

# MasterRoc RBA 387

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

## MATERIAL DESCRIPTION

**MasterRoc RBA 387** is a rapid reacting two component polyurea silicate injection resin specifically designed for rock bolt installations. Due to its unique thixotropic behaviour it offers high flexibility which allows for overhead applications without additional sealing.

## FIELDS OF APPLICATIONS

- Resin-into-bolt rock bolting at all angles.
- Bolt-into-resin rock bolting at all angles.

## 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.
- Increased reliability due to its full-size grouting.
- Mixes easily even in low temperatures > 5°C.
- 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.

## PACKAGING

**MasterRoc RBA 387** is supplied in:

- 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 <sup>3</sup>
Part A	Colorless	490	1.38
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	30s ± 5s
Foam Expansion Factor	1
Compressive Strength	> 35 MPa
Pull-out strength According to DIN 21521	≥ 320 kN (600 mm)

## 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.

# MasterRoc RBA 387

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

## 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 387** is completely washed out. Store the pump and hoses with the cleaning agent inside and seal all openings.

## STORAGE

**MasterRoc RBA 387** has a shelf life of 12 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.

## QUALITY AND RESPONSIBLE CARE

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.

## DISCLAIMER

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) Ltd 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.