

Polyurethane Elastomeric Grout

Guardian RAIL-LOCK is an elastomeric polyurethane rail grout providing vibration, dampening and electrical isolation whilst holding the rail securely in place absorbing movement without cracking. It is very rapid setting and may be used in new and repair applications. The product is in two parts to control the finished materials consistency, there is no need to add further aggregates.

USES & ADVANTAGES

Guardian RAIL-LOCK grout is used for filling the space between the rail and adjacent concrete. It is used with longitudinal rail and floating slab joints and embedded rails. Use for rail maintenance and new construction.

Advantages include:-

- Fast setting and curing.
- Setting time may be adjusted.
- Noise reduction.
- Electrical isolation.
- Bonds tenaciously to steel and concrete.
- Chemical, oil and fuel resistant.
- No VOCs.
- Self priming
- Flexible.
- Flowable.
- Easy to mix.
- Two part providing better quality control.

PROPERTIES

Specific Gravity @25°C :	1.10 -1.16 kg/litre	
Final Setting Time @25°C :	Approx. 60 min.	
Volume Resistivity :	3.46 x 10 ¹² ohm.m.	
Tensile Strength :	≥ 2 MPa.	ASTM D638
Elongation at Break :	≥ 100 %	ASTM D638
Shore A Hardness :	≥ 50	ASTM D2240
(Full Cure)		
Impact Resistance :	No crack or breaks observed.	ASTM D3029
Trafficable at 25°C :	Approx. 2 hours.	
Full Cure Time at 25°C :	7 Days	
Adhesion Bond Strength :	>2 N/mm ²	
to Concrete @ 7 Days	(Concrete failure)	ASTM D4541
Service Temperature :	- 40 to 80°C	
Chemical Resistance :	Dilute sulphuric acid & NaOH solution Sea, Chlorine and Waste water Glycerine Soap solution Fuels & oils	ASTM D543

Note: Guardian RAIL-LOCK is moisture sensitive.

Protect from rain until it has reached its final setting time

Do not apply the product below 7°C. Temperature should be 7°C & rising.

Wet & damp conditions: prime with **Guardian EAP**.

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PERFORMANCE PROPERTIES

It is very important to compare the data of the fully mixed material.

To ensure performance is maintained **Guardian RAIL-LOCK** is supplied in two parts in pre measured units.

CONSUMPTION

Approx. 92-97 sets of **Guardian RAIL-LOCK** will yield 1 cubic metre of elastomeric grout.

SUBSTRATE PREPARATION

Ensure no moisture is present in the substrate. Hot air blasting can be used to remove excess moisture from the substrate. In the case of repairs cut out all damaged spalled concrete to leave a clean, dust free, dry, exposed aggregate surface, ensure there is no contamination. The edges of the repair must be cut at right angles the full depth of the repair. New concrete should be at least 14 days old, clean, free of contaminants such as oil, grease, curing compound or other materials that interfere with adhesion. No primer is required when the concrete surface is prepared clean and roughened.

In the case where additional bonding to the substrate is required, primer is available upon request. For wet & damp conditions prime with **Guardian EAP**. Allow to dry for approx. 30 minutes to 2 hrs.

MIXING & APPLICATION

STEP-1: MIXING PART A & B

Mix "Part A" & "Part B" for approx. 2-3 minutes using a high speed drill mixer (or) paddle mixer having ribbon blades until a uniform homogenous mixture is achieved.

STEP-2: PLACING OF **Guardian RAIL-LOCK**

Pour the homogenous mixture of **Guardian RAIL-LOCK**, immediately into the prepared area. The poured material is self levelling.

STEP-3: CURING & FINISHING

The poured material will initially cure within 10-20 minutes, providing a smooth surface finish. The applied product can accept traffic in approx. 2 hours.

CLEAN UP

Use xylene to clean equipment.

PACKAGING

12 kg set.
12 kg set = 10.6 litres.

STORAGE & SHELF LIFE

Do not allow to freeze. Store in a dry shaded area between 10-35°C in original unopened containers. The shelf life is 12 months when stored correctly in the original unopened containers.

HEALTH & SAFETY

Wear protective clothing, goggles & gloves. If in contact with eyes wash out immediately with water & seek medical attention.

QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.
ISO 14001 : 2015 verified by Lloyd's Register International.

TECHNICAL SERVICE

Guardian Coating Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

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DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Guardian does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Guardian reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advice offered.