



## **FLOWMASTER-45**

High strength non-shrink pourable  
cementitious precision grout



## **DESCRIPTION**

BYZON FLOWMASTER-45 is a ready to use, non-shrink, free-flowing and high strength cementitious grout. FLOWMASTER-45 is engineered designed suitable for precision grouting where it is essential to withstand static and dynamic loads.

## **FEATURS & BENEFITS**

- ▶ Easy to use : Ready to use and reduce time for repair
- ▶ High built technology : It can be applied up to 60 mm thickness in single layer
- ▶ Pourable mortar: Self-compacting grout to ensure high level load bearing areas
- ▶ Long term durable : Provides excellent durability and strong structural repair
- ▶ Designed mechanical properties : Excellent compressive strength, flexural strength and tensile strength.
- ▶ Dual shrinkage compensated : Dual expansion system with long-term drying shrinkage hence reducing cracking tendency

## **AREA OF APPLICATION**

- ▶ To grout bearings, machine foundations, columns joints in precast construction etc.
- ▶ To grout cavities, gaps and voids in concrete
- ▶ To grout anchors in concrete
- ▶ Sealing around penetrations
- ▶ Post fixing strength.
- ▶ To grout base plate of turbine, compressor, boilers,pumps and heavy machinery

## **METHOD OF APPLICATION**

- ▶ Concrete surfaces should be sound, stable, clean and free from laitance, paint, oil, grease, and any residual mold release agents and curing compounds.
- ▶ Immediately before grouting takes place any free water should be removed with particular area care being taken to blow out all bolt holes and pockets.The formwork should be constructed to be leak proof.
- ▶ Generally the gap width between the perimeter formwork and the plate edge should not be more than 75mm.
- ▶ Product must be mixed using suitable grout mixing equipment combined with agitator for large volume mixing
- ▶ Place the grout within 20 minutes of mixing to gain full benefit of the expansion process
- ▶ For thicker sections it is necessary to fill out FLOWMASTER-45 with well graded silt free aggregate to minimize heat buildup
- ▶ Consistency of grout mix : The quantity of clean water required to be added to a 25kg bag to achieve the desired consistency is given below:  
Pourable: 4.125 liters  
Flowable: 4.500 liters

- ▶ Flow characteristic : Data on 75 mm gap between base plate and RCC surface

Normal head: 1200 mm

50 mm head: 2400 mm

100 mm head: 3000 mm

Notes: Non shrink grout FLOWMASTER-45 has to be poured one side of the base plate. It has to come out other side. If top surface of grout touches to other side base plate bottom surface then all side grout has to be poured minimum at the surface of base plate.

## **TECHNICAL INFORMATION**

<b>PROPERTIES</b>	<b>RESULT</b>
Colour	Grey Powder
Density	2200 to 2250 Kg/m <sup>3</sup>
Compressive strength @W/P 0.18 (BS 1881: part 116 1983)	>10 N/mm <sup>2</sup> @ 1 days >35 N/mm <sup>2</sup> @ 7 days >45 N/mm <sup>2</sup> @ 28 days
Time for expansion	Start: 20 minutes Finish: 120 minutes

## **PRECAUTIONS & NOTE**

- ▶ Low temperature working: When the air or contact surface temperatures are 10 °C or below on a falling thermometer, warm water (30 °C to 40 °C) is recommended to accelerate strength development.
- ▶ High temperature working: At ambient temperatures above 40°C, cool water (below 20 °C) should be used for mixing the grout prior to placement.

## **YIELD**

- ▶ Allowance should be made for wastage when estimating quantities required. The approximate yield per 25 kg bag for different consistency is :

Consistency Yield (liters)

Pourable : 12.5

Flowable : 13.3

### **SHELF LIFE**

- ▶ FLOWMASTER-45 has a shelf life of 6 months if kept in a dry store in sealed bags. If stored in high temperature and high humidity locations, the shelf life may be reduced

### **PACK SIZE**

- ▶ 25 Kg Bag

### **SAFETY PRECAUTIONS**

- ▶ FLOWMASTER-45 is alkaline and should not come into contact with skin and eyes. Inhalation of dust during mixing should be avoided. Gloves, goggles and dust mask should be worn. If contact with skin occurs, it shall be washed with water. Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought.