



*Start saving energy now.  
Contact your local distributor.*

**Unifrax Ltd.**

T: +44 (0)1744 88 7600

F: +44 (0)1744 88 9916

[www.unifrax.com](http://www.unifrax.com)

## DESCRIPTION

Insulfrax Board products are manufactured from Insulfrax alkaline earth silicate wool, blended with specially selected inorganic and organic binders to give rigid boards with exceptional characteristics. 110ZK is easy to cut and shape with standard tools. These boards exhibit high strength and rigidity coupled with excellent insulating performance and high temperature stability. 110LD is particularly suited to applications where reduced out-gassing and/or high definition mechanical machining are required. Insulfrax Board products are available in a wide range of sizes and thicknesses.

## GENERAL CHARACTERISTICS

Insulfrax Board products have the following outstanding characteristics:

- High temperature stability
- Low thermal conductivity
- Resistance to thermal shock
- Good handling strength
- Easy to cut with standard tools

## TYPICAL APPLICATIONS

- Hot gas duct linings
- Rigid high temperature gaskets and seals
- Heat shields
- Shapes for domestic appliances
- Molten metal transfer systems

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.

## TYPICAL PRODUCT PARAMETERS

Insulfrax	110ZK	110LD
<b>Typical Chemical Analysis (fibre wt. %)</b>		
SiO <sub>2</sub>	61.0 - 67.0	61.0 - 67.0
CaO	27.0 - 33.0	27.0 - 33.0
MgO	2.5 - 6.5	2.5 - 6.5
Al <sub>2</sub> O <sub>3</sub>	<1.0	<1.0
Fe <sub>2</sub> O <sub>3</sub>	<0.6	<0.6
<b>Physical Properties</b>		
Colour	White / Tan	White / Tan
Melting Point (°C)	>1330	>1330
Product Density (kg/m <sup>3</sup> )	360	270
Modulus of Rupture (kPa)	>700	>700
Use Limit (°C) *	1100	1100
Loss on Ignition (wt.%)	<9.0	<7.0
<b>Thermal Conductivity (W/mK)</b>		
<b>Mean Temp.</b>		
400 °C	0.10	0.07
600 °C	0.12	0.10
800 °C	0.15	0.14
<b>Permanent Linear Shrinkage (%) 24 Hour Soak</b>		
1100 °C	<4.0	<4.0

\*Use limit refers to the maximum short term temperature limit. The maximum continuous use limit for boards depends upon application conditions. For certain applications continuous use temperature limits may be significantly reduced. For assistance or clarification please contact your nearest Unifrax Engineering office. Where appropriate Physical Properties data measured according to EN 1094-1.

## AVAILABILITY

Thickness (mm)	110ZK	110LD	Sheets per carton	Sheets per pallet	Sheets per carton	Sheets per pallet
Sheet Dimensions			1000 x 610mm	1250 x 1000mm		
3	✓		32	704	32	352
5	✓	✓	20	440	20	220
6	✓	✓	16	352	16	176
10	✓	✓	10	220	10	110
12	✓	✓	8	176	8	88
15	✓	✓	6	132	6	66
18	✓	✓	5	110	5	55
20	✓	✓	5	110	5	55
25	✓	✓	4	88	4	44
30	✓	✓	3	68	3	34
40	✓	✓	2	44	2	22
50	✓	✓	2	44	2	22

Other thicknesses / sizes may be available on request 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:

Information contained in this publication is for illustrative purposes only and is not intended to create any contractual obligation. Further information and advice on specific details of the products described should be obtained in writing from a Unifrax Corporation company (Unifrax España, Unifrax France, Unifrax GmbH, Unifrax Italia, Unifrax Limited, Unifrax s.r.o.). Unifrax maintains a continuous programme of product development and reserves the right to change product specifications without prior notice. Therefore, it maintains at all times the responsibility of the customer to ensure that Unifrax materials are suitable for the particular purpose intended. Similarly, insofar as materials not manufactured nor supplied by Unifrax are used in conjunction with or instead of Unifrax materials, the customer should ensure that all technical data and other information relating to such materials has been obtained from the manufacturer or supplier. Unifrax accepts no liability arising from the use of such materials. All sales made by a Unifrax Corporation company are subject to that company's Terms and Conditions of Sale, copies of which are available on request.