# Technical Data Sheet

# PLATINUM SBR BONDING AGENT

High Strength Formulation - 42% Styrene Butadiene



#### **Special Properties:**

When used in a cementitious mix, Platinum SBR Bonding Agent has the following special properties:

- Suitable for use in damp conditions
- Imparts high water / salt resistance when incorporated
- Improves adhesion
- Allows thinner screeds to be laid
- Improves workability
- Allows a reduction in water content
- Improves flexibility and reduces cracking
- Improves resistance to abrasion and chemicals



Platinum SBR Bonding Agent is a High Strength 42% Styrene Butadiene Copolymer Latex which is specially modified to be compatible with cement based mixes (ordinary Portland Cement or high aluminium cement).

Platinum SBR Bonding Agent may be incorporated into cementitious renders, screeds or patching mixes in order to improve adhesion and abrasion resistance.

Platinum SBR Bonding Agent can be used internally or externally and in areas of continuous or intermittent water contact.

Platinum SBR Bonding Agent improves the chemical and water resistance of cementitious mixes and is recommended for use in effluent tanks, dairies, food factories, fertiliser stores etc.

## **Preparation:**

Where specific building methods are covered by British Standard Codes of Practice, ie. rendering and floor screeds, these should be followed as a guide to good building practice.

All surfaces must be sound and free from laitience, paint, grease, oil, surface water or any other contaminant which may adversely affect adhesion. Surfaces of high suction should be thoroughly dampened before the application of bonding primers.

Remove excess water from the surface before continuing. The sand to be used in the mixes should be well graded, clean and meet the appropriate British Standards.

## **APPLICATION:**

In relation to 'Bonding Primers' and 'Mix Designs', See 'APPENDIX' (Page 3).

## **Application 1 - Patching:**

Additional preparation is required where steel reinforcement is exposed.

Wire brush or preferably grit blast to remove rust and scale, apply 'Bonding Primer 2' liberally by brush to the prepared exposed steel and allow to become firm.

Dampen the surrounding substrate and apply 'Bonding Primer 2' over the entire area to be patched.

Finishing: Whilst the final Bonding Primer coat is still wet / green, patch onto the Bonding Primer using 'Mix 1'.

## Application 2 - Bedding:

Bonding Primer: Apply 'Bonding Primer 1' by brush to both the prepared surfaces.

Finishing: Whilst the Bonding Primer mix is still wet / green, butter one of the surfaces with 'Mix 1'.

Provide temporary support where necessary.

Note: For thin joints use fine graded sands (BS1199; 'Type B'), keeping the water content to the minimum.

## **Application 3 - Pointing:**

Bonding Primer: Apply Bonding Primer 1' into the dampened joints. Prime only small areas which can be jointed easily before the primer dries or sets.

Finishing: Whilst the Bonding Primer is still wet / green, point the joints with 'Mix 1'.





## Application 4 - Waterproof Renders:

Bonding Primer: Apply 'Bonding Primer 1' by brush to the dampened surface.

For difficult surfaces, i.e. weak and porous substrates, apply a coat of 'Bonding Primer 2' brushing vigorously into the surface, stippling to provide a key.

Allow to harden (minimum 16 hours, maximum 3 days), then apply one coat of **'Bonding Primer 1'** by brush onto the dry primer coat, again stippling to provide a key.

**Finishing:** Whilst the Bonding Primer is still wet / green, apply a render of 'Mix 1' to a minimum thickness of 6mm. Lightly scratch to provide a key and apply a second coat of 'Mix 1', maximum 6mm thick, when the first coat is firm (approx. 6 hours).

Prevent the rendering from drying out during the first 48 hours, eg. by mist spraying with water when firm.

## Application 5 - Tanking (Cellars, Swimming Pools and Ponds):

For new construction or existing sound structures eg. dense concrete, engineering bricks etc., (minimum compressive strengths 40 N/mm²).

**Additional Preparation:** Rake out all unsound joints and re-point as detailed under '**Application 3 - Pointing**'. Allow to cure for a minimum 24 hours before continuing.

**Bonding Primer and Finishing:** Apply 'Bonding Primer 2', brushing vigorously into the dampened surface, stippling to provide a physical key.

Bed a fillet of 'Mix 1' at the wall and floor junction, whilst the Bonding Primer is still wet/green.

Allow to harden (minimum 16 hours, maximum 3 days) then apply a second coat of **'Bonding Primer 2'**, by brush, to the dry first coat, laying off at right angles to previous coat, again stippling to provide a physical key.

Apply 'Mix 1' as detailed under 'Application 4 - Waterproof Renders'.

For areas subject to a high level of water pressure, i.e cellars, basements etc., or where walls / floors are in poor condition, BS 8102:1990 (The Code of Practice for Protection of Structures Against Water from the Ground) should be consulted.

