

Iso-Flex® Rail Grout Type I

PRODUCT DESCRIPTION

Iso-Flex Rail Grout is a two-component, aliphatic polyurethane elastomer. It cures to a medium hardness and durometer which enables the product to support a load with minimal deflection, absorb vibration and low movement without cracking. Iso-Flex Rail grout has good chemical resistance to common petroleum products, mild acids and alkalis.

BASIC USE

Iso-Flex Rail Grout is a grout used to fill weld pockets, spalls in concrete, and voids between vibrating transportation rails and concrete. Suitable for sealing penetrations through concrete slabs. The Iso-Flex Rail Grout can be extended with aggregate to reduce the cost and increase the load bearing properties. Extending 3.25 gallons of grout with 1.7 gallons of aggregate will yield approximately 5 gallons of grout (0.67 cu ft).

ADVANTAGES

- Preproportioned - easy to mix and install.
- remains flexible over a wide temperature range.
- cures at temperatures down to 32°F.
- can be coated or painted in 16 to 24 hours.
- bonds to concrete and blasted steel.
- can be extended with aggregate 2:1 by volume.
- has excellent weatherability.
- can be used in direct sunlight.
- relatively moisture insensitive.

PACKAGING

Iso-Flex Rail Grout is available as a 5 gallon unit. (consists of Part A, Part B and pre-weighed aggregate).

STANDARD COLORS

Black and Concrete Gray

INSTALLATION

Surfaces to receive the Iso-Flex Rail Grout must be clean, dry and sound. Prepare the substrate by abrasive blasting, water blasting or other appropriate mechanical methods. In some cases, priming may be required. Contact LymTal International for project specific recommendations.

TECHNICAL DATA FROM LABORATORY TESTS

(Field Properties May Vary)

Property	Test Method	Test Results
VOC	Calculated	60 g/l
Viscosity	Brookfield RVF No. 4 @ 20 RPM	4,000 - 6,000 cps
Weight/Gallon	—	8.4 lbs.
Flash Point	Cleveland CC	145°F
Work Life	—	40 mins
Tack Free Time	—	2 1/2 hours
Cure Time	—	16 hours
Hardness	Type I ASTM D2240	80 ± 10
Shore A		
Tensile	Type I ASTM D412	1500 psi, min
Elongation	Type I ASTM D412	1,000 %, min
Tear Strength	Type I ASTM D1004	300 psi, min
Adhesion to Concrete	ASTM D429	350 psi, min
Steel	ASTM D429 (C)	320 psi
Weathering	ASTM G53	No Change, 2,000 hrs.
Water Absorption	21 days Immersion	<1% by weight
Volume Resistivity (Grout), 75°F, 50%RH	ASTM D257	3.4 x 10 ¹² ohm-cm
After 7 days in 3% NaCl	ASTM D257	3.3 x 10 ¹² ohm-cm
Surface Resistivity (Grout)	ASTM D257	>1x10 ⁹ MΩ cm ²
Dielectric Strength (Grout)	ASTM D149	1000 volts/mil
Dynamic Deflection 25% (Grout)	ASTM D5992	No Failure
Compression Modulus @ 250 psi	ASTM D575	6%
Compression Set, 22 hr. @ 158°F. Incremental Set over 3 cycles	ASTM D395 Method B	0.60%

If being used as a liquid membrane, thoroughly mix the base component, add the cure while continuing to mix, and then apply. If being used as a grout, add 1.7 gallons of aggregate to 3.25 gallons of Iso-Flex Rail Grout. When mixed, the grout can be poured into the primed areas.

PRECAUTIONS

Use Iso-Flex Rail Grout with adequate ventilation and personal protection. Refer to Material Safety Data Sheets that accompany each product shipment

WARRANTY

LymTal warrants that its products are manufactured free of defects and conform to the technical data listed. Under this warranty we will replace, at no charge, any material proven defective when applied in accordance with our written instructions for applications recommended by us as suitable for subject product. LymTal shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of the product.

Chemical Resistance

Test Method - ASTM D471 @ 75°F for 7 days

<u>Solution</u>	<u>% Wt Change</u>	<u>% Vol Change</u>
Water	<0.5	<0.1
10% NaCl	<0.5	<0.1
10% CaCl ₂	<0.2	<0.1
5% H ₂ SO ₄	<1.2	<0.8
5% NaOH	<0.6	<0.5
ASTM Oil No. 1	<1.5	<1.0
ASTM Oil No. 3	<2.3	<1.9
ASTM Fuel A	<2.7	<2.8

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