

ACS GROUT 55®

Cement Based, Grout Mortar



■ Description

ACS GROUT 55® is cement based, single component, polymer reinforced self-locating grout mortar with high strength. (In compliance with ASTM C1107 Type B Type C Poz No: 04.613/3c)

■ Place of usage

- Fixing of the machine on the foundations.
- Concrete anchors (burying).
- In the manufacture of curtains and column headers.
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- Installation of turbines in power plants.
- All kinds of industrial machinery fixing.
- Reinforced concrete and steel coil filling the gaps that are left is used.
- Fixed steel columns.
- Railway beds.
- Reinforced concrete and steel coil filling the gaps that are left is used for applications in a controlled manner.

■ Consumption

19 kg/m² for obtaining 10 mm thick layer.

■ Advantages

- Easy to prepare and apply.
- Mixed with water.
- High compressive strength.
- Fluid properties.
- Strong quickly.
- Plastics, and expanded in the early hardening phase.
- The physical properties of the weather conditions during the service period does not change.
- Not corrosive and non-toxic.
- Mixed with water is poured into the mold and easy to apply.
- Provides high adhesion to concrete and the reinforcement.
- Waterproof.
- Resistant to shocks and vibrations.
- Resistant to sulphate and chloride attacks.
- Resistant to freeze-thaw cycle.
- Fills completely with hardness without shrinking.

TECHNICAL CHARACTERISTICS

Composition		It contains mineral fillings, fibers and special cement with polymer reinforcement.	
Color		Grey	
* Pressure Strength (TS EN 196)	1 Days	> 35 N/mm ²	
	7 Days	> 50 N/mm ²	
	28 Days	> 65 N/mm ²	
Adhesion Strength (28 days)	To Concrete	> 2,0 N/mm ²	
	Steel	> 2,0 N/mm ²	
* Elasticity Module (28 days)		> 22000 N/mm ²	
Application Thickness		Min. 10 mm	MK 
		Maks. 40 mm	
Use Time (+20°C)		45 Minutes	
Time to Walk on it (+20°C)		24 Hours	
Fully Cured Time (+20°C)		28 Days	
The Temperature of The Ground		+ 5 °C + 35 °C	
Service Temperature		- 20°C + 400 °C	

*Typical values have been obtained as a result of experiments done at +23°C, 50% relative humidity, 4x4x16 cm mortar prism. The values may change due to the difference in site ambient. High temperatures shorten and low temperatures extend the process.

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APPLICATION PROCEDURE / SURFACE PREPARATION

Preparation of Machine Foundation: Before the mounting of the machine the loose particles should be removed from the surface and concrete surfaces should be roughened before grouting. Steel base plates of the machine should be cleaned from oil, grease, rust and dust, which cause de-bonding of the grout. Proper holes should be drilled on to the steel base plates for draining the air under the machine during grouting. Position the machine and adjust the position and scale, then the position should never be changed. If the adjustment wedges (shims) are to be removed later, lightly oil the joints to prevent them from sticking. After the placement and adjustment of the machine is finished, the base concrete must be saturated with water at least 6-8 hours before the mortar casting.

MIXING

Add enough water into a clean mixing bucket by using a proper water gauge. **ACS GROUT 55®**, add the powder into the bucket slowly and continuously. Mix the fresh mortar with a proper electrical mixer (400-600 rpm) for 3-4 minutes until having a homogenous consistency. Let the mortar have rest for 4 minutes and re-mix for 30 seconds.

MIXING RATIOS

ACS GROUT 55®	1 kg powder	25 kg bag
Mixture Water Amount	Maks. 0,17 liter	Maks. 4.25 liter
Mixture Density	2,20 kg/liter	

APPLICATION METHOD

The vibration caused by the surrounding machines should be observed and if necessary all the machines shut down until the grout sets (10-12 hours in +20°C). Grout should be cast in only one side of the form continuously and the grout thickness should be between 10-40mm in single layer. For preventing air gaps do not cast material in two side of the machine. Do not use vibrator. For compacting the grout a steel or plastic hooked bar should be used. Do not release the formwork before 18-24 hours (in +20°C). Open areas should be protected from the rain, wind and similar aggressive weather conditions during the first 2 hours after finishing repair. In the case of unneeded excessive mortar outside of the machine plate, the grout can be broken after removing the formwork. Don't move the shims in two days after grouting. After starting the machine all the bolts should be checked and re-fixed if needed.

TIPS TO NOTICE

- Open areas should be protected from the rain, wind, etc. aggressive weather conditions during the first 24 hours after finishing.

- Repair mortar should be applied in 45 minutes in 20°C.
- Cement based materials' pot life and curing times vary depending on the relative humidity, substrate and ambient temperature. Reaction gets slow in low temperatures and it causes to extension on pot life and working time. On the other hand high temperatures speed up the reaction, which results to short pot life and working time. For full curing of material, both the substrate and ambient temperature shouldn't be under allowed application temperature.
- Do not use in case of contacting to liquids with a PH under 5.5.
- Do not use vibrator for compacting the grout.
- The following measures should be taken in applications to be carried out at low temperatures between + 6 ° C and + 10 ° C.
- **ACS GROUT 55®** should be stored in cold places.
- Hot mixing water (between +30 °C and +50 °C) should be used.
- The places filled with **ACS GROUT 55®** must be covered with protective sheath from cold.
- The following measures should be taken in applications to be carried out at temperatures between +25 °C and +30 °C.
- **ACS GROUT 55®** should be stored in cool places. Use cold, even iced water if necessary.

CLEANING OF TOOLS

After the application all tools should be cleaned with water. **ACS GROUT 55®** can be cleaned with only mechanical abrasion after hardening.

PACKAGING

25 kg bag

STORAGE

In unopened original package, it should be stored in a cool and dry environment at + 10 °C + 25 °C temperature protected. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

SHELF LIFE

The shelf life is 12 months from the date of production under suitable storage conditions. Opened packages should be closed firmly and consumed within 1 week.

SAFETY

During the application, work clothes, protective gloves, goggles and masks should be used in accordance with the Occupational Health and Safety Rules. Due to the irritating effects of uncured materials, the components should not be allowed to come into contact with the skin and the eye. In case of contact, immediately wash with plenty of water and soap. If swallowed, seek medical advice immediately. Food and beverages should not be left at the application areas. Keep out of reach of children. Please refer to the Material Safety Data Sheet for detailed information

□ Responsibility

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is only responsible for the quality of the product. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones (06/2019)