

TECHNICAL DATA SHEET
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# **Bia-Derz Fuga Flex**

# **Cement Based, High Performance Grouting Material for Tiles and Ceramics**

**Bia-Derz Fuga Flex** is a cement based flexible grout filler material used in grouts of cement based materials such as faience, ceramics, granite and marble and is not affected by temperature differences, water and vibrations.

# Areas of Usage

- · Indoors and outdoors
- In hotels, hospitals, shopping centers,
- In all wet volumes.
- In residences.
- In swimming pool and water tanks,
- It is used in all kinds of decorative applications.

# Advantages

- It is easy to apply and prepare,
- It does not draw the glazed surfaces,
- It is suitable for 2-8 mm grout widths,
- It provides excellent adhesion to the ceramic edges without cracking,
- It has a long processing time,
- It is obtained a smooth surface,
- Because of its low water absorption, it is hardly polluted and easy to clean,
- It is resistant to freeze-thaw cycle,
- It is resistant to the durables, vibrations and detergents,
- It does not fade or change color.

## **Technical Specifications**

Structure of Material : It contains mineral fillers, synthetic additives and special polymers.

Pressure Resistance : > 16 N/mm²
Bending Resistance : > 4 N/mm²

Water Absorption

**30 minutes** : < 2 gr **240 minutes** : < 5 gr **Abrasion Resistance** : < 1000 mm<sup>3</sup>

**Soil Temperature to be applied** : Between + 5°C and + 25°C **Service Temperature** : Between -20°C and + 80°C

**Duration of Ripening** : 3 - 5 minutes **Giving Sap** : 10 - 20 minutes

Usage Time : 2 hours
The duration of walkable on top : 24 hours

**Note:** Above values are given at + 23°C and 50% relative humidity. High temperatures shorten the duration, lower temperatures prolong the duration.

#### Preparation of Surface

Before filling of ceramics and tile grouts, it should be expected the adhesive used to be sufficiently hard. Before applying the *Bia-Derz Fuga Flex* material, the surface should be cleaned with mechanical methods that will not damage the ceramics and should be moistened with a wet sponge.



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#### **Mixing**

The clean water is put into a clean container as described on the packaging. While the *Bia-Derz Fuga Flex* bag opening and adding the water slowly inside, It mixes with a 400 - 600 periodical mixing drill for about 4 minutes until it is homogeneous. There should be no lumps in the material. After the material is rested for about 30 seconds, it is mixed again for 1 minute and made ready for application. Different water ratios and different mixing patterns may cause undesirable color differences.

## **Mixture Amount**

Approximately 0.32 liters of water should be used for 1 kg *Bia-Derz Fuga Flex*. It is sufficient 6.4 liters of water for 1 bag of 20 kg of product The mixture density is 1.8 kg / liter.

# Application

The mixed material is placed by diagonal movements to the grouts with rubber trowel. In the deep grouts, it must be waited firstly the collapse of material and then this process should be repeated.

In extreme hot weather and on absorbent surfaces, the grout material may suddenly lose its water and cause superficial cracks. For this reason, grouts should be lightly moistened with a wet sponge before application. When the materials which are left to dry comes to the hardness of resistance to finger pressure, the surfaces are put in their final form with a wet sponge and the material remaining on the ceramic surface is cleaned. After the material has dried (at the latest the next day), the ceramics are polished with a dry, clean cerusa.

#### Points to Consider

The use of mixing water in varying amounts during application causes a change in the grout colors. Therefore, applications should be made without changing the amount of water. Because the excessive use of water will weaken the material, it can lead to a powder spatter and cracking. It should not be used sawdust in the surface cleaning process.

#### **Packing**

20 kg polyethylene reinforced paper bag.

# **Consumption**

<b>Ceramic Dimensions</b>	2 mm	3mm	4mm	5mm	6mm	8mm
10x10	550	800	1100	1350	1600	2100
10x20	400	650	850	1050	1250	1700
15x15	450	650	900	1100	1350	1800
15x20	300	500	650	800	1000	1300
20x20	300	450	600	750	900	1200
20x25	275	400	500	700	800	1100
20x30	250	375	500	600	750	1000
30x30	200	300	400	500	600	800

Consumption amounts are theoretical. It shows the consumption of the powder product. The values are given in the gr/m².

#### Shelf Life

It is 12 months from the date of manufacture in the appropriate storage conditions. Opened packages should be consumed within 1 week by means of closing their brims.

## Storage

It should be stored in original unopened package, in cool and dry environment, protected from freezing. In short-term storage, maximum 3 pallets must be placed on top of each other and it must be shipped with the first-in first-out system. In long-term storage, pallets should not be placed on top of each other.



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#### Security Precautions

During the application it must be used, in accordance with the Occupational Health and Safety Rules, the work clothes, protective gloves, goggles. It should not be contacted to the skin and eye during storage and application, and in the case of contact, it should be washed immediately with plenty of water and soap, and in the case of swallow it should be applied to a doctor immediately. Food and drink materials should not be put into the application areas. It should be stored at places where children can not reach it. For further information, see the Material Safety Data Sheet.