# **PERMA BOND SBR**



# HIGH STRENGTH REPAIR MORTAR AND BONDING AGENT

#### DESCRIPTION

Perma Bond SBR is an aqueous emulsion of Styrene Butadiene Copolymer latex, specially formulated for use with cement. SBR modifies the property of cement in mortars and in concrete to make them perform better. In terms of water proofing, repair, corrosion inhibition, bonding, durability and wear resistance.

#### **PRIMARY USES**

- 1) Corrosion protection of steel.
- 2) Floor screed and topping.
- 3) Concrete and floor screed repairs.
- 4) Water proofing and tanking of basements.
- 5) Bonding old concrete to new concrete.

# **ADVANTAGES**

Water resistant, excellent adhesion to concrete, steel, brick, stones, compatible with cement. High compressive, tensile and flexural strength. Resistant to ingress of salts, mineral oils etc. Non toxic. Suitable for use in potable water tanks. Excellent corrosion protection. Economical when compared with epoxy mortars.

# **DIRECTIONS FOR USE**

#### A) Method:

- Apply passivalar coat of SBR+cement slurry.
- 2) On a cleaned and prepared wet surface apply Perma Bond SBR bonding slurry.
- Apply Perma Bond SBR modified mortar by float or trowel to form an uniform smooth surface. Bonding slurry sets very fast hence modified mortar application should be fast and immediately after application of bonding slurry.
- Moist cure for 24 hours and then allow it to dry off.
- B) Preparation: Passivalar coat/Bond Coat Slurry = Cement + SBR

NOTE: Applied bonding slurry sets very fast. 1 LTR Perma Bond SBR with 1 kg of cement gives a slurry which covers 20 to 25 sq./ft.

# MODIFIED MORTAR

 Cement
 :
 1 kg

 Zone II Sand
 :
 2.6 kg

 Perma Bond SBR
 :
 200 ml

 Water
 :
 150 ml

 Yield
 :
 2.00 Litres

This mortar cover 2.15 sq./ft. area if applied to a thickness of 10 mm

Note: 1) This MORTAR looks very dry. No further addition of SBR or water to be added.

 Dosage of SBR can be varied between 5 ltrs to 15 ltrs. per 50 kg bag of cement depending upon application and severity of problem.
 ltrs per 50 kg bag of cement is used in general plaster only as an admixture to produce crack free plaster.

## TYPICAL APPLICATIONS

- 1) Corrosion Repairs of Beams, Columns and Slabs:
  - Remove the cover concrete and cutback to the sound concrete zone.
  - Remove all the rust from the reinforcement by mechanical means.
  - Apply a passivalar coat on the cleaned steel and leave it overnight.
  - d) Apply one coat of SBR bonding slurry on the reinforcement and the surrounding concrete surface.
  - e) When the bonding slurry is still tacky apply modified mortar by pressing in position using 10 litre SBR per 50 kg bag of cement. Modified mortar can be applied upto a thickness of 20 mm. For building up to higher thickness leave the first layer to dry overnight and apply second layer with one more coat of bonding slurry.
  - f) Moist cure for 24 hours and allow it to dry off.

# 2) Industrial Floor or Floor Duct Nosing Repair:

- a) Cutback to sound concrete surface and make the surface wet.
- Apply the bonding slurry and when it is still wet apply the SBR modified mortar.
- c) Feather edge to match the original floor level. In case of nosing carefully build up the edge and give a smooth finish.
- d) Moist cure for 24 hours and allow it to dry off.

# 3) Bonding old Concrete to New Concrete:

- a) Vertical Joint: Apply SBR bonding slurry on the prepared wet old concrete vertical surface and pour the concrete.
- b) Horizontal joint: Pour and spread SBR bonding slurry on the wet old concrete surface to a thickness of 3.5 mm and pour fresh concrete.

# 4) Tile Ove Tile:

- a) Apply SBR bonding slurry to the existing mosaic or ceramic floor and immediately spread cement paste or cement sand mortar or tile adhesive over it.
- b) Apply SBR bonding slurry to back of the tile and fix it in position.

#### **PROPERTIES**

Form : Liquid

Colour : Milky White

Specific gravity : 1.01 Solid content : 40% ± 1 PH : 9.0

Solubility : Mixes with water

Application Temperature : Above 5°C
Physiological Effect : Neutral
Toxicity : Non Toxic
Particle size : 0.17 micron

Anti oxidant : YES Bacteriocide : YES Antifoam : YES

### **PERFORMANCE DATA**

## PROPERTIES OF HARDENED MORTAR

Results obtained with hardened mortar after 28 days are as follows:

Compressive Strength
Tensile strength
Flexural strength

40 to 45 N/mm²
6 to 8 N/mm²
9 to 11 N/mm²

Bond strength concrete

to mortar 1.8 to 2.2 N/mm<sup>2</sup>

Bond strength steel

to mortar 1.8 to 2.2 N/mm<sup>2</sup>

#### **PACKING**

Perma Bond SBR is available in 100 ml, 1 Litre, 5 Litres, 20 Litres and 100 Litres drum.

#### SHELF LIFE

12 Months from the date of manufacture.

#### **QUALITY ASSURANCE**

All "PERMA" branded products are manufactured under strict quality control supervision as per exact manufacturing specification. Should you find the behaviour of the product varying from the claims in the data sheets please stop the use of the product and contact the nearest Perma Staff or distributor.

### STATEMENT OF RESPONSIBILITY

Perma branded products when used in accordance with its current published directions for use, performs as per its data sheet/catalogue. The manufacturer and the distributor will not be responsible for other materials and conditions of inferior workmanship.

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