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NF21

Side Bearer Liner

RAILKO NF21 Side Bearer Liners are recognised as the industry's leading product for this safety critical application and give its end user long service life.

Wear Components

Product Description	Tenmat's RAILKO NF21 fully UIC approved Side Bearer Liners are installed onto the sides of the freight bogie to provide support to the car body. RAILKO plates are used to help safely manoeuvre the bogie and car body around curves on the track. RAILKO NF21 SBL's significantly improve train safety, as they are dimensionally stable and do not creep, being resistant to both water swell and thermal expansion. RAILKO NF21 SBLs are the product of choice at SNCF, Deutsche Bahn, Renfe, Trenitalia and other major railway authorities.	
Product Advantages	 Significantly lower wear rated compared to thermoplastics for enhanced safety Decreased maintenance intervals Full UIC approval Dimensionally stable (Zero Creep under load) Low water swell and thermal expansion ensures RAILKO SBLs keep their integrity and eliminate the risk of unnecessary wheel wear 	
Approved Applications	Side Bearer Liners for SNCF, Deutsche Bahn, Renfe, Trenitalia and other major railway authorities.	
Storage	 To be stored in a dry location Take care not to exceed safe working loads and heights for storage shelves and racks 	



Physical Properties

Property	Units	NF
Density	g/cm³	1.64
Flexural Strength	MPa	44
Flexural Modulus	GPa	5.7
Compressive Strength	MPa	190
Tensile Strength	MPa	27
Charpy Impact Notched	kJ/m²	30
Shear Strength	MPa	40
Compressive Yield @ 68.9 Mpa	%	2.0
Shore D Hardness		90
Swell in Water (24 hours)	%	
20 °C		0.2
80 ℃		0.5
Coefficient of Thermal Expansion	x 10-6/°C	
Parallel		43
Perpendicular		43
Coefficient of Friction (Unlubricated)		0.34-0.42
Maximum Operating Temperature	°C	
Continuous	120	
Intermittent		140
Normal Working Pressure	MPa	55





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Tenmat warrants the materials it produces will conform to Tenmat specifications and approved drawings where applicable. It is entirely the customer's responsibility to make the final product choice and satisfy themselves of the suitability of the product for the intended application, carrying out testing where required. For construction projects, all products which the customer is intending to use on a particular project must be approved in writing by the customer's building designer, system designer or design control professional, to ensure compliance with the latest regulations.

The information contained in Tenmat data sheets is presented in good faith. The values are "typical only" and are based on test results generally in accordance with BS2782, ASTM, a variety of other main test bodies along with Tenmat internal test methods. These values should not be relied upon for specification purposes or the primary selection of materials. As the data sheet values are typical only, Tenmatdoes not warrant the conformity of its materials to these properties or the suitability of its materials for any particular purpose. It is the responsibility of the customer to do the necessary testing and satisfy themselves the product is suitable for the intended application.