



## DESCRIPTION

The Fiberfrax® Durablanket family of lightweight needled blankets are manufactured from Fiberfrax® refractory ceramic fibres and provide effective solutions to a variety of thermal management problems. Fiberfrax® Durablanket products offer superior insulating performance, excellent chemical resistance, flexibility and resilience. Fiberfrax® Durablanket products are completely inorganic and so retain their strength, flexibility and thermal properties in many working environments, without the generation of smoke or fumes. Available in a wide range of density and thickness combinations, Fiberfrax® Durablanket range is one of the most versatile available in the market today.

## GENERAL CHARACTERISTICS

Fiberfrax® Durablanket has the following outstanding characteristics :

- Low thermal conductivity & heat storage
- Resistance to thermal shock & chemical attack
- High heat reflectance
- Good sound absorption
- Low shrinkage
- High tensile strength & resiliency
- Asbestos free
- Unlimited shelf life

## TYPICAL APPLICATIONS

- CPI heaters & heat treatment furnaces
- High temperature pipe, duct & turbine insulation
- Boiler, kilns & ovens insulations
- Tube seals, gaskets & expansion joints
- Fire protection & acoustic insulation

Any new and/or special use of these products, whether or not in an application listed in our literature, must be submitted to our technical department for their prior written approval.

*greener  
cleaner  
safer*  
specialty fibers for  
a greener, cleaner, safer world

**Unifrax India Private Limited** (Formerly Unifrax India Limited)

C-102, Business Square, Andheri-Kurla Road, Andheri (East), Mumbai-400 093

T:+91 (22) 2921 2200 / 201 | F:+91 (22) 2921 2249 | [unifrax.mumbai@unifrax.com](mailto:unifrax.mumbai@unifrax.com) | [www.unifrax.com](http://www.unifrax.com)

**UNIFRAX**

## FIBERFRAX® DURABLANKET Z

Fiberfrax® Durablanket Z is a high temperature blanket made from spun Zirconia stabilised ceramic fibre. It is a highly efficient insulator with extremely low shrinkage characteristics at elevated temperatures, low heat storage capacity and complete resistance to damage from thermal shock. Fiberfrax® Durablanket Z is ideally suited to use in high temperature furnace lining systems.

Individual data sheets are available for the other products in the Durablanket range.

Thermal Conductivity figures are empirical values (average) based on experience.

Tolerances as per ASTM C-892 (2010) or IS 15402 (2003).

Classification Temperature is not a definition of the operational limit of these products, especially when long term physical or dimensional stability is a factor. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office.

## TYPICAL PRODUCT PARAMETERS

<b>Fiberfrax® Durablanket Z</b>			
<b>Typical Chemical Analysis (wt.%)</b>			
<i>Al<sub>2</sub>O<sub>3</sub></i>	30 - 34		
<i>SiO<sub>2</sub></i>	50 - 54		
<i>ZrO<sub>2</sub></i>	14 - 18		
<i>Fe<sub>2</sub>O<sub>3</sub></i>	< 0.1		
<i>TiO<sub>2</sub></i>	< 0.3		
<i>Leachable Chlorides, ppm</i>	< 10		
<b>Physical Properties</b>			
<i>Colour</i>	White		
<i>Classification Temperature (°C)</i>	1425		
<i>Melting Point (°C)</i>	1760		
<i>Mean Fibre Diameter (microns)</i>	2.6 - 3.4		
<i>Fibre Index (%)</i>	48 - 56		
<i>Shot Content (ASTM) (%)</i>	8 - 14		
<i>Specific Gravity</i>	2.65		
<b>Permanent Linear Shrinkage (%) 24 hour soak</b>			
<i>1200 °C</i>	2.0 Max		
<i>1400 °C</i>	3.3 Max		
<b>Density (kg/m<sup>3</sup>)</b>			
	<b>96</b>	<b>128</b>	<b>160</b>
<b>Thermal Conductivity, ASTM C-177 (W/mK)</b>			
<b>Mean Temp.</b>			
<i>200 °C</i>	0.098	0.074	0.068
<i>400 °C</i>	0.13	0.10	0.10
<i>600 °C</i>	0.14	0.12	0.11
<i>800 °C</i>	0.24	0.19	0.18
<i>1000 °C</i>	0.34	0.27	0.25
<b>Tensile Strength (kPa)</b>			
	70	90	110

## AVAILABILITY

<b>Thickness (mm)</b>	<b>Density (kg/m<sup>3</sup>)</b>			<b>Roll Length (m)</b>
	<b>96</b>	<b>128</b>	<b>160</b>	
13		✓	✓	7.32
19	✓	✓	✓	7.32
25	✓	✓	✓	7.32
38	✓	✓	✓	4.88
50	✓	✓		3.66

Standard roll width is 610mm. Other thicknesses / sizes may be available on request subject to minimum order requirements. Versions with aluminium foil and other coverings are also available subject to minimum order requirements.

## HANDLING INFORMATION

A Material Safety Data Sheet has been issued describing the health, safety and environmental properties of this product, identifying the potential hazards and giving advice on handling precautions and emergency procedures. This must be consulted and fully understood before handling, storage or use.

Supplied by:

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