

TECHNICAL DATA SHEET

Rock Support Systems Medium Set

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

Description

Rock Support Systems (4/5) is a 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 (4/5) can be applied into vertical and horizontal holes.

Advantages

- Non-shrink controlled chemically expansion removing the risk of failure in underground applications. Rock Support Systems (4/5) Capsules are easy to apply.
- High impermeability preventing water and moisture penetration, thereof eliminating corrosion.
 - No added Chlorides, Nitrates, Sulphates or Gypsum.
- Rock Support Systems (4/5) is non-burning and non-toxic.

Typical Results

Bond Pull-out (kN)

The bond pull-out (kN) using a 16 mm diameter ripple bar grouted in a 250mm x 50mm internal diameter pipe is actually a measure of the shear strength of the Rock Support Systems medium (4/5) Grout. The following are typical laboratory results at a room temperature of 25°C

Age	Bond strength (kN)	Age	Bond strength (kN)
4 hours	50 kN	12 hours	75 kN
6 hours	60 kN	7 days	85 kN
8 hours	70 kN	28 days	100 kN

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

Initial Set: 20 Minutes
Final Set: 26 Minutes

Directions for use

Submerge in water for approximately 3 minutes, (until the air bubbles stop) the required number of Rock Support Systems medium (4/5) Capsules, allowing complete absorption. The entire hole must be filled with Rock Support Systems medium (4/5) 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. 150 bags packed into Duffel top Bulk Bag to protect against elements

Quality Assurance

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

