

March 2001

# Sika-Armorex Construction Grout

## Shrinkage Compensated Grout

### Technical Data Sheet

#### DESCRIPTION

Construction Grout is a specially formulated pre-mixed cementitious grout powder. It is a blend of selected cements, graded silica sand and compatible admixtures, which when mixed with water produces a high strength grout with good flow properties.

#### USES

Under stanchion plates.

Void filling.

Concrete repairs.

Machine base plates.

For exterior and interior use.

#### ADVANTAGES

Quality assured factory blend.

Just add water.

Compatible with **Sika FerroGard**

High compressive strength gain.

Easy to mix and apply.

Excellent bond to concrete.

Contains no chloride admixtures.

Overcoatable with **Sika** reprofiling/levelling mortars and coatings.

Low shrinkage.

Generally more durable than equivalent class of concrete.

Does not segregate or bleed.

Fire rating and protection properties comparable to concrete.

Can be pumped or poured.

Good mechanical properties.

| Technical Data (typical)  |             |    |    |  |  |
|---|-------------|----|----|--|--|
| <b>Mixed colour:</b> Grey   |             |    |    |  |  |
| <b>Mixed wet density:</b> 2.125kg/litre   |             |    |    |  |  |
| <b>Application</b> +5°C min, +25°C max<br><b>Temperature:</b> (Substrate and ambient)   |             |    |    |  |  |
| <b>Application</b> 10 mm minimum<br><b>Thickness</b> 100 mm maximum<br><b>per layer</b> |             |    |    |  |  |
| Water addition rate per 25kg bag  |             |    |    |  |  |
| Pourable Consistency  | 4.55 litres |    |    |  |  |
| Flowable Consistency  | 5.20 litres |    |    |  |  |
| MECHANICAL PROPERTIES   |             |    |    |  |  |
| Average compressive strength in N/mm <sup>2</sup> tested to BS 1881: Part 116:1983      |             |    |    |  |  |
| Age(days)   |             |    |    |  |  |
| Consistency   | 1           | 7  | 28 |  |  |
| Flowable  | 21          | 44 | 60 |  |  |

#### METHOD OF USE

Reference should be made to the current Instructions For Use and Typical Specification. Apply the grout to sound, clean and dust free surfaces.

#### CONCRETE SUBSTRATE PREPARATION

Concrete should be roughened to provide a good key.

Shutters should be of adequate strength, securely anchored and sealed to prevent leakage. Care should be taken to ensure that the shutters provide sufficient head. Concrete substrate surfaces should be soaked continuously with water for six hours before applying the grout. Surplus water in anchor pockets should be removed.

## MIXING

Measure the appropriate amount of water (see table above) into the mixer. Slowly add the complete bag of **Construction Grout** powder. When mixing more than one bag together in a mix add the water before each bag.

Mix continuously for 3 minutes to a smooth consistency. Mixing is best achieved using an approved mechanically powered mixer or an Sika-Armorex Mixing Paddle clamped into a slow speed drill. Do not exceed the maximum water content given in the table above.

Pour the mixed grout from one side only to avoid trapping air and water.

## APPLICATION

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated leaving no standing water.

When pouring, the area of grouting must be tightly shuttered and a header box used so that a grout head of 150 to 200 mm can be maintained.

For larger applications **Construction Grout** can be placed using a grout pump. Ensure that air is displaced by grout, if necessary, by making breather holes. Use steel rods or chains to assist the flow of grout where necessary.

## IMPORTANT CONSIDERATIONS

### CURING

It is essential to cure the product immediately after application for a minimum of 5 - 7 days to ensure full cement hydration and to minimise cracking.

After the grout has initially hardened remove any shuttering and cure by spraying with Sikafloor Proseal 90, taking care to avoid over spray onto equipment.

Use only clean potable water.

Do not add water over recommended dosage.

Apply only to prepared, sound substrates.

Protect freshly applied material from freezing for 3 days.

### CLEANING

Remove **Construction Grout** from tools and equipment with water. Hardened material can only be removed mechanically.

### PACKAGING

Refer to latest price list.

### CONSUMPTION

Wet Density Fluid Consistency  
2..125kg/m<sup>2</sup>/mm

Excluding allowances for loss wastage, surface profile and porosity.

## STORAGE AND SHELF LIFE

Minimum 9 months in unopened original sealed containers stored in dry warehouse conditions (+5°C - +25°C).

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#### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

#### Important Note

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

**Please consult our Technical Sales Department for further information**