

SOFT ROCK MINING / HARD ROCK MINING

RAPPASS

HIGH STRENGTH, IMPACT RESISTANT

DESCRIPTION

Rappass C and G are blended cements that have been designed as rapid strength and abrasion resistant products to be used as either a dry or wet mix. Rappass C requires the addition of water to produce a flowing concrete consistency. Rappass G is applied by conventional wet (GW) or dry (GD) shotcrete processes.



APPLICATION AND USES

Uses include;

- Linings for ore passes
- Outfalls
- Spill ways
- Crushers
- Chutes
- Equipment impact areas

ADVANTAGES

- High early strength
- Excellent abrasion resistance
- Excellent impact resistance
- Minimum rebound, reduced waste
- Non-caustic admixtures, safe to handle
- De-dusted, improved environment
- Chloride free, non corrosive to steel

TECHNICAL DATA

Pot Life

Typical Pot Life at 20°C	
Rappass C/GW	2 hours
Rappass GD	20 minutes
Rappass CF	40 minutes

Wet Density

Typical: 2200 Kg/m³

Exotherm

Typical peak exotherm of a 100 x 100 x 50 mm sample. Sample mixed at 20°C.

Rappass :48°C

Compressive Strength

In accordance with BS 7861 - Part 1: 1996

Typical Properties @ 20°C			
Water: Powder ratio 0.12:1			
Rappass	GD	C/GW	CF
Age	UCS (MPa)		
2 hours	29		15
4 hours	41		26
1 day	55	61	62
7 days	67	71	72
28 days	90	87	87

Abrasion Resistance

Typical Chaplin rotating disc abrasion test results (complying with BS 8204:1987 – Part 2). Independently tested at 28 days cure. Results available on request.

Abrasion (mm)

Rappass :0.17mm
 30 MPa structural concrete :0.51mm

Impact Resistance

Four 220 g cubes tumbled for 10 minutes at 17 rpm in Y shaped rotating drum mixer containing seven 130 g steel balls. Samples cured for 28 days prior testing.

Typical percentage weight loss:

Rappass :3.18 %
 36 MPa Concrete :6.39 %

Flexural Strength

Typical Flexural strength. Independently tested to AS 1012.8.2 at 28 days cure. Results available on request.

Rappass :8 MPa

APPLICATION METHOD

Preparation

Substrate should be de-dusted and pre-wetted. Mesh can be used if required.

Mixing and Placing

Rappass C

- Mixing should ideally be carried out mechanically using a free fall or forced action concrete mixer
- Always add powder to water slowly and mix for minimum of 3 minutes.

Water Requirements	L per Bag
20kg Bag	2.4L
1.2 T Bulka Bag	144L

Rappass G

- Empty directly into the hopper of the application machine
- Spray normally on vertical and overhead surfaces
- Water and air should be adjusted at the nozzle to maintain build and application properties

SAFETY INSTRUCTIONS AND LIMITATIONS

Do not use at temperatures below 5°C.

At the recommended consistency, the approximate yield is as follows:

Product Requirement	Yield
1.2T of Rappass	611 L

Coverage

Thickness (mm)	m ² coverage per 1.2T
25 mm	24.4 m ²
50 mm	12.2 m ²
75 mm	8.1 m ²
100 mm	6.1 m ²

PACKAGING AND TRANSPORTATION

Rappass is supplied in 20 kg bags or 1.2 T Bulk Bags. All 20 kg bags are packed on stretch wrapped wooden pallets, 60 bags per pallet.

STORAGE AND SHELF LIFE

Rappass has a shelf life of 12 months.

STORAGE CONDITIONS

Material should be stored in original packing under dry warehouse conditions. High temperature and high humidity may reduce the shelf life.

HEALTH AND SAFETY

For more information please refer to the Safety Data sheet at www.minovaglobal.com/apac.

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work.

MANUFACTURER

Minova Australia Pty Ltd

An ISO 9001:2015 Quality Management Certificated Company



FS 603747

ADDITIONAL INFORMATION

Minova Australia offers a comprehensive range of products, all of which have been developed after extensive research and testing on a global scale via our international network of operations. These products include:

- Resin anchor systems
- High yield grouts and foams
- Monolithic chock systems
- High performance cable bolt grouts
- Polyurethane resin systems
- Sprayable coatings for ventilation control
- Water stop grouts
- Ventilation formwork systems including: Meshblock and Tecmesh
- Grout mixers and batchers both air and hydraulically operated
- Contract Installations
- Flexible membranes for strata support and waterproofing applications

CUSTOMER SERVICE

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