

MasterRoc[®] TIX 10

Shrinkage compensated thixotropic grout for rock dowels

DESCRIPTION

MasterRoc TIX 10 is a shrinkage compensated grout for the encapsulation of fully bonded rock dowels in both underground and above ground applications. It is a ready-to-use powder requiring only the addition of water to produce a mortar suitable for filling annular gap widths of 5 - 125mm. It has been specifically formulated to provide high early strengths and an extended working life even at high ambient temperatures.

TYPICAL APPLICATIONS

MasterRoc TIX 10 is specifically formulated for use in overhead and inclined holes. The product rheology is suitable for pumping but will remain in the hole after placing.

MasterRoc TIX 10 has been formulated for use in both temporary and permanent applications.

ADVANTAGES

- High bond to steel
- Positive Expansion
- Pumpable
- Predictable Performance
- High early and ultimate strength ensures the permanence and safety of critical installations
- Extended working time to enable multiple holes to be grouted with ease

PACKAGING

MasterRoc TIX 10 is available in 25kg bags.

TYPICAL PROPERTIES*

At 0.32 water / powder ratio the typical properties are:

Workability (EN 13395-1)	150 – 180 mm	
Bleed	<1 % at 2 hours	
Compressive strength (EN 12190)	1 day	>20 MPa
	7 day	>45 MPa
	28 day	>60 MPa
Unrestrained Shrinkage 28 Days (EN 12617-4)	< 1.7 mm/m	



Fig. 1 : MEYCO Deguna Mixer and Pump

MIXING

MasterRoc TIX 10 is supplied in a ready to use form requiring only the addition of clean water with a temperature less than 30°C. Do not use hardened or lumpy grout caused by torn or water damaged bags.

Do not mix by hand. Use a **MEYCO Deguna**, see Fig.1, or similar high shear mechanical mixer.

Add the powder to the mixer and then the water. Continue mixing for approximately 1 minute then add the remainder of the water until the desired consistency is achieved and mix for a further 2 minutes. Discard any grout that is left in excess of 30 minutes.

Water addition should be between 0.3 - 0.36 water / powder ratio. At 0.36 water / powder ratio each 25kg bag should yield approximately 17 litres.

PLACEMENT

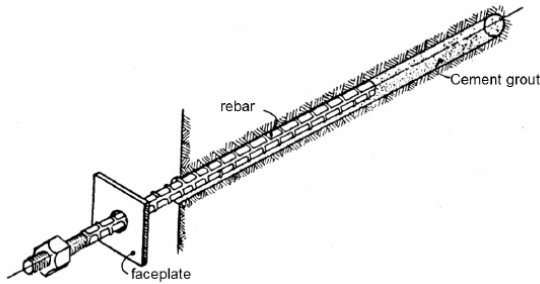
Placement technique will vary depending on the type of anchor, the strata and the orientation of the hole.

The usual method of placement is by injection through a stiff plastic tremie pipe inserted to the bottom of the hole.

The grout is pumped at a steady rate and the tremie pipe is withdrawn steadily to ensure complete filling of the hole allowing for the volume of the dowel itself. Immediately after filling, insert the dowel into the hole. Face plates may be tightened to a required torque once the grout has gained sufficient strength.

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Fig 2: Rock Dowel Installations



Please contact your local Master Builders Solutions technical service engineer for assistance in choosing the right methodology to suit your application

If placement is interrupted, disconnect the grout tube from the pump to drain grout. Wash out the pump and connecting line. Remix **MasterRoc TIX 10** prior to recommencing pumping. If grout is over 30 minutes old, discard and mix a fresh batch.

Special placement techniques may be required for badly broken strata layers. Refer to Master Builders Solutions Technical Representatives for specific installation advice.

STORAGE AND SHELF LIFE

MasterRoc TIX 10 has a shelf life of 6 months when stored in a cool dry environment. The bags should be stored on a pallet and not be in direct contact with the floor or walls.

HEALTH AND SAFETY

MasterRoc TIX 10 is not toxic, but as with other materials containing portland cement it has an alkaline nature and thus can be irritating to skin and eyes. Wear simple dust masks and gloves when handling. Keep out of reach of children. Wash off splashes of grout with clean water. If irritation persists, seek medical advice.

QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

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STATEMENT OF RESPONSIBILITY

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NOTE

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