

Cement Based Grout Mortar

Cement based, high-strength, high-flowable, R4 class, non-shrinkage grout mortar.

Advantages

- Compressive strength is high.
- It has fluid properties, so does not leak water.
- It does not change its physical properties during the performance period.
- Due to its chemical structure, it provides high adherence to concrete and reinforcement.
- It is impermeable to water because it has a low water/cement ratio.
- It is resistant to freeze-thaw effects.
- Shrinkage is prevented, it does not shrink.
- It is used to place steel bridge piers on the foundation base.
- Can be applied in 10 mm -110 mm thickness at one time.

Field of Application

It is used in steel structures, prefabricated structures, machinery and crane assembly bases, foundation sockets, in the manufacture of wall and column heads, and in fixing steel columns to the foundation, which are exposed to dynamic effects and require high strength.

Technical Data

Application Thickness 10 mm -110 mm	Water Mixing Ratio 3,25 - 4,00 liters water/ 25 kg GROUT 255	Processing Time 30 mins	Mixture Density 2,20 – 2,45 kg/liters
Flexural Strength 9 N/mm ² (28 days)	Compressive Strength (1 days) ≥ 25 N/mm ² (28 days) ≥ 75 N/mm ²	Adhesion Strength ≥ 2 N/mm ² (28 days)	Waiting Time Between Coats 3 hours

Pre-application Surface Preparation

The application floor surface must be clean and solid, free from dirt, dust and weak particles. The mold to be applied must be fixed, sealed and cleaned very well. If the application is to be made on old concrete, the surface must be moistened before the application. Small puddles should be avoided. Taking into account the working time, enough material to be used should be prepared. The ambient temperature should be between +5°C and +35°C. Application under strong wind or sun should be avoided. It should not be applied on surfaces that are frozen, melting or in danger of frost within 24 hours.

Method of Application

A 25 kg bag of **YAPBUILT® GROUT 255** should be slowly poured into a container with approximately 3.25 - 4.00 liters of clean water and mixed with the help of a low-speed hand mixer for about 3-4 minutes until a homogeneous consistency is reached. The mixture should be left for about 2 minutes before application. The fluid **YAPBUILT® GROUT 255** must be poured seamlessly from a single side of the pre-prepared mold. Thus, air entrapment in the mixture should be prevented.

The mixing water should be in the range of 20-25°C. Large surfaces open to outdoor weather conditions should be protected from sunlight and wind with **Yaprheo® Cure 201** or covered with a telis cloth for 48 hours. After the application, the instruments should be cleaned with water while the material is fresh. Water should not be added to the hardening mortar.

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Post-Application Care and Recommendations

For the best results in YAPBUILT® GROUT 255 application, the ambient temperature should be between +5°C and +35°C and necessary precautions should be taken in bad weather conditions. The performance temperature of the material is between -30°C and +80°C. The terminated application should be protected from severe weather conditions for 24 hours. (Intense sun, wind, frost, rain, etc.) In order for the performance and technical values of the material to provide the specified data, to be processed and to avoid prolongation-shortening in pot life. It is recommended to apply at the specified ambient and surface temperatures, in an environment with optimum humidity. Packages that have been stored in advance and will be opened for application should be made ready for use at an average of 25°C. It should not be used in contact with liquids with a pH value of less than 5.5. Vibrators should not be used when inserting the YAPBUILT® GROUT 255. The equipment used must be cleaned with water after the application.

Consumption

1.90 – 2.10 kg/m² (for 1 mm application thickness)

Storage and Shelf Life

It should be stored in a clean, dry, and moisture-free environment between +5°C and +35°C, away from direct sunlight. It must be protected against water, frost, and severe weather. It should be stored in stacks of no more than 10 layers. Provided that the specified storage conditions are complied with, the storage life is a maximum of 12 months from the date of manufacture.

Safety Precaution Information

First, all necessary Occupational Health and Safety measures should be taken in the areas where the application will be done, and the procedures should be carried out by people who have technical knowledge and equipment. Occupational Health and Safety instructions must be followed in all applications. In accordance with the Occupational Health and Safety instructions, it is obligatory to use all occupational safety equipment such as work clothes, protective gloves/goggles/masks during the application. It is necessary to ventilate the work site. Warehouses and stock areas should not be approached with fire. Contact of the product with skin and eyes should be strictly avoided. In such a case, the area where the product comes into contact should be washed immediately with plenty of water, and medical help should be sought immediately. Food and beverages should also not come into contact with the product. The product should be stored and protected in places away from children. For more information, the Material Safety Data Sheet (MSDS) should be reviewed. In addition, the application of the product should be done by people with sufficient technical knowledge, equipment, and experience. The responsibility in this regard belongs exclusively to the user.

Legal Responsibility

All information provided in this information sheet is advisory only. All products should be used by people with technical knowledge and suitable equipment, considering the recommendations. YAPKİM Yapı Kimya San. A.S. cannot be held responsible for any consequences that may occur during or after usage. This document is valid until a new one is issued and invalidates the old editions. YAPKİM Yapı Kimya San. A.S. may make changes in the content of the product. It is imperative to take safety precautions during product use. These measures are not just those listed above, and it is the sole responsibility of the user to take all security measures.

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