

Condur[®] Rail Fix

POLYURETHANE ELASTOMERIC GROUT

DESCRIPTION

Condur Rail Fix 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

Condur Rail Fix 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.
- Long life expectancy
- Reduces vibration.
- Absorbs intensive dynamic and cyclic track loads.
- Does not contain rubber or cork.
- Insensitive to moisture

PROPERTIES

Specific Gravity @25°C :	1.10 -1.16 kg/litre
Final Setting Time @25°C :	Approx. 60 min.
Tensile Strength :	2.15 MPa.
ISO 527-2 : 2012	
Elongation at Break :	115 %
ISO 527-2 : 2012	
Shore A Hardness :	63
ISO 868 : 2003	
Pull-Off Test :	2.12 Mpa
ISO 4624 : 2023	
Determination of Resistive properties (DC methods)-	
Volume Resistivity :	5.32 x 10 ¹⁰ Ohm.m
EN 62631-3-1;2016	
Density for Component A & B :	1.13 gm/cc
ISO 2811-1 : 2023	
Volume Density of the Hardened Mass of Component A & B :	
ISO 1183-1 : 2019	1.16 gm/cc
Tear Strength :	0.32 KN/mm (320 N/mm)
ISO 34-1 : 2022	
Compression Modulus :	63.06 Mpa
ISO 604 : 2002	
Peel Strength :	1.85 Mpa
EN 1542 : 1999	
Reaction to Fire :	Class E
ISO 11925-2 : 2020	
Viscosity for Component A & B :	1686 mPa.S
ISO 3219 -1: 2021	

Infrared Spectrum for Component A & B :

EN 1767 : 2000

FTIR Spectrum is found to be similar to Polyurethane No failure @ 1 kN to 32 kN Load range. Complies to Category A, A+ Fastening systems >7 kN

Vertical assembly Stiffness :

EN 17319 : 2020

Longitudinal Rail Restraint : or Longitudinal Stress

EN 17319 : 2020

Complies to Category A, A+ Fastening systems. Approx. 5 hours.

Trafficable at 25°C :

Full Cure Time at 25°C :

7 Days

Application Temperature :

+5°C to +35°C.

For temperatures outside that please consult Cormix International limited.

Material temperature shall be preferably at +10°C before application.

Service Temperature :

- 40 to 80°C

Chemical Resistance :

ASTM D543

Dilute sulphuric acid & NaOH solution

Sea, Chlorine and Wastewater

Glycerine

Soap solution

Fuels & oils

Note : For more information details on chemical resistance contact Cormix International Limited.

Note: Protect from rain until **Condur Rail Fix** has reached its final setting time.

Surface temperature shall be +5°C to +45°C.

Wet & damp conditions: prime with **Condur EA2**.

PERFORMANCE PROPERTIES

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

To ensure performance is maintained **Condur Rail Fix** is supplied in two parts in pre measured units.

CONSUMPTION

Approx. 92 sets (12 kgs) of **Condur Rail Fix** 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. The prepared concrete surface shall be clean and roughened.

Apply **Condur EA2** on the concrete channel surface for bonding Rail pad with the concrete.

Clean the rail surface thoroughly using rail scrubber machine and place the rail on the Rail pad.

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MIXING & APPLICATION

STEP-1: MIXING PART A & B

Mix "Part A" & "Part B" for approx. 3 minutes using a high-speed drill mixer (or) paddle mixer having ribbon blades until a uniform homogenous mixture is achieved. Pot life of product is 20-30 minutes @25°C.

STEP-2: PLACING OF CONDUR RAIL FIX

Pour the homogenous mixture of **Condur Rail Fix**, immediately into the prepared area. The poured material is self levelling.

STEP-3: CURING & FINISHING

The poured material will initially cure within 60 minutes @ 25°C & 2 hours 30 minutes @ 15°C providing a smooth surface finish. The applied product can accept traffic in approx. 5 hours @ 25°C and 8 hrs @ 15°C.

CLEAN UP

Use xylene to clean equipment.

PACKAGING

12 kg set (10.9 litres)

20 Kg Set (18.18 litres)

Other pack sizes available.

Note : Various grades are available to meet specific project requirements

STORAGE & SHELF LIFE

Do not allow to freeze. Store in cool and dry place in unopened original containers at temperatures between +10°C and +25°C. Protect from direct sun light & frost. 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.

TECHNICAL SERVICE

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

QUALITY ASSURANCE

ISO 9001 : 2015 verified by TUV Nord.

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

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. Cormix 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. Cormix 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 advise offered.

CONTACT DETAILS

Cormix International Limited

89 Romklao Rd., Sansab, Minburi, Bangkok 10510

Tel. (66 2) 917 3955-8

Website: <http://www.cormix.com>

Email Address: info@cormix.com