



# High Build Acrylic Render

## TECHNICAL BULLETIN



ARMATEX 100% ACRYLIC TEXTURES

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### PRODUCT TYPE

100% acrylic, light weight render.

### DESCRIPTION

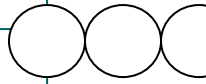
Armatex High Build is a 100% Acrylic Render, filled with light weight insulating aggregates. The product is used in place of traditional sand/cement render for the levelling of flush jointed block work, Hebel and raked brick prior to the application of an acrylic texture. The product can be applied at a thickness of up to 15 mm in one single application without the normal shrinkage cracks, soft corners and drumminess associated with traditional sand and cement renders.

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 by weight for exterior use.

The product can be applied by either hawk and trowel or mortar spray devices and is suitable for application to most correctly prepared mineral based construction surfaces, including, well adhered "gloss free" painted surfaces.

The final result is a light weight, water resistant render that keys with an extremely strong bond to the substrate, providing an excellent impact resistance surface with good flexibility.

*Astec Paints are a 100% Australian owned company committed to the research and development of technologically advanced coatings that provide premium durability against our harsh Australian conditions. Our coatings are manufactured with high regard for worker safety and environmental care and will provide you with absolute confidence in long term performance.*



## PROPERTIES

Unlike normal render, the cured film of Armatex High Build, 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.

Unique to Armatex are flow control and setting additives that enable a good wet edge to be maintained. In addition, provides pseudoplasticity, making the product extremely buttery and smooth to apply.

Most importantly for the applicator, Armatex has undergone rigorous field and laboratory test programs. This will guarantee the tradesman maximum ease in fast, trouble free application that is a paramount performance requirement to achieve the uniform end result.

Unlike many available render finishes, Armatex High Build 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.

## DESIGNED USE

Armatex High Build Acrylic Render is designed for the levelling of flush jointed block work, Hebol, polystyrene foam construction, F.C. sheeting and raked brick prior to the application of an acrylic texture.



The product's high build is capable of covering large surface misalignments or defects and can be applied at a thickness of up to 15 mm in one single application.

## COLOUR

Armatex High Build Acrylic Render is manufactured as a stone white base, however, with the addition of different coloured Portland Cements, the final colour of the render can vary from white to dark grey.

In the event a light coloured texture is to be applied over the High Build Render, it is advisable to use a white or off white cement.

## TOP-COATING

High build can be over coated with any water based texture, however, it is recommended that a texture with at least a 1mm profile be used. Where a very fine texture is required it is advisable to first fill any surface imperfection caused during floating the render, with one scratch coat of Astec Pre-Patch Medium.

## CLEAN UP

All equipment can be washed up in water. Do not allow waste water to enter sewers or water courses. Any spilt material should be allowed to dry and be disposed to land fill according to local regulations.



# 100% ACRYLIC TEXTURES

## COVERAGE RATE

0.45 m<sup>2</sup> per ltr @ minimum  
spreadable thickness = 2mm

60 to 90 m<sup>2</sup> per 200 ltr drum  
average use (applicator dependent)

## DRYING TIMES

Armatex High Build Acrylic Render will dry to touch in approximately 1 to 2 hrs at 25°C and 50% relative humidity. The film will reach full cure in 7 days. The surface can be textured the following day in most cases, dependent upon climatic conditions and the thickness of applied film.

## CEMENT QUANTITIES

High Build can be used on interior walls as supplied. However, requires the addition of between 3 and 5% cement by weight for exterior rendering.

Up to 15% cement by weight can be added which will further thicken and tighten the mix during application. A tighter wet mix is preferred by some applicators as it allows the applied wet film to be floated up sooner. The higher addition of cement will also provide a faster cure and will have a harder surface than normal when dry.

## MIXING

Mixing the cement into the product can be carried out by either using an electric mixer in a 15 ltr drum or alternatively, by using a normal garden rake to mix the cement through the product in a wheel barrow. The measured amount of cement can be mixed direct into the product, however, some lumps may occur. To avoid cement lumps, add a small amount of water to the cement first and mix to make a creamy slurry. Add the slurry to the product and mix as normal. This will ensure the mix will be lump free.

