

# byk®



## BYK 1003 GRANITEFLEX & BYK 1004 GRANITEFLEX

Cement and Polymer Based, Slipping Feature Reduced, Long Working Time, High Adhesion Strength, Flexible Adhesive Mortar

BYK 1003 GRANITEFLEX & BYK 1004 GRANITEFLEX is a cement and polymer based, flexible bonding material for materials such as ceramic, porcelain, granite, marble, natural stone and glass mosaic with high adhesion performance, suitable for all kinds of weather conditions.

In compliance with TS EN 12004 - C2TE S1 standards.

C2: Cement Based, Additional Features Improved, High Performance

T : Reduced Slip Feature

E : Open Waiting Time Extended

S1: Flexible

### FIELDS OF APPLICATION

- Adhering materials such as ceramic, porcelain, granite, marble, natural stone and glass mosaic to in vertical and horizontal applications in indoor and outdoor areas,
- It is used for adhering materials such as ceramic, porcelain, granite, marble, natural stone and glass mosaic on plasterboard, cement chipboard, heat insulation plates. It is recommended to use **BYK 1101 PRIMER** for this and similar sheet applications.
- In bonding processes in swimming pools, baths, water storage, bathrooms, industrial floors, cold weather deposits,
- It is used for adhering granite marble on granite marble. It is recommended to use **BYK 1101 PRIMER** for this and similar sheet applications.
- Used in places with heavy pedestrian and load traffic.

### ADVANTAGES

- Mixed only with water. Long workable time, Does not cause slippage in the case of vertical applications,
- Very comfortable and easy to apply, Flexible, does not affected by vibrations, Resistant to freeze-thaw effect,
- Does not shrink, The S1 class of flexibility makes it possible to adapt to temperature differences.

### TECHNICAL FEATURES

Structure of the Material	Special cement, mineral fillings, polymer additive
Density	1,70 kg/lit
Colour	Gray, White
Tensile Strength	28 days $\geq 1,0$ N/mm <sup>2</sup>
Joint Filler Application after	24 hours
Application Thickness	3-8 mm
Application surface Temperature	+5°C / +35°C
Service Temperature	-40°C / +80°C
Initial Curing Time	3-5 minutes
Pot life	2 hours
Workable Time	30 minutes
Slippage (mm)	None
Water Immersion	Min % 90
Opening the Traffic	24 hours

The values above are given for +23°C and 50% relative humidity. While higher temperatures shorten the period, lower temperatures extend it

### APPLICATION PROCEDURE

#### Preparation of the Substrate

The surfaces to be applied should be cleaned in situations that adversely affect rust, mold, oil, loose particles, dust and plaster adhesion, and cracks and holes on the surface should be repaired with **BYK 4014 REPAIR** mortars. In hot weather conditions, surfaces should definitely be moistened with water. Concrete surfaces should be applied with **BYK 1101 PRIMER** roller before applying to concrete ceilings and walls.

### Mixing

The appropriate amount of water described on the package is poured into a clean mixing container. **BYK 1003 GRANITEFLEX & BYK 1004 GRANITEFLEX** bag is opened and added slowly into the water. It is mixed for about 3 minutes until it is homogenous with 400 - 600 rpm mixing drill. There should be no lumps in the material. After the material is rested for about 3 minutes, it is mixed again for 1 minute and made ready for application.

### Mixing Ratio

For 25 kg/1 bag of **BYK 1003 GRANITEFLEX Gray** approximately 6,00-7,50 lt of water should be used.

For 25 kg/1 bag of **BYK 1004 GRANITEFLEX White** approximately 7,00-8,50 lt of water should be used.



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## Application

Ceramic, porcelain, granite and marble must be in full contact with the adhesive mortar. In order to obtain a better adhesion surface, the mortar should be applied with the toothed part of the trowel selected in accordance with the ceramic, porcelain, granite and marble size after spreading on the surface with the straight part of the trowel. The application is completed by leaving the recommended joint gap according to the appropriate ceramic, porcelain, granite and marble size. For filling the left joint gaps. **BYK 1006 FUGAFLEX** Series joint fillings should be used to fill the cleaned joint spacing. Joint application can be completed after about 24 hours.

## Applicability Test

For the applicability of the granite and marble on the adhesive, the open pause time must be checked. Finger is pressed on the adhesive on the applied surface. If the adhesive is contaminated with the finger, the application of the granite and marble is continued. If the adhesive is not contaminated with fingerprints, the application period of the adhesive has passed. In this case, a new adhesive must be applied which is etched from the adhesive surface.

## Consumption

Depending on the tooth thickness of the ceramic tile to be used, the consumption varies between 4-6 kg/m<sup>2</sup>.

## Package

25 kg Kraft Bag

## Cleaning of Application Tools

Tools and equipments should be clean with water after application.

## Watch Points

- In **BYK 1003 GRANITEFLEX & BYK 1004 GRANITEFLEX** application, suitable temperatures should be expected if ambient and surface temperature are below +5°C or above +35°C. It should not be applied in extremely hot, rainy or very windy weather.
- In outdoor applications, for the first 24 hours should be protected from sun, rain, wind and freezing.
- Working and reaction times in ceramic adhesive mortars are affected by air temperature, humidity and floor temperatures.
- High temperatures accelerate hydration and the working time is shortened accordingly. Low temperatures slow down hydration and thus extend the working time. For the material to be completed, the floor temperature and ambient temperature to be applied must not fall below the minimum permissible temperature.



### Shelf Life

Shelf life is 12 months from the date of production when stored properly at +5 oC to +30 oC at room temperature, away from direct sunlight. Opened packages should be consumed within 1 week by closing the mouths.

### Storage

The product should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 2 palletes should be placed on top of each other and the shipment should be made on a 'first come, first go' basis. Palletes should not be placed on top of each other during long term storage.

### Health and Safety Precautions

It is dangerous to approach the application sites with fire. Fresh air should be circulated in the storage and the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept out of reach of children.

### Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **BYK Binyapı Co.** is only responsible for the quality of the product. **BYK Binyapı Co.** 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.