



[Technical Bulletin]

Firewall Render

FIREWALL



PRODUCT TYPE:

Armatex Firewall Render is a 100% Acrylic Bound Render, filled with light weight aggregates and specialty additives that promote strong adhesion to difficult substrates such as painted surfaces and PVC. This adhesion is maintained even during large scale fire testing to AS5113 when exposed to 30 minutes of extreme fire and radiant heat while at the same time being exposed to thermal drift and warping of the substrate.

The product can be applied at a thickness of up to 20 mm in one single application without the normal shrinkage cracks and drumminess associated with traditional sand and cement renders. As the product is light weight it allows for high build vertical applications with high resistance to slump during and after applications.

The render is a water reducible compound that is supplied ready for use straight from the drum apart from the required addition of between, 3%-5% and up to 15% cement or fondu by weight for exterior use.



LARGE SCALE FIRE TESTED TO AS-5113

Firewall Render is used as the base coat render in our product system for multi residential apartment substrates and has been subjected to large scale facade fire testing in accordance with AS5113:2016, BS8414-2:2015

This coating system satisfied the non-combustibility provisions relevant to Type C construction in accordance with the Building Code of Australia Deemed-to-Satisfy provisions. It also can be used in Type A and B construction upon a Performance Solution being completed by a suitably qualified fire safety engineer. For assistance regarding this non-combustibility assessment, we can provide an overview conducted by Red Fire Engineers of our testing in accordance with AS5113:2016, BS8414-2:2015 and AS/NZS1530.3.

NOTE:

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

(Contact Astec for a fire review report conducted by Red Fire Engineers of our testing in accordance with AS5113:2016, BS8414-2:2015 and AS/NZS1530.3.)

(Contact Astec for a substrate specific technical specification).

DESCRIPTION:

Unlike traditional renders, the cured film of Firewall Render, does not suffer from shrinkage cracks, leaching salts and lack of adhesion during and after cure. The applied finish is an extremely strong and chip resistant render, which has proven advantageous during the construction of new buildings. Square set window returns and corners dry hard and do not chip easily, which removes the threat of difficult to touch up chips caused by following trades.

Firewall Render is manufactured using the highest grade of silica, quartz and marble aggregates. The aggregates are carefully selected and analysed to assure they are without, or have only, very low traces of iron or clay content. As a result, the common threat of rust bleeding from the finish and excessive shrinkage are removed assuring the wall will remain aesthetically sound for many years to come.

Firewall Render is designed to be flushed smooth with one tight coat of Firewall Skim to fill surface deviations in the Firewall Render. Firewall Skim can be float finished and will produce a smooth and uniform surface ready for the application of an Armatex acrylic texture then elastomeric paint.

KEY PROPERTIES

- Tested in accordance with AS5113:2016, BS8414-2:2015 and AS/NZS1530.3.
- Very strong substrate adhesion.
- Minimal to no drying shrinkage.
- Good water resistance.
- Environmentally friendly
- Rapid cure and bond strength.
- Excellent resistance to alkali and efflorescence.
- High Build applications
- Highly flexible, even as a thick section
- Light weight / low density.

SUBSTRATES:

- PVC Permanent formwork.
- Cement sheet permanent formwork.
- Cement Sheet cladding.
- Hebel Block & Power Panel XL.
- All AAC Panels and block.
- Masonry substrates. Diagram 4
- Concrete block.
- Wire cut clay block.
- Unglazed brick.
- Cast in place concrete.
- Low gloss well adhered painted surfaces.

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 mineral substrates no further preparation is required.
4. For PVC Permanent formwork, the surface requires scuffing with a low speed diamond grinder. Contact Astec Paints for a specification sheet on how to conduct the process correctly).
5. Any deep hollows or surface misalignments should first be pre-filled and struck smooth.
6. High suction surfaces can be sealed with Astec Rapid Sealer or CA-5000 to aid application in hot dry weather.
7. 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:

1. Mix 1 Kg, (5.6%) of fresh grey cement direct into 15 ltrs of Armatex Firewall Render using a mortar mixer. Ensure that only fresh cement is used to avoid lumping.
2. It must be remembered that on PVC Wall Panel there is no substrate suction and therefore does not take water from the applied product. As a result, no additional water should be added to the mix.

3. To accelerate the product set in both cool weather and or for high film thickness applications, (20 mm), add 250 grams of Fondue along with the 1 kg of cement per 15 ltr tub of Armatex Firewall Render.

APPLICATION TECHNIQUES

1. The Firewall Render can be applied in one single pass up to 20 mm or in multiple layers at a minimum of 3mm per pass until the desired build is achieved. If additional coats are required allow the preceding product to semi cure before adding coats.
2. The product should be applied to the surface with firm pressure and then levelled true with a straight edge or feather edge darby. Do not float the product as you will disturb the level finish achieved by the straight edge.
3. Apply any addition coats of Firewall Render in the same manner as above.
4. Any large surface misalignments of the must be feathered before the render system is applied.
Misalignments must be feathered at 100mm for each 1 mm of misalignment.
5. The trowel or straight edge is placed across the misalignment with the front edge raised to a 45° angle. While maintaining this angle, the trowel is drawn along the section with even pressure. Misalignments should be feathered at a ratio of 100 mm for every 1mm of surface misalignment.

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.

DISPOSAL:

Do not pour left over render down the drain, allow to dry on newspaper or in an open bucket in a well-ventilated area. Dispose of the dry render via domestic waste disposal. Empty cans should be left open and allowed to dry then disposed of in accordance with your local recycling legislations.

SAFETY DIRECTIONS:

Keep out of reach of children, provide adequate ventilation during use and do not dispose of left-over render in any drainage systems.

FIRST AID:

Eye Contact

Irrigate continuously with water for fifteen minutes holding eyelids open. Seek Medical advice.

Swallowed

Contact a doctor or Poisons Information Centre immediately. Do not induce vomiting. Give a glass of water. If vomiting does occur, place victim's face downwards at low level to prevent vomit entering lungs. Contact Astec for the relevant Material Safety Data Sheet.

PRODUCT DATA;	
Pack Size	15 Ltr or 200 Ltr
Mix activation water.	Not Required / Wet Mix
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	3 to 6 hrs
Minimum application temperature	5° C
Finish colour	Light or Dark grey, (Cement colour dependent)
Durability	Exterior/Interior (must be top-coated)
Curing	Not required

COVERAGE

Calculation = 0.9 ltr / m² per 1mm thickness

COATING THICKNESS	Ltrs/m²
Theoretical spread rate @ 3mm (Minimum)	2.70
Theoretical spread rate @ 4mm	3.60
Theoretical spread rate @ 8mm	7.20
Theoretical spread rate @ 20mm	18.0

LIMITATIONS

- Contact an authorized Astec representative for the correct substrate specific product system specification.
- Should not be applied in temperatures below 5°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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