## THINNING

All Armatex products are manufactured approximately 2% thicker than is normally required, to allow some on site control for the tradesman. In addition to accommodate any high temperature reduction in viscosity that can occur.

Thinning can be done with clean fresh water or Astec high temperature Thinners. The amount of thinner should not exceed 1% by weight and should be determined by the applicator on the day of use, taking all climatic and evaporation loss factors into account.

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## LIMITATIONS

Armatex High Build Acrylic Render should be applied at temperatures between 10°C and 32°C. Avoid application in extreme heat and or windy conditions and always work with shaded areas out of direct sunlight. Always protect the applied product from freezing prior to cure.

During inclement weather and where you know the temperature will fall below 10°C at night, always terminate work early enough to allow sufficient time for the product to cure. In some areas this could be as early as 12 pm to 1pm.

When applying Armatex at temperatures around 10°C you must remember that in some cases the substrate temperature can be many degrees lower than the day. Under these circumstance it is advisable to conduct a small test patch to ensure cure will take place. In the event the product does not cure, application must be postponed until the weather is more suitable.

Armatex High Build Acrylic Render is a water based material, therefore, should not be applied during inclement weather or when precipitation and freezing are imminent.

### SURFACE PREPARATION

The surface should be clean dry and free of all surface contaminants, such as, grease, mould and **most importantly, release agents**. Remove any loose mortar splashes and cut back protruding block or tie wires. Remove any loose paint and all surface gloss from any remaining paint.

In the event a high suction wall reduces application and finishing times to less than that required. The wall can be sealed with Astec W.R. Primer or Astec CA 4000 just prior to application. A seal coat prior to application of the render, will slow surface suction and increase application and working times.

Contact Astec for assistance on the correct procedure for the removal of release agents or any other surface preparation difficulties.

### EQUIPMENT REQUIRED

Armatex High Build Acrylic Render is applied with a hawk and trowel, ( **See Diagram 1** ), then floated smooth with an Astec High Build Float, ( **See Diagram 4** ), or an Aluminium Darby, ( **See Diagram 5** ), to remove any steel trowel marks and achieve its final finish. (See application technique for details).

A high quality stainless steel trowel is best for application and a stainless steel High Build Float, manufactured by Astec, is best for the finish floating. It is not advisable to apply the product with a mild steel trowel as traces of iron can be left on the surface which can cause unsightly rust stains to appear. In addition, a steel trowel drags on the surface of the render more than stainless steel making application more difficult.



Figure 1

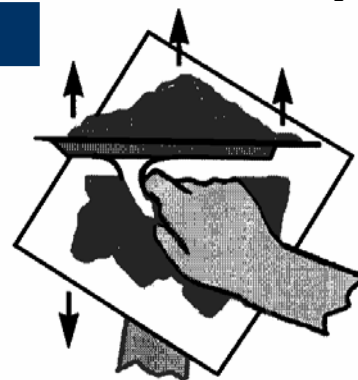


Figure 2



Figure 3

( diagram 1 )

## APPLICATION TECHNIQUE

Load a manageable amount of render to your hawk via a scoop. (See Diagram 1, Fig 1). Then load your trowel by moving it across your hawk starting from the edge closest to your body, while at the same time tilting the outer edge of the hawk up and toward yourself to assist in pick-up of the render. (See Diagram 1, Fig 2 & 3).

Transfer the render from the trowel to the wall in vertical strips starting at the top of the wall and across an area of approximately 1 metre wide. (See Diagram 2).

**NOTE:** The amount of area covered prior to floating will depend on the wet edge time that will change with each different substrate and is highly dependent on weather conditions. Do not get too far ahead as losing the products wet edge will result in a poor final appearance.

With your trowel at a 45 degree angle to the surface and using an arc motion, use firm pressure to spread and smooth off the wet render. Do not spend too much time trying to smooth the wet material, only spread it as even as possible. (See Diagram 3).

Allow the render to stand for a short while after spreading. Then float the render in a circular, figure eight or vertical up and down motion with light even pressure to create the required smooth surface. (See Diagram 4 & 5).

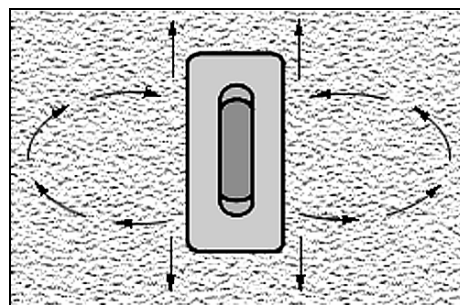
The most common finish floats used for finishing High Build Acrylic Render are, an Astec High Build Float or an Aluminium Darby.



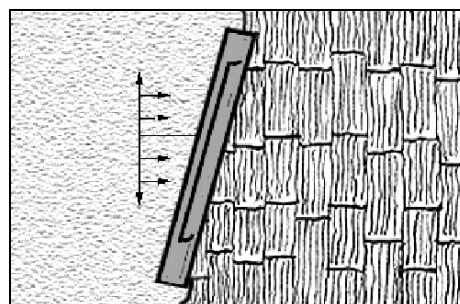
(diagram.2) transfer texture to the wall



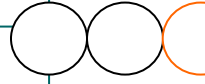
(diagram.3) smooth off and remove excess render



(diagram.4) float texture to achieve desired finish



(diagram.5) float texture to achieve desired finish



For best results, the procedure of applying the texture to the wall, loading in vertical strips, smoothing off and then, floating, must be carried out in a uniform and well planned manner. (See Diagram 6 ).

### SPECIAL CONSIDERATIONS

Window seals, reveals and corners should be squared up true the day prior to render application. This is done with the traditional method of pining an aluminium straight edge to the corner and filling any space between the straight edge and wall with high build render. The straight edge is then removed with a wiping action just prior to the render drying and allowed to cure overnight. This method of truing up corners provides a square corner from which to work the render and assures that all corners are aesthetically pleasing to the client.

Careful consideration must be given to the size of the area, as the application must take place without interruptions across the entire area. In the event that the area is too large to effect uninterrupted application, the area should be architecturally broken up into more manageable sizes.

Most importantly, the applicators must consider the weather elements to ensure that the texture is not applied in direct sunlight, on hot surfaces or when hot wind is present.

Attention to detail with on site planning and logistics, including weather, scaffolding for substrate access and the sizing of manageable areas will ensure the longest possible time is achieved to effect a uniform finish across the entire project.

It is imperative that the render be applied to the entire selected area while maintaining a wet edge. For the most effective system of maintaining a wet edge. (See Diagram 6 ).



(diagram.6) maintaining a wet edge

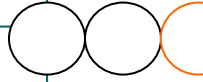
## PRODUCT DATA



ARMATEX 100% ACRYLIC TEXTURES

[*arma. hibu*]

Gloss Level	Flat/Aggregate
Recommended Thinners	Water
Touch Dry 25 deg C, 50% RH	1 hour
Handle @ 25 deg C, 50% RH	2 hours
Dry @ 25 deg C, 50% RH	24 hours
Theoretical spread rate [@ 2000 mic D.F.T.]	0.45 m <sup>2</sup> /ltr
Abrasion Resistance	Excellent
Impact Resistance	Very High
Solvent resistance	[Full top coated system]
Alcohol	No reaction
Salt water	No reaction
Distilled water	No reaction
Diluted Caustic Soda	No reaction
Detergent solution	No reaction
Dilute 5% mineral acid	No reaction
Weatherability	[Full Top-coated system]
	Excellent
Specific Gravity	1.178
Solids volume	88% V/V
P.V.C.	90% V/V
Moisture vapour transmission [Method ASTM E96-1966 Full top-coated system]	42.7g.m <sup>2</sup> /24hrs



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