (at 25°C and 55% relative humidity) per millimetre of applied acrylic finish. Refer to the relevant product data sheets for more information.

***Estimated dry times/ready for over-coating times (based on 25°C and 55% relative humidity) when products are applied according to the previously detailed system:-**

Product	Drying Time*	Approx Spread Rates M2 per 15 Litre Pail*
Patches:	4-8 hours	45-50 LM
<i>Acrylic Render</i> 1mm: (Over Raw FC Sheeting)	4-8 hours	13-15 M2
Trowel-ons:	24-72 hours	2mm 7-9M ² ; 2.5mm 5-7; 3mm 3-5M ²
<i>955 Impact Paint</i> .	3-6 hours	For 2 coats Over 2mm 28-30M ² ; 2.5mm 26-28; 3mm 24-26

*Subject to substrate porosity, climatic conditions and applied thickness of product & application techniques.

OVER-COATING

Prior to the application of RSA paints such as *955 Impact Paint* the *Trowel On* and its substrate must contain less than 15% WME or the 955 paint film could blister and peel.

CLEAN UP

Clean all equipment immediately with water.



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LIMITATIONS

When applied, the products cannot be expected to overcome poor building design, hide poorly aligned substrates or completely eliminate the effects of 'critical/glancing/sidelight' on the FC joints.

The products will not remedy poor quality substrate installations. *RSA Acrylic Renders*, textures and paints are not a substitute for good solid plastering/painting trade practices. It is the plasterer's/painter's responsibility to assess each project to determine 'best practice'. If in doubt, phone **07 3287 6444**.

COLOUR LIMITATIONS

We DO NOT recommend the selection or application of mid range to dark colours due to the 'heat draw' and heat absorption into the fibre cement sheet. This in turn, makes the sheeting expand and contract to the extent where the coating system will crack and degrade. RSA cannot guarantee projects where light colours have not been selected.

PRECAUTIONS

- Thoroughly check all *955 Impact Paint* by:-
 1. Confirming all pails are the same colour as signed off sample. If in doubt, dry down a swatch from each drum to check. If not correct call your RSA outlet.
 2. Ensuring that there is enough product on-site to complete the whole project.
 3. Boxing or batching all drums together.
 4. Ensuring client signs off on the colour prior to application.
- Products should only be applied by tradespeople skilled in the application of renders, trowel-on renders, textures and/or Impact paints.
- RSA products should only be applied when weather conditions allow.
- Control/expansion/movement joints in all substrate must be carried through the trowel-on coating system to a minimum width of 10mm.
- 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 48 hours after application.
- RSA products should only be applied within a temperature range of 5-35°C.