



[Technical Bulletin]

Firewall Rota-Render Non-Combustible

FIRE WALL



PRODUCT TYPE:

A pre-blended, polymer modified cement render that complies as a non-combustible building component in accordance with Australian Standards Fire Testing AS 1530.1:1994 (R2016).

NOTE:

(Contact Astec for a full fire testing report completed by Warrington Fire).

(Contact Astec for a substrate specific technical specification).

Designed for use on all masonry components on the exterior of a building project such as concrete block, Hebel and cast in place concrete.

For other substrates not mentioned herein, such as PCV permanent formwork or fibre cement sheet, contact Astec to obtain required specifications of our Firewall Render system for these substrates that comply with AS-5113 & BS-8414 - large scale facade fire testing.

DESCRIPTION:

Firewall Rota-Render Non-Combustible is a polymer modified, mineral based, trowel-on render developed to provide a render with application properties similar to that of a traditional sand cement render. The product displays exceptional adhesion, flexibility, water and fire resistance properties required to perform flawlessly on today’s modern building substrates.

Firewall Rota-Render Non-Combustible is a formulation of a nominal composition being sand and cement that is modified with proprietary polymers, slump control and adhesion promoting additives.

Firewall Rota-Render Non-Combustible is smooth to apply and simple to float finished with a high-density blue polystyrene foam float producing a flat and uniform rendered appearance that is easy for the applicator to achieve.

The product is supplied in a 20 kg paper sack. On site mixing requires only the addition of fresh clean water to a desired consistency. Do not add any polymer or other additives as the product must not deviate from its AS 1530.1:1994 test result, to remain compliant with Australian Standard combustibility requirements of the Building Code of Australia.

The product is a pre-blended powder mix that contains premium grade crushed marble, Type HE Portland Cement, conforming to Australian Standard 3972 and proprietary additives that provide an exact viscosity profile suited to it’s intended use.

The product is modified with high levels of proprietary polymers and hydrophobic agents that ensure a well adhered render with excellent resistance to water, efflorescence or rising damp.

Firewall Rota-Render Non-Combustible is designed for over-coating with acrylic textures and coatings while in combination providing strong inter-coat adhesion and bond to new masonry construction surfaces. The product exhibits minimal to no drying shrinkage.

PROPERTIES:

The exact composition of the products aggregate shape, size and proprietary additives provides unique application properties for the applicator.

The product is tight to apply but results in a wet render that can be floated with a high-density blue polystyrene foam float within minutes of its wet application.

The product can be used in thick layers as a render up to 15mm. Alternatively, the product can be applied in one tight uniform thin section as a skim coat down to 3 mm with the confidence of no edge lifting.

The product has very low trowel stick, good workability, high slump resistance and provides long open time for the applicator to complete the entire leveling or floating process with ease.

Results have proven that even novice applicators using this render are able to achieve a uniform and level wall with very low waste.

TIME AND COST SAVING

Firewall Rota-Render Non-Combustible is quick and requires less effort to apply than standard cement render. It requires less clean up and offers greatly reduced curing time before the application of a texture finish. Under normal conditions, the application of a texture or coating may be commenced one day after its application.

KEY PROPERTIES

- Deemed non-combustible as tested to AS 1530.1:1994 (R2016)
- Very strong wet adhesion.
- Long open time for good workability.
- Floats well.
- Minimal to no drying shrinkage.
- Flat uniform appearance.
- Good water resistance.
- High polymer concentration for strong bond.
- Environmentally friendly
- Rapid cure and bond strength.
- Excellent resistance to alkali and efflorescence.

SUBSTRATES:

- Hebel Block & Power Panel XL
- Masonry substrates
- Concrete block
- Wire cut clay block
- Unglazed brick
- Cast in place concrete

SURFACE PREPARATION:

1. All surfaces must be structurally sound, clean, and free from surface contaminants such as, dirt, dust, oils, grease, silicones and release agents.
2. Remove any loose mortar splashes and cut back protruding block or tie wires
3. For normal concrete block no further preparation is required.
4. Any deep hollows or surface misalignments should first be pre-filled and struck smooth.
5. High suction surfaces can be sealed with Astec Rapid Sealer to aid application in hot dry weather.
6. All release agents must be completely removed from tilt up panel, contact Astec for the correct procedure.

If Unsure, Contact Astec for the correct preparation technique, sealers, primers and undercoats before proceeding.

MIXING:

The powder is added to the gauging water whilst being stirred vigorously with a mechanical stirrer until a trowelable consistency is reached, usually 30 seconds to one minute. The mix is left to stand approximately 5 minutes before adjusting the consistency with additional water if required. Care must be taken not to mix excessive air into the mix.

APPLICATION TECHNIQUES

Skim Coat

1. To apply the product as a skim coat, (3mm), use a hawk and stainless-steel trowel. The application should occur in two passes, a tight first pass followed by a second leveling pass.
2. Allow the product to stand for a short period, allowing for surface moisture to stabilize then any remaining ridges can be smoothed by float

finishing with a high-density blue polystyrene foam float

Render

1. To apply the product as a render, (10mm), use a hawk and stainless-steel trowel. The application should occur in two passes, a light first pass followed by a second light, leveling pass. Allow the product to stand for a short period, allowing for surface moisture to stabilize then screed with a 1200mm straight edge or darby to a uniform level surface. Any remaining ridges can be smoothed by float finishing with a high-density blue polystyrene foam float

NOTE:

Always terminate the application above a damp course line. Never bridge a damp course.

PRECAUTIONS FOR USE:

Avoid contact with skin and eyes; always use a dust mask during mixing.

PRODUCT DATA;	
Pack Size	20kg Paper Sack
Mix activation water.	3.6 to 4.0 liters per bag.
Drying Time at 25°C @ (55% Relative Humidity)	8 hours, (Dry times will vary with changes with substrate, temperature, humidity and residual moisture in the substrate).
Recommended thinners	Water
Wash up	Water
Recoat time at 25°C	2 to 4 hrs
Minimum application temperature	5° C
Finish colour light grey	Light grey
Durability	Exterior/Interior (must be top-coated)
Curing	Not required

COVERAGE

Calculation = 1.68kg m² per 1mm thickness

COATING THICKNESS	m² /20kg bag	kg/m²
Theoretical spread rate @ 2mm (Minimum)	5.95	3.36
Theoretical spread rate @ 4mm	2.98	6.72
Theoretical spread rate @ 6mm	1.98	10.08
Theoretical spread rate @ 10mm	1.19	16.8

LIMITATIONS

- Should not be applied over cement sheet or previously painted surfaces without Armatex Ultra-KeyCoat. Contact an authorized Astec representative for the correct product system specification.
- Should not be applied in temperatures below 3°C or in very hot and windy conditions or above 35°C.
- Protect from freezing temperatures for 24 hours after application.
- Protect from heavy rain for 8 hours after application.



WARRANTY

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