

Phoscrete

Rapid Setting Grout



DESCRIPTION

Phoscrete is a high performance, non-shrink, phosphate-bonded grout. Phoscrete RSG excels in a wide range of applications within the construction and building industry where rapid strength gain is required. Once mixed Phoscrete produces a fast setting concrete that can withstand traffic within hours.

Phoscrete **contains** no Portland cement, requires only minimal surface preparation and does not require wet curing. It displays rapid early strength development and has a superior bond to most surfaces.

The engineering properties of Phoscrete such as Modulus, creep and co-efficient of thermal expansion, are similar to those of Portland cement concrete.

ADVANTAGES

- Requires no pre-soaking or post curing
- Cures rapidly for minimum down time
- Will cure at temperatures down to -5°C
- Comparable in appearance to ordinary concrete
- Some self-levelling properties
- Outstanding chemical bond

USES

- Bedding machinery with heavy static loads and dynamic operating forces
- Grouting anchor points, bridge supports or bedding plates
- Rapid repair to concrete surfaces
- Industrial floor repairs
- Repairs to cold rooms, bridge decks, ramps, runways, loading docks etc.
- Repair of concrete subject to high thermal shock
- Embedding runway lighting

TECHNICAL DATA @23°C

Colour	Grey
Consistency	Flowable
Initial set	10 - 15 min
Wet density kg/m ³	2300 - 2350
Compressive strength	
3 hours	40Mpa
24 hours	60Mpa
7 days	80MPa
Flexural strength	
7 days	8.5MPa
Application temperature	-5°C-35°C
Water requirement	2 L per bag

LIMITATIONS

The minimum depth of repair for Phoscrete is 10mm. Do not apply in areas where their will be unsupported loads applied the edges of the repair, e.g. the edges of control joints subjected to heavy traffic.

CONSUMPTION

One 20 kg bag yields approximately 10 litres of grout at fluid consistency. Up to 10kg of clean aggregate per bag may be added to increase the mixed volume to approximately 15 liters.

SAFETY

This material is acidic:

Do not breathe dust.

Avoid contact with skin or eyes.

Always read the Health and Safety Data Sheets before use.

STORAGE

Store in dry conditions. Shelf life up to 12 months if stored in original unopened packaging.

PACKING

20 Kg bags

SURFACE PREPERATION

Surfaces must be sound and clean. Edges must be square and at least 15mm deep (No feathered edges). Remove all dust, grease, any unsound concrete, oil and any substances that may interfere with the bond. No bonding agents are required. **Use plastic coated formwork or grease all formwork, as Phoscrete will bond through a film of oil.**

Remove all free standing water, the surface may be dry or damp but not wet. Please note the hole diameter for anchor bolts should be twice the diameter of the bolts specified (minimum 50mm).

Phoscrete is acidic and most non-ferrous metals including Aluminium and Zinc (galvanising) react with this product causing slight etching and reduced bond strength. The use of a protective coating is recommended where Phoscrete is to come into contact with nonferrous metals.

MIXING

Mechanical mixing is essential. Such as high shear paddle type mixers. Hand mixing can be used for small amounts. Potable water is essential.

DO NOT ADD SAND or PORTLAND CEMENT to Phoscrete.

Place the required amount of clean water in the mixing vessel and add the powder in a steady stream while mixing.

One to two minutes mixing is usually sufficient.

The mix will initially appear too dry but will become more fluid once the chemicals dissolve. Do not add extra water.

For One Hour Concrete: Up to 10 kg of clean, round 10 mm aggregate **with no fines** may be added to produce "One Hour Concrete". Water addition can be up to 2.0 litres per 20 kg bag to reach desired consistency. Use only silica aggregates do not use limestone or other calcareous aggregates.

Do not re-temper by adding water or remixing. Use the minimum amount of water consistent with adequate workability.