

# BAUCAST

Non-shrinking pourable cast grout for construction of mantle, filling gaps and anchors machinery. Thickness up to 100mm / layer.

# Description

The BAUCAST is a single component cement based mortar with special additives, which with addition of water forms a homogeneous non-shrinking high strength grout. According to the requirements of European standard EN 1504-3 Class R4.

# Features - Benefits

- High initial and final strengths
- Equalized tumor of shrinkage
- Easy to use material
- High resistance to chloride penetration and CO2
- High liquidity
- Excellent affinity with the concrete and steel
- The final product can receive high mechanical stresses

## Examples of applications

- Repair and manufacturing of concrete elements with high requirements
- Structural Strengthening restoration of damaged concrete in bridges, buildings, tunnels, retaining walls, concrete etc.
- Repair of degraded concrete surfaces
- Fills nests, deductibles
- Anchoring and filling with great precision bearing bases for light and heavy machinery such as lathes, machining benches, various kinds of presses, cranes, steel structures, turbines, etc.

#### Specifications

Form: gray cement

Density of dry mortar: 1.80 kg/lit

Density of fresh mortar: 2.20 kg/lit

Pot life: 1 hours at 20°C

Compressive strength (MPa): 1 day ≥ 40 N/mm<sup>2</sup> 7 days ≥ 50 N/mm<sup>2</sup> 28 days ≥ 60 N/mm<sup>2</sup>

Flexural strength 28 days: ≥ 10 N/mm<sup>2</sup>

Content of chloride ions  $\leq 0,01\%$ 

Adhesion  $\geq$  2.0 N/mm<sup>2</sup>

Modulus of elasticity  $\geq$  20 GPa

Dangerous substances (Cr6 +) <0,0002%

## Substrate preparation

Ensure surfaces are sufficiently stable. Remove loose detached parts, grease, dirt etc. prepare the substrate with suitable mechanical methods such as high pressure water blasting, sandblasting, etc. It is advisable to prefer methods without impact or vibration of the substrate. Before applying BAUCAST, the concrete substrate should be wetted with water to saturation. The final application surface should be rough and free of standing water. Regarding minerals clamping mounting, must be free of rust, paint, grease etc. If the metallic surfaces contaminated with chloride or other substances that can cause corrosion should be cleaned.

# High-absorption substrates

For highly absorbent surfaces that have been exposed to strong sunlight during the hot days of summer slight wetting of substrates without stagnant water is needed to reduce water absorption and rapid dehydration of gypsum. Generally, no priming is required. In cases where primer is necessary use only BAUER products and deploy fresh on fresh.

# Mixture preparation

BAUCAST is prepared in a container, first throwing the required amount of (3,25-3,75 Lt) water and adding the contents of the bag (25kg) gradually stirring using a low speed electric mixer, until it we have a homogeneous mixture.

#### Instructions

The finished mixture is injected, taking care to avoid air entrapment. Injection should be done in such a way as to ensure that the mortar has filled all the space between the mold and the existing layout.

For jobs requiring thicknesses exceeding 100 mm, washed aggregate must/can be added that is free from impurities, has a diameter of 5 to 10 mm, and constitutes 25% of the total weight of the dry mixture. After the aggregate is added, performance must be rechecked with test mixtures at the worksite.

#### Remarks

- Existing mixture must not be diluted again with water
- The temperature during application should be between +5 °C and +35 °C.
- Mixing should always be carried out mechanically, not by hand because it cannot achieve optimum workability.
- Application of the product in direct sunlight and / or strong wind should be avoided.
- Do not add more than the recommended dosage of water.
- At low temperatures, mix the material with lukewarm water and protect with thermal insulation the covers of the formwork
- Protect fresh mortar from premature drying using appropriate methods of maturation

## Storage

In sheltered areas, protected from ice, moisture, high temperature and direct sun exposure for 12 months from the date of production and at the original packaging.

## Consumption

Approx 1,8 Kg / volume of 1 Lt

Packaging

Paper bags of 25kg

#### Precautions and safety

The product contains cement and is classified as irritant. No special precautions are necessary for product application except for standard precautions applicable to all construction operations i.e. using gloves and goggles; preventing prolonged skin contact; etc. In case of eye contact, immediately wash with plenty of water and seek medical advice if necessary. Collect empty bags and plastic covers and dispose in refuse bins designated for this purpose. Consult instructions for safe use indicated on product packaging. For more information please refer to the material safety data sheet of the specific product.

#### Notes

Technical details, properties, recommendations and information on BAUER products are supplied in good faith. They are based on the company's research and experience, provided that they are stored and applied under normal conditions. As the method of using materials as well as project and environment conditions are beyond the control of the company in each individual application setting, the product user is held solely responsible for the result of application. No responsibility under any legitimate relationship can be substantiated against the company, based on the information set out hereunder. Product users are advised to refer to the latest revision of the technical manuals available.

#### Other information

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