

TECHNICAL DATA SHEET

Rock Support Systems Fast Set 1/4

Encapsulated, Ready-to-use, Non-Shrink, High Alumina Mechanical Rock Support Grout for Mining and Tunnelling Industries

Description

Rock Support Systems is an encapsulated High Alumina Cement rock support grout material which, when submerged in water for approximately 3 minutes and then inserted into the anchor hole, achieves desired rock bolt support.

Typical Applications

- Where quick strength fixing of anchor bolts into rock, concrete, masonry or other material of sufficient strength will take the loading required.
 - Rock Support Systems can be applied into vertical and horizontal holes.

Advantages

- Non-shrink chemically controlled expansion removing the risk of failure in underground applications.
 - Rock Support Systems Capsules are easy to apply.
- High impermeability preventing water and moisture penetration, thereby eliminating corrosion.
 - No added Chlorides, Nitrates, Sulphates or Gypsum.
 - Rock Support Systems is non-burning and non-toxic.

Typical Results

Bond Pull-out (kN)

The bond pull-out (kN) using a 16 mm diameter rebar grouted in a 250mm x 50mm internal diameter pipe is actually a measure of the shear strength of the Rock Support Systems Grout.

The following are typical laboratory results at a room temperature of 25°C:

AGE	BOND STRENGTH (kN)	AGE	BOND STRENGTH (kN)
1 hour	40 kN	8 hours	90 kN
2 hours	50 kN	7 days	95 kN
4 hours	80 kN	28 days	100 kN

Setting Times (Tested in accordance with SANS 1745: 2003)

Initial Set: 10 Minutes

Final Set: 16 Minutes

Directions for use

Submerge the required number of Rock Support Systems Capsules in water for approximately 3 minutes (until the air bubbles stop), allowing complete absorption. The entire hole must be filled with Rock Support Systems Capsules. Push the specified bar, rope dowel or shepherd's crook through the capsules to the length of the hole and leave to set.

Packaging

Supplied in woven polypropylene bags with a waterproof inner liner.
Palletised and wrapped with 150 bags per bulk bag.

Quality Assurance

Rock Support Systems Mining Supplies Pty. Ltd. production and testing programs comply with all local (SANS 1745: 2003) and international testing standards.

