

MasterFlow[®] 700

Natural aggregate, general purpose non shrink grout

DESCRIPTION

MasterFlow 700 is a ready to use natural aggregate general purpose grout which undergoes controlled expansion in the plastic state. It is a Class 'A' grout as defined in ASTM C1107-97.

RECOMMENDED USES

All general purposes grouting operation such as:

- Column bases
- An in-fill grout for cavity block walls
- Between pre-cast panels and other joints where total load bearing is not required
- Underpinning where a grout similar in appearance to concrete is required

Please consult your local Master Builders Solutions representative on other grout applications.

FEATURES AND BENEFITS

- **Ready to use**, - factory blended grout requires only the addition of mixing water on site
- **Low water / cement ratio** - reduces drying shrinkage which increases durability
- **Damp packable** – no slumping in plastic state slumping
- **Controlled fluid-phase expansion** - complete void filling
- **Economical** - relatively low in-place cost due to its ease of use and flowable properties
- **Chloride free** –adds no Chloride load to structure

PROPERTIES

Supply form :	Powder
Colour:	Cement grey
Density (wet) Flowable	2.18 Kg/L
Trowellable	2.26 Kg/L
Estimate setting time Initial	5 hours
Final	6 hours

The strength of the grout is often the determining factor in deciding when loads can be put on structural members or machinery that has been grouted. The strength of the grout is dependent on the amount of mixing water, temperature (ambient and grout), curing and age of the hardened grout.

Compressive strength	Flowable	Trowelable
1 day	18 MPa	22 MPa
3 days	30 MPa	39 MPa
7 days	41 MPa	45 MPa
28 days	50 MPa	55 MPa

APPLICATION

Preparation

The foundation should be clean, well roughened and pre-saturated with water. Eliminate external sources of vibration until the grout hardens.

Mixing

For large quantities, use a paddle type mortar mixer. For smaller quantities, mix in a 20 – 25 litre pails using a heavy-duty electric drill (e.g. Festo) fitted with a helical paddle (jiffy). When using a mortar mixer, add approximately 80% of the water in the mixer. Keeping the mixer running, add **MasterFlow 700** slowly. Mix for at least 3 minutes until a lump-free mix is obtained.

Add the remaining water while continuing to mix until the desired consistency is achieved. When using a helical mixer, add all the required water before adding any dry grout. Mix for 1 – 2 minutes. Do not use grout from damaged bags.

Mixing water	
Flowable	4.0 - 4.5L
Plastic	3.1 - 3.4L

ESTIMATING DATA

Actual amount of water will depend on the desired consistency for the job and temperature (both ambient and grout). For any given consistency, more water will be required at high temperatures and less at low temperatures.

As a guide, the yield from 25 kg of grout mixed at the following amount of water, with different quantities of aggregates (eg. Aggregate density = 2.6 Kg/L) is given below:

MasterFlow® 700

	Nil Aggregate	13 kg Aggregate	25 kg Aggregate
Flowable: 4.5L of water	13.5 L	18.5 L	23.1 L
Trowellable : 3.4L of water	12.5 L	17.5 L	22.1 L

Do not use water in an amount or at a temperature that will cause the mixed grout to bleed excessively or segregate.

PACKAGING

MasterFlow 700 is supplied in 25 kg in multi-ply paper sacks

SHELF LIFE

MasterFlow 700 has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall.

PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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