



MICSHIELD™



REPFLOW SCLA

Typical Properties

Single component free flowing Self Compacting, Low Alkali micro concrete.

Description

REPFLOW SCLA cementitious mortar, Single component free flowing low alkali micro concrete. Based on Portland cement, graded aggregates and additives supplied as a ready to use mixture, only water is added.

REPFLOW SCLA have an excellent thermal conductivity and water resistance.

REPFLOW SCLA suitable to fill voids between 20 mm and up to 150 mm of micro-concrete

Uses

- Repair zones with heavy reinforcement
- Reinstatement of large, structural sections of concrete
- Repairs to concrete effected by alkali-silica reaction and chloride and carbon dioxide.

Characteristics / Advantages

- Factory controlled pre-blended dry mix which requires only addition of water.
- Versatile - packable, pourable, pumpable
- Low shrinkage with high durability.
- Low permeability
- Low alkali content
- Flowable, self-leveling and ensures highest effective bearing area.
- Chloride-free product

Standard Compliance

REPFLOW SCLA meets or exceeds the test requirements of UK Department of Transport Standard (BD 27/86, Clause 4).

Technical information corresponds to the data, which were obtained at 20 °C (±2 °C) temperature and 50+5% relative humidity.

Color	Grey
Appearance	Powder
Setting time (BS 4550)	
Initial:	6 hours 30 min. at 20°C
Final:	9 hours at 20°C
Compressive strength :	≥ 45 MPa at 7 days
(BS 1881 Pt.1161)	≥ 60 MPa at 28 days
Flexural strength :	≥ 7 MPa at 28 days
(BS 1881: Pt 117)	
Water absorption ISAT (BS 1881 Pt 5:1970)	
10 minutes:	0.0125 ml/m ² /sec.
2 hours	0.0013 ml/m ² /sec.
Permeability :	< 10 mm
(DIN 1048 Part 5)	
Bond strength (BS 6319 slant/shear - substrate pre-soaked, nonbonding aid):	66 MPa at 28 days
Fresh wet density:	Approximately 2270 kg/m ³ dependent on actual consistency used.
water: powder	0.133

Application Instructions

Surface preparation

The substrate surface must be clean, sound, and free from oil, grease, curing compound or any loose materials.

Break out the area to a minimum depth of (the minimum thickness). Areas that do not have be broken out, roughening the surface is mandatory to remove any laitance.

Any rust, scale, concrete, and other loose material on the steel reinforcement should be removed using abrasive blast cleaning or other suitable means to reach the bright condition.



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REFFLOW SCLA

Mixing

REFFLOW SCLA requires around 3.3 liters of potable water per 25 kg bag, Mixing in a suitably sized drum using an approved spiral paddle in a slow speed (400/500 rpm) heavy-duty drill is acceptable.

- Measure 3.3 litres of drinking quality water and pour three-quarters into the mixer.
- Gradually add powder into the water whilst continuously mixing the contents of the bucket and mix for one minute before adding the rest of the water.
- Mix for a further 2-3 minutes until a smooth even consistency is obtained. Note that powder must always be added to water.

It is recommended that the mixed product be passed through a suitable coarse metal screen prior to placing or pumping to highlight any unmixed material.

Application

The mixed material should be placed within 30 minutes of mixing in order to gain the full benefit of fluidity and of the expansion process. If placing by pump, standard concrete pumping practice should be followed. The pump and pipeline must be 'grouted' with a rich cement slurry or mortar, discharging the 'grout' as waste. Pumping should be commenced immediately after 'grouting' in this way.

Cleaning

Tools should be cleaned immediately with clean water. Hardened material should be removed mechanically.

Packaging

REFFLOW SCLA is available in 25 kg bags

This product is environmentally friendly

Storage

REFFLOW SCLA has a shelf life of 12 months when stored in its original unopened packing in dry conditions. Shelf life may reduce if the recommended storage conditions changed.

Limitations

- Do not apply the product if the ambient temperature is less than 5 °C.
- Hot weather practices should be adopted during application and curing if the temperature is above 35 °C.

Safety Instructions

Like any cementitious product, **REFFLOW SCLA** contains hydraulic cement and may cause irritation to skin or eyes. For further information Refer to the Material Safety Data Sheet

Disclaimer

Manaseer Industrial Complex has the right to amend its datasheets anytime. Please make sure to have the latest published datasheet version.

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