

# MasterFlow<sup>®</sup> 626

# Heavy duty, epoxy resin based grout

### DESCRIPTION

MasterFlow 626 is a modified epoxy resin based system, which on mixing yields a rapid hardening, high strength, high flow, chemical resistant grout. It comprises 3 components - resin, hardener and specially blended inert aggregates. The product is designed to have a high flow property but for applications that do not require a high flow, it is also available in a normal flow version.

### **RECOMMENDED USES**

**MasterFlow 626** is recommended for use as a precision, heavy duty polymer grout. It is suitable for engineering applications such as grouting of machinery that exerts high static and dynamic loads (both compressive and tensile) on the foundation, or where the grouted area is prone to spillage of corrosive chemicals. Also it is ideal for grouting production line equipment to reduce down time before re-commissioning after maintenance.

Examples of MasterFlow 626 applications are:

- grouting of reverberating machinery such as forging hammers, heavy duty compressors and diesel generating sets.
- grouting of elements bearing heavy loads such as bridge bearings and crane rails.
- grouting of pumps and motors prone to chemical spillage in fertilisers, paper and chemical industries
- grouting of rolling mills, plate mills, etc., after maintenance for rapid re-commmissioning.

Being a flowable grout, **MasterFlow 626** is not suitable for overhead and horizontal anchoring.

### **FEATURES AND BENEFITS**

- High tensile and flexural strengths- Efficient transfer of operational loads to foundation. Withstands dynamic loads
- High bond strength Ensures efficient vibration dampening.
- High flow Allows complete filling of space below the base plate providing total support to bearing area.
- Excellent chemical resistance Durability unaffected when exposed to chemicals such as mineral acids, oils, fats, fuels and strong alkalis.

## **PROPERTIES**

Age	Compressive Strength	Flexural Strength	Tensile Strength
16 hours	60	22	12
24 hours	70	25	13
7 days	90	35	15

	Comp A	Comp	В	Comp C
Supply form	Liquid	Liquid	t	Aggregate
Colour	Turbid White	Amber		Grey
Mixed Density with high flow aggregate			: 2.06 kg/L	
with standard aggregate			: 2.15 kg/L	
Pot life @ 23°C			: 30	- 45 mins.
Application temperature			: 5°(	C – 35°C
Application temperature range			: 5°(	C to 35°C
Initial cure @ 23°C			: 4 -	6 hrs
Final cure @ 23°C			: 7 days	

# **APPLICATION**

# **Surface Preparation**

Surfaces should be structurally sound, clean, dry, rough and free from loose particles, oil, grease, or any other contaminant. Cement laitence, loose particles, mould release agent, curing membrane, and other contaminants must be removed from the surface using an appropriate method followed by vacuum cleaning.

Clean the bottom of base plates free of rust, mill scale oil, grease and other such contaminants.

## Formwork

Grouting of base plates and crane rails require formwork but holding down bolts and anchor rods do not. Proper design of formwork based on the geometry of the space being grouted is essential for effective grouting. The formwork can be made from timber, steel, or any other suitable material depending on the circumstances. It must be grout tight, strong, and well braced to withstand the fluid pressure of the grout until it sets. Before erecting it coat the inner surfaces with grease for easy release. Ensure that the distance between perimeter formwork and the base plate edge is 100 mm to 150 mm at the pouring side, 20 mm to 50 mm at the opposite (grout emerging) side and the minimum possible at the remaining sides (flush to base plate edge possible). Provide a header box of at least 200 mm height, along the entire pouring side, to allow for sufficient build up of head while grouting. Seal all the gaps in formwork and those between formwork and concrete surface, with a suitable rapid setting material. Before commencing the grouting operation, blow clean the grouting area with oil- free compressed air.

### Mixing

Mechanical mixing is necessary. A slow speed (600 rpm) drill fitted with a grout stirrer is recommended.



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Empty Component B completely into Component A container and stir until the two components are fully mixed. Pour the mixture into a clean dry pail and keeping the mixer running, add Component C slowly. Mix for a further 3-4 minutes or until a lump free homogeneous mix is obtained. It is important to ensure that the rate of mixing is adequate to cater for grouting continuously to completion, since interruptions in grout placing can cause air entrapment or difficulties in complete filling of the void.

#### Placing

Place the mixed grout within 30 minutes after mixing.

Base plate grouting: Pour continuously from only one side to ensure complete filling without air pockets. MasterFlow 626 can be placed to a thickness of 10 mm to 40 mm in a single pour. Grouting to higher thicknesses can be achieved in multiple layers but every subsequent layer should be placed after the previous one has set hard. It is important to control the thickness of each layer, so that the final layer is at least 10 mm thick.

Bolt and anchor rod grouting: Holding down bolts should be hooked at the bottom (J - bolt) or fitted with an anchor plate. Anchor rods must be rough for optimum pull out strength and the dia- meter of holes should be at least 20 mm more than that of anchor rods. While anchoring, place the required quantity of grout first in the hole and then introduce the anchor rod by pushing it gently, so that the displaced grout fills the annulus around the rod.

### **ESTIMATING DATA**

Each pack of 26.9 kg yields 13.06 L on mixing. However, In case of the normal flow version, the three

components together weigh 29.9 kg and yield 14.5 L on mixing.

### **PACKAGING**

**MasterFlow 626** is available in a set of 3 components as below.

Component	Description	Packaging
А	Resin	3.56 kg pail
В	Hardener	1.34 kg can
С	High flow aggregate	22.0 kg bag

For normal flow version, use the alternative Component C available as **MasterFlow 626** Standard Aggregate in 25 kg bags.

### SHELF LIFE

**MasterFlow 626** has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

### **PRECAUTIONS**

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet (MSDS) from our office or our website.

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