

Reinforced Render

A GLASS FIBRE REINFORCED HIGH PERFORMANCE WATERPROOF RENDER

PACKAGING



MIXING



APPLICATION



USES



Waterproof Drinking Tanks



High performance render



Surface render for dry stacked blocks

SUBSTRATES

CONCRETE
BRICK
BLOCK
CEMENT RENDER
GALVANISED IRON
STYRENE FOAM
PLASTERS MESH

DESCRIPTION

REINFORCED RENDER is a cement and fibre aggregate premix containing alkali resistant glass fibres and waterproofing additives making the product suitable for use as a high performance render. The addition of the alkali resistant glass fibres makes a rendering mix with greatly enhanced performance compared with conventional mortar without fibre.

USES

REINFORCED RENDER is ideally suited for applications requiring waterproofing and/or high impact resistance. Some typical uses are:

- Waterproofing render e.g. tanks, cellars, basements, etc.
- Impact resistant walls on squash courts, jails, psychiatric units, hospitals and schools.
- Hygienic hard wearing coating in the pharmaceutical and food processing industry.
- Apply to expanded plasterers mesh to make lightweight maintenance free walls and facades.
- Strengthens weak, unstable, fire affected brick and block walls.
- Surface bonding render for block walls stacked without mortar.

(A surface bonding, building instruction book is available on request.)

FEATURES

Reduced liability to cracking and greater resistance to water penetration gives REINFORCED RENDER a high degree of impermeability compared to ordinary renders.

Due to the mix formulation and the reinforcing fibre, REINFORCED RENDER adheres strongly to clean substrates and the resistance of the hardened render to abrasion and impact is excellent.

Fire Resistance – REINFORCED RENDER is not combustible.

COVERAGE

4m² per 20kg bag 3mm thick.

PERFORMANCE DATA

Compression strength BS 4551 28 day 40.00 N/mm²

Flexural strength BS 4551 28 day 8.8 N/mm²

Water resistance FSTTP-0035 2.5mm thick coat 160kph wind for 8 hours

Water vapour transmission ASTM C-355 (dessicant method) 162 grams/24hr/m²

Combustibility ASTM E-136 Non Combustible

Weather Resistance Twin AIC weatherometer no effect after 2,000 hours.

SPECIFICATION

The render shall be a waterproof, non-combustible alkali resistant glass render with a minimum compression strength of 40 N/mm² and flexural strength of 8.8 N/mm² such as REINFORCED RENDER manufactured by Construction Chemicals and shall be applied strictly in accordance with the manufacturers instructions.

ACRYBOND

The addition of ACRYBOND to the mixing water is recommended at 1 litre per 20kg bag for normal application and 2 litres for severe applications.

SURFACE PREPARATION

Any local deterioration (cracks, holes, mortar joints etc.) must be made good by cutting out and filling. New concrete walls must be free from mould oil. The surface to be rendered must be sound, clean of oil, dirt, mud, efflorescence and other contaminants. Smooth surfaces must be roughened or acid etched. Porous surfaces must be wet thoroughly.

MIXING

- Mix in a wheel barrow using a hoe or similar as a mixing tool.
- Place 4 litres of water/1 litre of ACRYBOND in a barrow and progressively add 20 kg of REINFORCED RENDER mixing to a thick creamy consistency.



- Avoid over-mixing as this will break down the fibres making the mixture lumpy and difficult to apply.
- More water can be added up to 30 minutes after mixing to adjust the mix to workers preference.
- Discard unused material after 1 hour.

APPLICATION

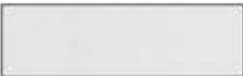
Apply the REINFORCED RENDER using the same techniques as that adopted for normal rendering. Apply the REINFORCED RENDER 3mm thick. To eliminate show-through from the substrate two 3 mm coats are recommended. The second coat should be applied while the first is green – that is within 24 hours. The use of



ACRYBOND is recommended. Apply when temperatures are between 5°-30°C, using upward diagonal strokes. Apply firmly but avoid excessive pressure. Avoid stops or cold joints in the centre of the wall by planning work to stop at natural stopping points, i.e. wall columns, tops, intersections and expansion joints.

FINISHING

Finish REINFORCED RENDER in a similar manner to normal renders. To hide show-through from the substrate textured finishes are recommended or two coats where a smooth finish is required.



Smooth finish is obtained with a normal plasterers trowel by trowelling to a semi-smooth finish initially then retrowel with a clean wet trowel while the render is still wet on the surface.

A stainless steel trowel should be used to reduce the risk of metallic blemishes.

Over-trowelling may lead to fine hairline crazing of the surface. Trowelling a surface which has lost its moisture will result in dark trowel burns forming on the dry areas. Should this occur, the affected area should be immediately dampened, rubbed with a wood float and carefully retrowelled.



A **stucco finish** is achieved by applying more than 3 mm in a sweeping motion.



A **stippled effect** is achieved by imprinting a semi-smooth finish with a mason's float or textured roller.



A **swirled finish** is achieved by imprinting the semi-smooth finish with a hard bristled brush.

Mix sufficient REINFORCED RENDER to complete each section with one mix to avoid cold joint lines. Finishing time is extended by application to the shaded side of the wall. Finish the render while the surface is wet.

REINFORCED RENDER can be painted using masonry paints (eg Elastakote, Roltex) that are resistant to alkaline substrate. Paints that cure initially on the surface and rely on the substrate to absorb the remaining solvent are not suitable.

CURING

Mist spray the surface 3-4 times daily for 3 days and repeat more frequently in hot windy conditions.

REINFORCED RENDER mixed with ACRYBOND does not require curing. Protect the surface from rain for the first 3 days.

LIMITATIONS

REINFORCED RENDER like any cement based product is susceptible to staining from timber, clay and dirt and careful work practices should be followed or protect the surface to avoid staining.

Do not use structurally in areas that maintain high temperatures (80°C plus) and high humidity (80%).

COLOUR VARIATION

The appearance of any cement based coating can vary depending on many factors. Some obvious variables are suction or porosity of the substrate, workmanship, rate of cure, water/cement ratio, weather conditions etc.

In order to achieve the best appearance, experienced applicators should be employed.

Some tips to minimise colour variations are:

1. Accurately measure mixing water using the same amount in each batch.
2. Avoid application during extremes in temperature and apply to the wall when shaded and in cooler conditions.
3. Two coats are recommended to minimise variation in colour, applying the second coat an hour after the first.
4. Avoid finishes that require using wet sponges or splashing with water.

SAFETY

Glass fibre and cement can cause skin irritation when wet or can dry and burn the skin. Therefore, it is advisable to wear gloves and eye protection when applying REINFORCED RENDER. Wash away thoroughly any wet render in contact with the skin.

SHELF LIFE

One year, when stored unopened on pallets in a dry area protected from moisture.

**CONSTRUCTION
CHEMICALS**