

Build Walls without Mortar

Packaging



Mixing



Application







Substrates



Description

Reinforced Render is a mixture of cement, glass fibres, waterproofing, and bonding additives which is mixed with water and applied as a 3mm thick render. The applied finish is waterproof, strong, impact-resistant, non-combustible and maintenance free. **Reinforced Render** walls are simply built by stacking concrete blocks without mortar and then rendering both sides of the wall with **Reinforced Render**.

Uses

Houses, sheds, extensions, fences, retaining walls, cellars, piggeries, dairies and stables.

Features

Reinforced Render built walls have the following advantages over conventional mortar built block walls.

- 3 times stronger
- Waterproof
- Built in half the time
- Cost less
- Built by unskilled labour

Coverage

4m² per 20kg 3mm thick

Performance Data

Compression Strength (BS4551) 40.00 N/mm² (28 days)

Flexural Strength (BS4551) 8.8 N/mm² (28 days)

Water Resistance (FSTTP-0035) 2.5mm thick coat 160kph wind for 8 hours, no penetration

Water vapour transmission (ATSM C355) (desiccant method) 162grams/24 hours/m²

Combustibility (ASTM E136) Non-combustible

Weather Resistance Twin Arc Weatherometer -No effect after 2000 hours

Hardness (Brinell) 3.2 (28 days)

Wall Construction

First Course

The first course is laid on a full mortar bed on a steel reinforced concrete footing (constructed in accordance with local building requirements) and must be straight and level. The corner blocks are placed first and aligned followed by the remaining blocks which are laid to a string line. A spirit level is used to level the blocks vertically. Leave necessary openings (i.e., door and windows), and do not mortar between blocks.

Stacking the Wall

After the base course has set for four hours commence stacking the wall in a staggered pattern or 'running bond'. Rub blocks together to remove burrs before removing blocks from the pallet. Stack blocks three to four courses high at the corner (using a level to true vertically). Set back a half block on each course. Using the corner as a guide, a string line set at every course enables the rest of the wall to be built up, setting the top outside edge of each block to a true line and level. Butt all blocks tightly together. Check all blocks with a level for vertical alignment and pack or shim with sheet metal, mortar or Reinforced Render any blocks out of level. A perfectly smooth wall is not necessary as Reinforced Render will hide the block lines.

Timber Frames

Held with metal straps nailed to the frame and mortared into the block core.

Steel Frames

Mortar fill between the blocks and frame.

Intersecting Walls

Butt walls together and fix with a metal strap mortared into the adjoining cores.

Metal Straps

Notch blocks to accept straps and place them at the base course then every third or fourth course.

Control Joints

10-12mm wide joints must be placed at 6-10 metre intervals.

Surface Preparation

The surface to be rendered must be clean of oil, dirt, mud, efflorescence and other contaminants. Block and porous surfaces must be wet before applying **Reinforced Render**.

Mixing

- Mix in a wheel barrow using a hoe or similar as a mixing tool
- Place 4 litres of water and 1 litre of **Acrybond** in the barrow and progressively add 20 kg of **Reinforced Render** mixing to a thick, creamy consistency
- When using Acrybond replace 1 litre of mixing water with 1 litre of Acrybond and mix together (Acrybond improves bond, and eliminates the need to wet cure)
- Avoid over mixing as this will break down the fibres making the mixture lumpy and difficult to apply
- More water can be added to up to 30 minutes after the mixing to adjust the mix to workers preference
- Discard unused material after 1 hour.

Application

- Apply when the temperatures are between 10-30°C
- Trowel the **Reinforced Render** (using upward diagonal strokes) uniformly 3-5mm thick
- Apply firmly, but avoid excessive pressure
- Apply to both sides of the wall.

Curing

Mist sprays the surfaces 3-4 times daily for 3 days and repeat more frequently in hot, windy conditions. Do not cure Reinforced Render mixed with **Acrybond**. Protect the render from rain for 24 hours after application.

Finishing

A textured finish is recommended as it will disguise joint lines and irregularities. Typical finishes are:

Smooth

A semi finish is obtained with a standard plaster trowel. A smooth finish is achieved by retrowelling with a clean wet trowel before the initial set has occurred.

Stucco

This effect is achieved by applying more than 3mm in a sweeping motion.

Stippled

Imprint the semi smooth finish with a mason float or textured roller.

Swirled

Imprint the semi-smooth finish in a swirled motion with a hard bristle brush. Mix sufficient **Reinforced Render** to complete each wall section with one mix to avoid cold joint lines. Finishing time is extended by application to the shaded side of the wall. Finish the wall while the **Reinforced Render** is wet or before initial set has occurred.

Shelf Life

1 year



First Course



Stacking



Mixing



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