



BUILDING TRUST



## PRODUCT DATA SHEET

# Davco 702 MY

High mechanical strength and high fluidity non shrink grout

### DESCRIPTION

Davco 702 MY is a premixed cementitious non-shrink, high strength grout containing cement, sand and additives

### USES

Davco 702 MY is suitable for repairs to the following concrete structures:

- Grouting machine foundations
- Installing rebars and anchor bolts
- Filling gaps between precast panels (RC structures)
- Filling cavities
- Rail beds
- Recesses

### CHARACTERISTICS / ADVANTAGES

- High compressive strength
- Non-shrink
- Good workability
- High fluidity
- Pumpable

### PRODUCT INFORMATION

Packaging	25 kg bag
Appearance / Colour	Grey powder
Shelf life	6 months from date of production
Storage conditions	Store in dry conditions. Keep away from rain, water and moisture. Protect from direct sunlight.
Maximum grain size	2.0 mm

### TECHNICAL INFORMATION

Compressive strength		<b>Flowable</b>	<b>Pourable</b>	(ASTM C109)
	1 day	> 25 MPa	> 30 MPa	
	7 days	> 45 MPa	> 50 MPa	
	28 days	> 60 MPa	> 65 MPa	
Expansion	0.6–1.5 % at 24 hours			(ASTM C940)

### APPLICATION INFORMATION

<b>Mixing ratio</b>	Flowable consistency	4.1–4.4 L of water per 25 kg bag	
	Pourable consistency	3.7–4.0 L of water per 25 kg bag	
	Stiff consistency	3.0–3.4 L of water per 25 kg bag	
<b>Fresh mortar density</b>	~2.2 kg/l (depending on consistency and temperature)		
<b>Yield</b>		<b>Flowable consistency</b>	<b>Pourable consistency</b>
	Davco 702 MY	25 kg	25 kg
	Water	4.1–4.4 L	3.7–4.0 L
	Yield	13.4 L	13.2 L
<b>Layer thickness</b>	5 mm min. / 50 mm max. per pour		
<b>Flowability</b>		<b>Flowable consistency</b>	<b>Pourable consistency</b> (ASTM C 230 modified)
	Flow cone	~280 mm	~250 mm
<b>Ambient air temperature</b>	+10 °C min. / +40 °C max.		
<b>Substrate temperature</b>	+10 °C min. / +40 °C max.		

## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## IMPORTANT CONSIDERATIONS

- At temperatures below +20°C, setting time and strength development will be slower.
- Non-shrink grout contains additives which expand either during the plastic stage and / or the hardening stage to compensate for the shrinkage of the cementitious matrix. However, this 'non-shrink' property will be effective only if the material is not subjected to water loss.
- This is confirmed by a note in the ASTM C 1107 Standard Specification for packaged dry, hydraulic cement grout (non-shrinkable), which clarifies the behaviour of the non-shrink grout when subjected to some drying:

*"Note 1: Since all conditions of use cannot be anticipated, this specification requires non-shrink grout to exhibit no shrinkage when tested in a laboratory controlled moist-cured environment, and requires only the reporting of the observed height change, usually shrinkage, when test specimens are subject to some degree of drying."*

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### SUBSTRATE QUALITY / PRE-TREATMENT

The substrate should be prepared by suitable mechanical

preparation techniques such as high pressure water, breakers, grit blasting, scabblers, etc.

All absorbent surfaces must be well saturated with clean water, but free of any surface water or puddles prior to the application of SikaGrout®-215.

#### Concrete, mortar and stone

Surfaces must be sound, clean, free from frost, oils, grease, standing water and all loosely adhering particles and other surface contaminants.

#### Metal surfaces (iron and steel)

Surfaces should be clean, free from scale, rust, oil and grease.

### MIXING

Place about 70–80 % of the premeasured clean water (depending on consistency required - refer to "Mix Ratio") into a clean container and gradually add the whole bag of Davco 702 MY into it while continuously mixing. Add the remaining water and continue mixing until the desired consistency is obtained. Mix for 2 to 3 minutes with a slow speed drill and paddle (~500 rpm).

For large quantities mixing, the use of a forced-action mixer of rotating pan, paddle or trough type is preferred. Free fall mixers should not be used.

### APPLICATION

Use Davco 702 MY for grouting only.

After mixing, stir lightly with a spatula for a few seconds to release any entrapped air. The grout is then poured immediately into the prepared formwork. When carrying out baseplate grouting, ensure sufficient pressure head is maintained for uninterrupted mortar flow. For formwork repair, the prepared formwork must be firmly in place and kept watertight. When placing grout over a large area, it is important to maintain a continuous flow throughout. Work sequence must be properly organised to ensure an uninterrupted flow. In large areas, Davco 702 MY may be pumped using heavy duty diaphragm pumps. Screw feed and piston pumps may also be used.

refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

### Specific Areas of Application

- **Grouting under baseplate** - pourable consistency
- **Formwork grouting** (example deep honeycombs, column reinforcements, etc.)
  - *pouring method* - flowable / pourable consistency
  - *prepacked method* - flowable consistency.
- **Grouting anchor bolts** - stiff consistency
- **Grouting large volumes** - for sections thicker than 50 mm, it is necessary to fill Davco 702 MY with graded 10 mm silt free aggregates to minimise temperature rise generated during the curing stage. The quantity of aggregates should not exceed 1 part aggregates to 1 part Davco 702 MY by weight. For such mixes, a conventional concrete mixer and pump may be used. To further ensure that air entrapped during mixing is allowed to fully escape, it may be necessary to make breather holes. Use steel rods or chains to assist the flow of the grout where necessary.

### CURING TREATMENT

On completion of the grouting operation, exposed areas should be thoroughly cured. This should be done by the use of Sika® Antisol® E curing compound, continuous application of water and / or wet hessian.

### LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

### LEGAL NOTES

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 accordance with Sika's recommendations. 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 user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always

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#### Product Data Sheet

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