

Rock Set

Thixotropic Epoxy Resin Adhesive

PRODUCT DESCRIPTION

Rock Set is a solvent-free, thixotropic, two component adhesive and repair mortar, based on a combination of epoxy resins and specially selected high strength fillers. Complies with ASTM C881-78 type I, Grade 3 Class B+C.

USES

- Rock Set is available in three different grades of reactivity: rapid, normal, long pot life. They can be used as follows:
- Adhesive levelling compound for concrete, stone, ceramics, mortar, renderings, steel, iron, aluminum, wood, woodchip boards, polyester, epoxy and glass.
 - Concrete repairs.
 - Blow hole filling.
 - As structural adhesive for precast concrete segments, columns, curb-stones etc.
 - Crack and surface sealing.
 - Fixation of dowels and starter bars

For Segmental Bridge Construction a special range of adhesives is available:

ADVANTAGES

- Rock Set is an extremely versatile product that offers many advantages to the user:
- Easy to apply.
 - Suitable for both, dry and damp surfaces.
 - Non-sag product, even at high temperatures.
 - Hardens without shrinkage.
 - Excellent mechanical strengths.
 - High early strength according to grade used.
 - Components of different colors (Mixing control).
 - High abrasion and impact resistance.
 - Solvent free.

PRODUCT DATA

Grey (Comp. (A): white, Comp. (B): black).

Color

Packaging 1 kg and 5 kg units (A+B).

Storage Store in shade, under normal weather temperature and in dry conditions.

Shelf Life 24 months from date of production if stored properly in original unopened packing.

Technical Data All types: Comp. (A): 1.65 kg/l

Density (20°C) Comp. (B): 1.65 kg/l

Coefficient of Thermal Expansion 50×10^{-6} per °C (temp. range: -20 °C to +40 °C)

Modulus of Elasticity 4'300 N/mm² (Static)

Mechanical Strengths

	Normal/Rapid Type after 10 days at +10-20°C	L.P Type after 10 days at +20-30°C
□ Compressive strength	60 - 70 N/mm ²	50 - 60 N/mm ²
After 24 hrs. at + 20°C:	~40 - 45 N/mm ²	--
After 24 hrs. at + 30°C:	~35 - 40 N/mm ²	~40 - 45 N/mm ² 20 - 25 N/mm ²
After 24 hrs. at + 50°C:	-	15 - 20 N/mm ²
□ Flexural strength	30 - 40 N/mm ²	3-3.5 N/mm ² (concrete failure)
□ Tensile strength	15 - 20 N/mm ²	
□ Bond strength to concrete	3.5 N/mm ²	
□ Bond strength to steel	~15 N/mm ²	

APPLICATION	Type Normal/Rapid: Comp. (A) : Comp. (B) = 2 : 1 by weight and volume. Type L.P. : Comp. (A) : Comp. (B) = 2 : 1 by weight and volume.			
Mix Ratio				
Surface Preparation	All surfaces must be clean, free from frost, standing water and all loosely adhering particles. Cement laitance must be removed. Concrete must be at least 3 - 6 weeks old, depending on climate, wire-brush, sand-or water-blasted or grind substrates.			
Priming	Priming is not required.			
Mixing	Mix components (A+B) together for at least 2 minutes with a mixing paddle attached to a slow speed electric drill (max. 600 R.P.M.) until the material becomes smooth in consistency and even grey color of the mixture is obtained. Material in industrial packing must be stirred well before proportioning and mixing. Avoid aeration while mixing.			
Application	When using a thin film adhesive, apply the mixed adhesive to the surfaces with a trowel, spatula or by glove-protected hand. When applying as a repair mortar, take into account any form work that may be required. On vertical surfaces it is non-sag up to 10 mm thickness. On damp surfaces, ensure that the material is well rubbed in. Max. layer thickness: 30 mm.			
Cleaning	Clean all tools and equipment immediately after use with Colma-Cleaner.			
Pot Life	°C	Normal Type	Rapid Type	L.P. Type
	40	-	-	25 min.
	30	20 min.	-	50 min.
	20	40 min.	20 min.	90 min.
	10	90 min.	40 min.	-
	5	-	60 min.	-
Important	Optimal working temperatures for each grade are: □ Normal Type : 10°C - 30°C. Rapid Type : 5°C - 15°C. L.P. Type : 20°C - 40 When working at a higher temperature than recommended, the pot life will be shortened. Similarly when working at lower temperatures, the material will become more difficult to apply and takes longer to harden. When applying to damp concrete, work well into substrates. When the working temperature will be above 45°C, please consult our Technical Service.			
SAFETY INSTRUCTIONS	In liquid state components (A+B) contaminate water. Do not dispose of into water or soil but according to local regulations.			
Ecology				
Transport	Comp. A: Non-hazardous. Comp. B: All types: 8/65 c).			
Safety Precautions	Product may cause skin irritations. Wear gloves and goggles. If the material is accidentally splashed into the eyes, flush immediately with plenty of warm water and seek medical attention without delay.			
Toxicity	Class 4, under the relevant Swiss health and safety codes. Observe warnings on packing.			



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CONSTRUCTION