

INSEE Mortar 72

High Compressive Strength Non-Shrink Grout

INSEE MORTAR 72

is a non-shrink cementitious grout with high compressive strength specially formulated for bridge bearing grouting, large machine foundation grouting, structure concrete repair.

Advantages

- Excellent flowability
- No bleeding
- Shrinkage compensation
- Can be used with pump machine
- Pouring minimum thickness of 10 mm
- Impact load withstand
- Non-toxic and non-corrosive
- Can be mix with chip stone size 3/8" in case the thickness more than 150 millimeter (please call 1732 for more info)

Applications

It is used for bridge bearings grouting, large machine foundation grouting, structure concrete repair with a suitable thickness of 10 to 150 mm.

Surface Preparation

All grout surfaces must be solid, completely free of oil, wax, grease, sealers, paint and other contaminates that may act as a bond break. Concrete surface must be water saturated thoroughly and no standing water when pour.

Mixing

1. Weigh or measure water per usage into container. Carefully and completely pour all cement grout into the water within 30 seconds. Then use the mixer at 400 – 600 rpm to mix them for another 2-3 minutes or until it is homogeneously blended.
2. Leave the mix for a while in order to decrease air bubbles that might be created during mixing process.
3. In case of thick mixed application, it is recommended to mix in small amount, so that the mix will be blended more easily.
4. It is not recommended to increase amount of water in the mix than the recommended ratio.



Technical Data

Water Demand at Flowable State	3.75-4.00 litre/bag
Quantity per 1 cubic metre with water content at 288.75 litre	77 bags
Bulk Density	Approx. 1.50 kg/litre
Wet Density (at 15% of Water Content)	Approx. 2.25 kg/litre

Pouring

Formwork should be liquid tight, nonabsorbent and firmly installed. When grouting large area, prepare rail or cone to help cement grouting to flow easily and continuously. During pouring, maintain the pressure head of mixture stable. Mixture should be continuously poured from one side only, pour until the gap is completely filled. Ensure the air entrapped can escape and continue pouring of the mixture to avoid layer boundaries. May require a wire to scoop grouting mortar to fill the space and help releasing any entrapped air bubbles. Avoid using mixer, as it may cause segregation. Suitable working temperature is between 20-35 °C. If pour at a low temperature, it will result in long setting time and delay strength development. Avoid pouring at high temperature due to it will result in reducing flowability, hardens quickly may cause cracks.

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Curing

When the surface reaches the final setting, cure with water for at least 3-7 day. Cover with plastic sheet or burlap to keep the concrete moist and protect from high temperature, high wind, low humidity and direct sunlight causing rapid drying. Avoid vibration and contact with extremely hot or cold condition.

Packaging

25 kg/bag

Storage & Shelf Life

Product in sealed packaging has a shelf life of 12 months since manufacturing date. Store it in a dry area with good air ventilation.

Warning

- Do not add aggregates and/or chemical additives in the mixture

Precaution

- Store in dry shaded condition and avoid contact with water of moisture.
- Wear glove and mask when working.
- Mix and apply the product in an open area with good ventilation.

Water Content (%)	Flow Rate (seconds) JHS 312 (J-14 Funnel)	Bleeding (%) ASTM C 232	Compressive Strength (kg/cm ²) / ASTM C109			
			1 Day	3 Day	7 Day	28 Day
15	≤10	0	≥ 400	≥ 500	≥ 600	≥ 800
16	≤8	0	≥ 350	≥ 450	≥ 550	≥ 700