Paco systems
SPECIALIST PAINTS FOR INDUSTRY

SBR

Description
SBR is a Styrene-Butadiene co-polymer emulsion which imparts beneficial property improvements to cementitious mixes. After appropriate dilution with water, the resultant liquid may be used to gauge the cementitious mix to the desired consistency.
A reduced water: cement ratio leads to superior mechanical properties and resistance to moisture ingress.

Typical Uses
a) Flooring: screeds and patch repairs in dairies, abattoirs, breweries, factories, etc.
b) Bonding additive: renders, slip bricks, tiles, coping stones, etc.
c) Concrete repair: making good structural concrete, increase in effective concrete cover.

Advantages
* Plasticising action
* Waterproofing action
* Improves adhesion
* Reduces permeability
* Increases mechanical strength
* Up-grades chemical resistance
* Versatile and easy to use
* Cost effective
* Improves freeze-thaw resistance
* Compatible with many types of cement

Typical Properties

Appearance:	Milky white liquid
s.g.:	1.018 g/cu.cm
Shelf Life:	12 months minimum
Packaging:	5 litre, 25 litre, 200 litre

APPLICATION AND USE

1) Surface Preparation
Surfaces shall be clean and free from dust, oil, grease, laitance and other contaminants.

2) Priming
Surfaces shall be pre-dampened with clean, potable water, taking care to remove any excess surface water.
A 1:1 cement/sharp sand mix should be gauged to a slurry consistency using a 1:1 SBR/Water blend. This bonding slurry shall be brushed onto the prepared surface using a stiff brush.
NOTE: in certain instances it may be deemed preferable to prime with an Epoxy bonding agent such as Tack Primer. In such an event the Tack Primer should be applied to a dry substrate and be allowed to “tack up” prior to topping. Please refer to the Tack Primer product data sheet for additional information.

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Paints and Coatings for Industry

3) Polymer modified cementitious toppings.
The appropriate design mix material shall be applied whilst the primer is still tacky, and finished and cured in accordance with good concreting practice.

4) General Notes
a) SBR is compatible with Ordinary Portland Cement, Snowcrete, RHPC, SRPC and HAC.
b) Keep water addition to a minimum, applying “semi-dry”.
c) Minimum application temperature is 3C.
d) Cureseal may be applied as a curing membrane to prevent over-rapid drying out.
e) The usable life of these polymer-modified mixes is usually less than those of corresponding unmodified sand/cement mixes e.g. approximately 20-30 minutes.
f) Refer to BS8204:part 3: 1993 for additional information relating to polymer-modified cementitious flooring mixes.
g) High performance, forced action mortar mixes e.g. Cretangle type are much better for mixing than concrete mixers.

5) Typical Design Mixes

MIX I	**MIX II**
Mortar for screeds, renders floorpatching and re-pointing (<12mm)	High performance, waterproof repair mortar, renders (<12mm)
50 Kg OPC 125Kg Zone 2 Sand 6 litres SBR up to 12 litres Water Yield = 0.09 cu.m. approx	50 Kg OPC 125Kg Zone 2/3 Sand 9 litres SBR up to 9 litres water Yield = 0.09 cu.m. approx

NOTES:
(i) for Mixes I and II where thicknesses are to exceed 12mm, a further 25kg of sand should be added to the mix.

MIX III	**MIX IV**
Heavy duty floor Screeds up to 25mm	Adhesive/bonding mortar for slip bricks, tiles, kerbs, etc.
50 Kg OPC 75Kg Zone 2 Sand 75Kg 6mm gravel 6 litres SBR up to 12 litres water Yield = 0.10 cu.m. approx	50Kg OPC 125Kg Zone 2 Sand 9 litres SBR up to 9 litres water Yield = 0.09 cu.m. approx

NOTES:
(ii) for Mix III apply semi-dry. If thickness is to exceed 25mm, then use only 4 litres SBR in the mix.

6) Equipment Cleaning
Clean all equipment, immediately after use, with clean water.

7) Curing
Cure in accordance with good concreting practice.
Under conditions where rapid drying out is likely, the use of a curing membrane such as Cureseal is recommended.

8) Storage
Store in original unopened containers, free from frost and out of direct sunlight.

9) Limitations
Avoid frost during storage and use.

10) Health and Safety
SBR is essentially non-hazardous. However, it is invariably used in conjunction with cement which is highly alkaline and irritating to skin and eyes.
Wash off all splashes immediately with soap and water.
Please refer to the Material Safety Data Sheet for additional information.

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