

FORMULATORS, MANUFACTURERS AND CONSULTANTS OF
SPECIAL CONCRETE PRODUCTS

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ROCKBOND ULTRAFLOW GROUTS

DESCRIPTION:

ROCKBOND ULTRAFLOW GROUT (RB UFG) is a specially designed Portland cementitious grout used for the filling and sealing of fine cracks and voids. The grout powder is a blend of fine and ultra fine cements, stabilisers, admixtures, and is free of sand. When ROCKBOND ULTRAFLOW GROUT powder is mixed with water, a particularly fluid grout is produced, which will not segregate or bleed, and is easily pumped and placed. ROCKBOND ULTRAFLOW GROUT ACCELERATED (RB UFGA) contains chloride free accelerators, and is used during winter weather work, or when a rapid strength gain is required at 20°C. The powders are packaged in 25kg moisture proof durable bags, are ready to use, and have a shelf life of 2 years.

SPECIAL PROPERTIES:

- * Quickly and easily mixed, pumped and placed.
- * Portland cement based, shrinkage compensated and microsilica enhanced.
- * Excellent penetration through holes, cracks, interconnected voids and fine fissures.
- * Highly stable under pressure, and will not segregate or bleed.
- * Contains water soluble polymers: will not washout, disperse or break up underwater.
- * Contains expansive agents to ensure the grout will "tighten-up" in voids or ducts.
- * High compressive strength, and high bond strength to concrete and steel.
- * Impermeable, waterproof, resistant to chemical attack and durable.
- * Economical, non flammable, non toxic, user friendly and safe to use.

USES:

- + To penetrate and seal fissures in rock, masonry, brick and concrete.
- + Underpinning and stabilizing foundations, gravels, loose floor and road slabs.
- + Grouting up retaining walls, behind lift shafts and tunnel linings.
- + Between construction joints, precast concrete, and closely spaced steel reinforcing.
- + For post tensioned, prestressed concrete cables and ducts.
- + Under baseplates, anchor plates, holding down bolts, holes, cables, bars and rods.
- + For underwater applications, waterlogged foundations, tunnels, conduits, pipes and sewers.
- + To grout up open graded aggregates to produce void free, fully compacted, non shrink, high strength "in situ" concretes and flooring materials.

MIXING INSTRUCTIONS:

ROCKBOND ULTRAFLOW GROUT powder is mixed with water using a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC), a pneumatic or electric power tool (1kW), and a ROCKBOND CONCRETEM STIRRER (RB CS).

Add 12.50 litres of water to the container or mixer.
Pour 25kg of the powder onto the water while mixing.
For batches of 2 or more bags, repeat the procedure.
After all the powder has been added, mix for 30 seconds.
The grout is now ready for use.

ROCKBOND ULTRAFLOW GROUT (RB UFG), MIXING INSTRUCTIONS CONTINUED...

ROCKBOND ULTRAFLOW GROUT ACCELERATED is mixed with water at 40% water content: 10 litres of water/25kg bag.

Alternatively, small amounts of the material can be prepared by slowly adding the powder to a quantity of water and mixing to the required consistency.

APPLICATION PROCEDURE:

For the filling and sealing of cracks and voids, or fissures in rock, grout injection points should be placed at appropriate centres. Where possible, position injection points so they tap into interconnected cracks and voids.

When grouting into vertical faces, grout injection points should be located at the base of the structure where possible, and outlet points situated at the very top. Vent pipes should be sited at appropriate points. Injection tubes should be fixed quick and fast into the concrete or brick by using ROCKBOND FASTROCK MORTAR (RB FRM).

Mix the ROCKBOND ULTRAFLOW GROUT at the required consistency. For the filling and sealing of thin and deep cracks of approximately 200 microns, mix the powder with clean water at a fluid consistency: 12.50 litres of water/25kg bag. When the grout is required thick and stiff, use 6.25 litres of water/25kg bag. Mix the grout powder with quantities of water to produce the most advantageous consistency for the job in hand. Often it may necessary to start with a thin, fluid grout and then proceed with a thicker material to effect a successful grouting application.

Where grout leaks out of the concrete or brick during the application of the material, use ROCKBOND WATERSTOP (RB WS) mortar to immediately plug, stop and seal the flow of grout.

During the filling of large structures, or during ground grouting, a large demand will suggest the grout is escaping. Should this be the case, wait until the grout has set, or use ROCKBOND ULTRAFLOW GROUT ACCELERATED, and then continue grouting.

Use ROCKBOND ULTRAFLOW GROUT ACCELERATED for applications that require a fluid, quick strength grout at 20°C, or when ambient temperatures are low.

Use ROCKBOND PUMPING GROUT (RB PG) in situations that require a non flow, thixotropic grout.

TECHNICAL DATA:

ROCKBOND ULTRAFLOW GROUT (RB UFG)

TYPICAL DATA at 50% water/powder ratio at 20°C

CONSISTENCY: Fluid grout

CONSISTENCY LIFE: 1 hour

DENSITY: 1700kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1	7	28	Days
15	35	50	MPa

YIELD: 25kg of powder yields 21.00 litres of Ultraflow Grout.
1m³ of Ultraflow Grout requires 1.200 tonnes of powder.

ROCKBOND ULTRAFLOW GROUT (RB UFG), TECHNICAL DATA CONTINUED...

TECHNICAL DATA:

ROCKBOND ULTRAFLOW GROUT ACCELERATED (RB UFGA)

TYPICAL DATA at 40% water/powder ratio at 20°C

CONSISTENCY: Fluid grout
CONSISTENCY LIFE: 20 minutes

DENSITY: 1900kg/m³

MINIMUM COMPRESSIVE STRENGTH:

1 hour	2 hours	1	7	28	Days
2	8	12	30	50	MPa

YIELD: 25kg of powder yields 17.25 litres of Ultraflow Grout Accelerated.
1m³ of Ultraflow Grout Accelerated requires 1.450 tonnes of powder.

HEALTH AND SAFETY:

ROCKBOND ULTRAFLOW AND ULTRAFLOW ACCELERATED GROUTS are non toxic and safe to use. However, use the same precautions as with any cementitious product: wear goggles, protective clothing and a dust mask while mixing and applying the material.

FURTHER INFORMATION:

Should you require further information on this product, or details of other ROCKBOND SPECIAL CONCRETE PRODUCTS, then please do contact our Technical Department:

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IMPORTANT NOTE:

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