

# ROCK REINFORCEMENT

## Normet Resin Capsule ROCLOC® Resin Capsules



RocLoc® Resin Capsules are a two-compartment capsule system that provides a quick and easy alternative to grout anchoring rock bolts. When mixed, the two components form a rapidly curing compound that binds the rock bolt to the surrounding strata, providing anchorage and corrosion protection. RocLoc® is permanent support used in combination with appropriate rock bolts and is suited for rock reinforcement in mining and tunneling construction projects.

### WORKING PRINCIPLE

The resin capsules contain two components separated by a thin membrane. One compartment contains the resin mastic, and the other compartment contains the catalyst paste.

The capsule is placed into a pre-drilled borehole, followed by the insertion of the rock bolt.

The insertion and rotation of the rock bolt breaks the sheath, allowing the resin and catalyst to mix. This thixotropic compound sets after a specified setting time and creates a chemical bond between the anchor and the strata.

### BENEFITS

- > Resin capsules are suitable for soft, fractured and hard rock.
- > Immediate bonding of the bolt to surrounding strata, allows for immediate reinforcement and rapid advancement of support.
- > Rapid strength development allows for support to become safe and active shortly after installation.
- > Thixotropic compound allows for overhead installations.
- > Can be used for end-anchorage or full-length anchorage and load distribution.
- > Full encapsulation provides additional corrosion protection
- > Individual capsules are provided with identification and subject to end-to-end testing for quality control

### RANGE AND SPECIFICATIONS

#### Strength Specifications

Requirements:		RocLoc® Resin Capsules
Standard	19 MPa	> 23 MPa punch-shear test
High Strength	23 MPa	

#### Set Times Specifications

Set Time	Standard Colour Code	Spin Time*	Hold Time*
15 sec	Purple	8 sec	8 sec
20 sec	Black	8 sec	12 sec
30 sec	Red	10 sec	20 sec
60 sec	Green	15 sec	45 sec
120 sec	Blue	20 sec	100 sec
5/10 min	Yellow	20 sec	10 mins

\* spin time and hold times established at 20 degrees C. Set time will be faster (slower) when the temperature is higher (lower).

#### Strength Specifications

Particulars	Value (in mm)
Standard Diameters	21, 23, 25, 28, 30, 32, 35
Standard Lengths	380, 400, 450, 500, 600, 900, 1000, 1100, 1350

\* other dimensions can be manufactured if required

