# Cempatch SBR400



Liquid polymer bonding agent for cement containing mixes

#### **DESCRIPTION**

Cempatch SBR400 is a one component styrene butadiene rubber latex bonding agent. Cempatch SBR400 is designed to improve the physical properties of cement mixes and slurries.

#### **APPLICATIONS**

Cempatch SBR400 is ideally designed for use in the following applications:

- » Bonding of new to old concrete when used as a slurry
- To produce polymer modified screeds and floor toppings.
- To produce a mechanical key prior to rendering of various plaster mixes on concrete, brick and block
- To produce a repair mortar for patching of honeycombed concrete, internally and externally.
- To produce waterproof renders.

#### **ADVANTAGES**

- » Successfully increases the bonding/adhesion of cement
- Excellent waterproof additive which helps produce waterproof renders, screeds and toppings.
- » Effective plasticiser giving improved workability and cohesion.
- Improved mechanical and physical properties by increasing tensile, flexural and adhesive strengths.
- Reduces shrinkage and cracking in repair and screeding mixes.
- Good freeze/thaw resistance.
- > Chloride free.
- Non-toxic, can be used for concrete in contact with potable water.

#### **STANDARDS**

Cempatch SBR400 complies with:

- ASTM C1059-99, Type I and II, when tested in accordance with test method ASTM C1042.
- ASTM C932, for tensile bond strength.

# **TECHNICAL PROPERTIES @ 25°C:**

Colour: White

Specific gravity: Around 1.0

Slant shear strength:

ASTM C1042-99

Type I (dry) > 7 MPa Type II (after immersion) > 10 MPa

Tensile bond strength:

(Fresh sample)

ASTM C932

Dry condition > 2500 KPa Wet condition > 1800 KPa

Tensile bond strength:

(After heat aging)

ASTM C932

Dry condition > 1900 KPa Wet condition > 1400 KPa

Tensile bond strength:

(After freeze thaw cycles)

ASTM C932

Dry condition > 2000 KPa > 1400 KPa Wet condition

# **METHOD OF USE**

### SUBSTRATE PREPARATION

The substrate should be sound, clean and free from contamination. Surface laitance should be removed by acid etching.

Exposed steel reinforcements should be grit blasted or wired brushed to a bright finish to insure it is clean of all surface contaminants.

For patch repair, cut back the edges of the repair areas to a minimum of 10 mm depth to avoid thin repair thicknesses. Presoak substrates with water prior to commencing the repair.

## **MIXING**

In general, Cempatch SBR400 should be added and mixed with the clean water prior to dry materials for better dispersion.

# 1) As a bonding agent slurry:

The recommended mix to produce slurry consistency can be achieved by mixing 1 Cempatch SBR400: 2 OPC cement by volume.



2) As a bonding and waterproofing additive for site mixed floor screeds, renders, concrete repair and floor patching: The following table shows the mix designs proposed for the reinstatements of old floors, general purpose patch repair mortar and new floor screeding.

	Thin Section 6 - 15 mm	Thick section 12 - 40 mm
Cement	50 kg	50 kg
Clean sand	125 kg	75 kg
3 - 6 mm aggregate (preferably granite chips)	-	100 kg
Cempatch SBR400	5 - 10 ltr	5 - 10 ltr
Water	17 - 19 ltr	17 - 19 ltr
Yield approximately	0.12 m³	0.13 m³

## **APPLICATION**

1) As a bonding agent slurry:

Use a stiff brush to apply a thick coat to presoaked surfaces. Application of the subsequent render, mortar or screed should take place while the bond coat is still wet (tacky). DO NOT apply on dry bond coats.

(If bond coat dries before subsequent application, roughen the dry coat before applying a further coat of Cempatch SBR400 slurry.)

2) As a bonding and waterproofing additive for site mixed floor screeds, renders, concrete repair and floor patching: Apply the screed, repair mortar or render mix using wooden float to place and compact while the bond coat is still wet (tacky). Finish with a steel float.

# **CURING**

Care should be taken for appropriate curing. Use a chemical curing compound or a wet hessian completely covered with a polyethylene sheet for curing.

## **CLEANING**

All tools should be cleaned immediately after use with fresh clean water. Hardened materials should be cleaned mechanically.

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### **PACKAGING**

Cempatch SBR400 is available in 5 and 25 litre drums.

#### **STORAGE**

Cempatch SBR400 has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C in closed packaging.

If these conditions are exceeded, contact DCP Technical Department should be contacted for advice.

#### **CAUTIONS**

#### **HEALTH AND SAFETY**

Cempatch SBR400 is nontoxic. Avoid skin and eye contact. Gloves and eye protection should be worn. The use of barrier cream is recommended on exposed areas of the skin.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice.

For further information, refer to the Material Safety Data Sheet.

## **FIRE**

Cempatch SBR400 is nonflammable.

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