

MasterRoc RBA 384

Highly reactive, thixotropic polyurea silicate injection resin for rock- and cable bolt installation

MATERIAL DESCRIPTION

MasterRoc RBA 384 is a quick reacting two component polyurea silicate injection resin specifically designed for rock and cable bolt installations. Due to its unique thixotropic behaviour, it offers high flexibility which allows for overhead applications without additional sealing. The extended setting time allows the installation in areas with higher ambient temperature and where longer open times are required.

APPLICATIONS

- Resin-into-bolt rock bolting at all angles.
- Bolt-into-resin rock bolting at all angles.
- For the use with steel and glass fiber bolts.

FEATURES AND BENEFITS

- Secure and precise injection due to its thixotropic properties.
- Flexibility in application due to its unique thixotropic properties and long-distance pumping capacity.
- Penetrates cracks wider than 0.14 mm.
- Increased reliability due to its full-size grouting.
- High structural strength combined with flexibility.
- Injected material shows good adhesion to damp and low friction substrates.
- Neither expands its volume with water nor absorbs water.
- Keep people safe during bolting due to its fast curing and strength development.
- Fire resistant according to DIN 4102-2 Class B2.

PACKAGING

MasterRoc RBA 384 is supplied as:

- 25 l cans, 200 l drums and 1000 l IBC
- Special packaging on request

TECHNICAL DATA

Physical properties:

	Color	Viscosity, mPa.s	Density g/cm ³
Part A	Colorless	490	1.39
Part B	Dark Brown	150	1.18

Note: Tested at 23°C, density tested at 20°C

Mixing Ratio: 1:1 by volume

Reaction characteristics:

Testing Temperature	23°C
Thixotropic Time	Immediately
Setting Time	280s ± 30s
Foam Expansion Factor	1
Compressive Strength	> 35 MPa
Penetration capacity	≥ 0.14mm

APPLICATION PROCEDURE

Part A and B are delivered ready for use. They are injected in the ration of 1:1 by volume, using a two component injection pump equipped with a static inline mixer nozzle, as shown in the following picture.



Example of a two component injection pump.

Please note: The curing time is dependent on the temperature of the product and ground. Please store both components prior to application at a temperature of at least +10°C.

To achieve a favourable mixing result during injection the addition of a static in-line mixer in connection with the mixing head is strongly recommended. The static mixer should at least consist of 16 cross mixing elements.

EQUIPMENT

For short breaks in the injection procedure pump part A through the nozzle including the static in-line mixer. After the injection process pump an appropriate cleaning and maintenance agent or oil containing no water, through the pump and injection hoses until **MasterRoc RBA 384** is completely washed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

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STORAGE

MasterRoc RBA 384 has a shelf life of 24 months if stored in original, unopened packaging between +5 °C to +35°C. The storage area must be kept dry.

SAFETY PRECAUTIONS

The use of gloves, eye protection and safety clothes are recommended. Any physical contact (e.g. skin or eyes) with the product should be avoided. If contact with skin occurs, wash thoroughly using soap and water. In case of eye contact, rinse thoroughly with an eyebath filled with water and seek medical advice. The products are harmless.

Uncured products should not enter the local drainage system. Spillage must be collected using absorbent materials such as sawdust and/or sand and disposed of in accordance with local regulations.

For further information, please refer to the Material Safety Data Sheet or contact your local Master Builders Solutions representative.

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

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All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled tests.

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