

KÖSTER® VGM 5

Cementitious, flowable grout

Product Description:

Turkish product name > KÖSTER VGM 5

KÖSTER VGM 5 is a factory blended, cement based grout with flowable consistency.

It can be used for both interior and exterior applications.

KÖSTER VGM 5 has strong adhesion to mineral based surfaces like concrete, mortar and similar and does not crack even at high application thicknesses.



Applications:

KÖSTER VGM 5 is used for ;

- Precast columns applications
- Anchors and plates
- Repairing and filling of surface imperfections on the floor
- Turbine, generator and machine foundations.

Technical Data:

Compressive strength (EN 196-1)(24 hours) 25,0 N / mm²

Compressive strength (EN 196-1) (7 days) 39,0 N / mm²

Compressive strength (EN 196-1) (28 days) 45,0 N / mm²

Tensile strength (EN 196-1)(24 hours) 3,5 N / mm²

Tensile strength (EN 196-1) (7 days) 6,0 N / mm²

Tensile strength (EN 196-1) (28 days) 8,5 N / mm²

Operating temperature + 5 °C

View cement colored powder

Pot life (20 °C / 1 lt mixture) 20 – 22 min.

Adherence (concrete surface) > 2 N / mm²

Mixing ration 0,15 lt water / kg powder

Mixing ration 3,75 lt / bag

Density of fresh mortar 2,30 g / cm³

Bulk density TS EN 6433 1,23 kg / dm³

Advantages:

- Cement based ready – mix ; just add water
- Good flow characteristics, easy to mix and apply
- Fast early strength development and high final strength
- High mechanical strength

Properties:

Working time – After mixing, the working time of KÖSTER VGM 5 mixture is approximately 20-22 minutes, depending on ambient weather conditions.

Drying time –Drying of the KÖSTER VGM 5 is dependent on the air temperature and relative humidity. Under average drying conditions (20 °C and 50 % R.H.), protect work from rain for at least 12 - 24 hours.

Water Vapor Transmission - KÖSTER VGM 5 is permeable to water vapor.

Bond Strength - High bond strength to mineral or metal surfaces.



T704 / 0906.ENG

Gap width – min. 10 mm and max. 50 mm per pour.

Instructions:

Job conditions – Air and substrate temperatures must be 5 °C or higher and must remain so for a minimum of 24 hours.

Surface preparations – Absorbent surfaces must be saturated with water.

The surface has to be sound and solid, free of laitance, paint, dust, form oil and other contaminants that might affect the bonding adversely. Suitable tools are wire brushes, high-pressure water jets, sand and shot blasting.

Metal surfaces should be free from rust, oil and Grease. Cracks and surface honeycombs should be chiselled open so that application of an even uniform coat can be achieved. Smaller honeycombs, cracks and depressions should be filled with KÖSTER Repair Mortar and be allowed to dry for 24 hours before commencing.

Mixing – One bag (25 kg) of KÖSTER VGM 5 should be mixed with 3,75 lt of clean water. Mixing should be done with a slow speed drill (max. rpm 400), until a smooth and lump free consistency is achieved.

The powder should always be added to the water slowly and during continuous mixing action with power mixer equipped with mixing paddle.

Application – Apply the mixed mortar immediately to the prepared surface. Air which is displaced by the grout must escape thru suitable openings in the form work.

In case of base plate grouting sufficient head of pressure should be maintained and flow of grout and deaeration should be supported with a long wire.

Exposed surfaces should be protected from rapid water loss (KÖSTER Cure Aid or suitable curing method).

Consumption:

KÖSTER VGM 5 _____ app. 1,90 kg / lt

Packaging:

KÖSTER VGM 5 _____ 25 kg bag



Cleaning of Tools:

Clean tools with water while KÖSTER VGM 5 is still wet.

Notes:

- Do not apply below +5°C or if temperatures below +5°C are expected within 24 hours.
- Do not apply on wet or frozen surfaces
- Do not apply on dusting or weak surfaces. If in doubt, perform adhesion test.
- Cold temperatures lengthen and hot temperatures shorten pot life and curing time of mixed material.

Storage:

Dry and cool, in original containers.

Shelf Life:

12 months.

Caution:

Contains cement. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye / face protection. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.

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KÖSTER YAPI KİMYASALLARI İNŞ. SAN. ve TİC. A.Ş. GEBKİM Kimya İhtisas OSB Atatürk Bulvarı No: 6 41455 DİLOVASI / KOCAELİ 16	
1020 - CPR - 040 051990 / DOP NO: 034 EN 1504-3 KÖSTER VGM 5 Cementitious, flowable grout Coating application (PI) 3.1/4.4/7.1/7.2 Sınıf R2	
Compressive Strength	≥ 15 N/mm ²
Chloride Ion Content	≤ %0,05
Bond formed with adhesion	≥ 0,8 N/mm ²
Limited Shrinkage / Expansion	≥ 0,8 mm ²
Resistance to Carbonation	7,5 mm
Elasticity Module	≥ 50GPa
Response to Fire	A1
Dangerous Materials	Materials 5.4 appropriate

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