



[Technical Bulletin]

Firewall Skim

FIREWALL



PRODUCT TYPE:

Armatex Firewall Skim is a polymer bound float coat, filled with proprietary vitreous aggregates and specialty additives that are designed minimize vertical and or horizontal flame spread and to ensure that strong inter-coat adhesion is maintain with Astec Firewall Render when a building facade is exposed to temperatures of up to 1000 degrees centigrade during a large-scale fire.

This adhesion and flame spread performance was proven during large scale test conducted to AS-5113 when the product was exposed to 30 minutes of extreme fire conditions and radiant heat while at the same time being exposed to substrate intumescing, thermal drift and warping of a PVC substrate.

Armatex Firewall Skim provides the applicator a highly polymer bound float coat that floats smooth in a similar manner to that of a traditional sand and cement faring coat.



Armatex Firewall Skim is applied in one single pass at a thickness of between 2mm to 5mm across the entire surface of the Firewall Render then floated smooth and flat to level out any surface imperfections in the under-laying render.

It is a water reducible compound that is supplied ready for use straight from the drum apart from the required addition of between, 12% ~ 14% cement or fondu by weight.

LARGE SCALE FIRE TESTED TO AS-5113

Firewall Skim in combination with Firewall Render are used as the base render and float coat 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 thin section skim coats, the cured film of Firewall Skim, does not suffer from shrinkage cracks, crumbling, leaching salts and lack of adhesion during and after cure. The applied finish is extremely strong and chip resistant 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.

Armatex Firewall Skim 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.

Armatex Firewall Skim is designed to be float finished and will produce a smooth and uniform surface ready for the application of an Armatex acrylic texture then the application of a crack bridging 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.

SUBSTRATES:

- Firewall Render
- PVC Permanent formwork with Firewall Render
- Cement sheet permanent formwork.
- Cement Sheet cladding.
- Hebel Block & Power Panel XL.
- All AAC Panels and block.
- Masonry substrates.
- 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 and the application of Firewall render first. 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, (12~14 %) 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.

12% = 3.2 kg/15Ltr Tub or 2.0 Litres Cement
14% = 3.8 kg/15Ltr Tub or 2.3 Litres Cement

2. It must be remembered that on PVC Wall Panel previously prepared with Firewall Render that there is low 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 cool weather applications, replace some of the cement with up to 250 grams of Fondue along with the remaining cement.

APPLICATION TECHNIQUES

1. The Firewall Skim is applied in one single tight pass of between 2mm and 5mm per pass.
2. The product should be applied to the surface with firm pressure and then levelled true with a high quality large stainless-steel trowel.
3. Allow the product to stand and release any surface moisture, then float smooth with a polystyrene float.
4. Any large surface misalignments must be feathered before the skim coat 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 Tub
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 @ 1.8mm (Minimum)	0.55
Theoretical spread rate @ 2.5mm	0.41

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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