### **Application 6 - Flooring:**

**Bonding Primer:** Apply one coat of 'Bonding Primer 1'. If the surface is porous, 'Bonding Primer 2' should be used.

## Finishing:

- Screeds 6 12mm thickness: Use 'Mix 2'
- Screeds 12 25mm thickness: Use 'Mix 3'
- Screeds over 25mm thickness: Use 'Mix 3' with SBR reduced to 5 litres / 50 kg cement (ca. 1 part SBR: 3 parts water).
- Heavy Duty Screeds 12 25mm thickness: Use 'Mix 4'
- Heavy Duty Screeds over 25 mm thickness: Use 'Mix 4' with SBR reduced to 5 litres / 50 kg cement (ca. 1 part SBR: 3 parts water).

The above screeds should be applied whilst the bonding primer is still wet / green. For dense water resistant concrete, 'Mix 5' should be used.

**Note:** All mixes should be covered with polythene sheeting, damp hessian or mist sprayed for the first 48 hours.

All screeds should be laid in bays not exceeding 25m². The maximum length of the bay should be no greater than 1.5 x the width.

Best results are achieved if work is carried out at temperatures between 5°C and 25°C with the use of well graded, clean, dry sharp sands.

## Application 7 - Bonding Gypsum Plaster:

**Bonding Primer:** Brush apply 2 coats of 'Bonding Primer 3'. Allow approximately 30 minutes between coats.

**Finishing:** Whilst the second coat of Bonding Primer is still wet, apply gypsum bonding plaster as per normal plastering practice.

## **Application 8 - Suction Control:**

Platinum SBR Bonding Agent may also be used as a primer coat when diluted with 4 parts water to control suction on very porous and difficult surfaces before subsequent treatments are carried out with cement / gypsum based systems.

## AFTER APPLICATION, LEAVE TO DRY THOROUGHLY BEFORE CONTINUING.

## **APPENDIX - Bonding Primers:**

**Bonding Primer 1:** 1 part SBR: 1 part water: 5 parts cement (by volume) mixed to produce a smooth, creamy consistency. 5 litres of SBR Latex Liquid would provide enough 'Bonding Primer 1' to cover approximately 30m² per coat.

**Bonding Primer 2:** 1 part SBR: 2 parts cement (by volume) mixed to produce a thin, smooth cream. 5 litres of SBR Liquid would provide enough 'Bonding Primer 2' to cover approximately 20m² per coat.

**Bonding Primer 3:** 1 part SBR: 1 part water:  $3\frac{1}{2}$  parts gypsum plaster (by volume). Mix to a smooth consistency. 5 litres of SBR Liquid will provide enough 'Bonding Primer 3' to cover approximately  $25m^2$  per coat.

Note: All Bonding Primers should be applied to a minimum thickness of 1mm.

## **APPENDIX - Mix Designs:**

## Mix 1:

Α		В
Cement - 50kg Sand - 125kg SBR - 15 Litres	OR	Cement - 1 Part by Volume Sand - 2 Parts by Volume SBR / Water - @ 3:1 (as Required)
Approximate Mix Volume = 0.1m³ (16m² at 6mm thickness) per 50kg cement		

## Mix 2:

Α		В
Cement - 50kg Sand - 125kg SBR - 10 Litres	OR	Cement - 1 Part by Volume Sand - 2 Parts by Volume SBR / Water - @ 1:1 (as Required)
Approximate Mix Volume = 0.1m³ (8m² at 12mm thickness) per 50kg cement		

## Mix 3:

Α		В
Cement - 50kg Sand - 150kg SBR - 10 Litres	OR	Cement - 1 Part by Volume Sand - 2½ Parts by Volume SBR / Water - @ 1:1 (as Required)
Approximate Mix Volume = 0.11m³ (9m² at 12mm thickness) per 50kg cement		

## Mix 4:

Α		В
Cement - 50kg Sand - 75kg Granite Chips SBR - 10 Litres	OR	Cement - 1 Part by Volume Sand - 1¼ Parts by Volume Granite Chips - 1¼ (3-6mm) - 75Kg Part Volume SBR / Water - @ 1:1 (as Required)
Approximate Mix Volume = 0.11m³ (9m² at 12mm thickness) per 50kg cement		

## Mix 5:

Α		В
Cement - 50kg Sand - 75kg 20mm Aggregate SBR - 5 Litres	OR	Cement - 1 Part by Volume Sand - 1 Part by Volume 20mm Aggregate - 2½ Parts - 125Kg by Volume SBR / Water - @ 1:3 (as Required)
Approximate Mix Volume = 0.14m³ per 50kg cement		

**Product Data:** 

Colour: Milky white emulsion.

**Storage:** Store in a dry place and protect from frost, high temperatures and direct sunlight.

Shelf Life: At least 1 year in sealed containers.

Packaging: 5 Litre and 25 Litre Containers.

**Thinning:** Platinum SBR Bonding Agent disperses in water.

Hazard: Non Hazardous

Instructions for Health & Safety and use of Platinum SBR Bondng Agent are given on the product label.

More detailed information on is available in our material Safety Data Sheet for Platinum SBR Bonding Agent.

Date: November 2018