

FIBERFRAX® DURABOARD™

Fiberfrax Duraboards are high temperature rigid products manufactured by a wet forming process using Fiberfrax Bulk Fibers and binders.

Fiberfrax Duraboards offer low thermal conductivity and high temperature stability in applications where vibration, mechanical stress and strong erosive forces are present. The excellent rigidity and modulus of rupture inherent to these boards makes them strong and self-supporting, yet relatively lightweight and easy to cut or machine.

Fiberfrax Duraboard H is manufactured with a hardened skin, suitable for applications where high erosion resistance and excellent insulating properties are required.

General Characteristics

Fiberfrax Duraboard offers users a number of important advantages over other man-made mineral fibers:

- Excellent thermal and physical stability up to 1260°C
- Thermal shock resistance
- Light weight
- Resiliency
- Excellent cold handling strength
- Excellent corrosion resistance

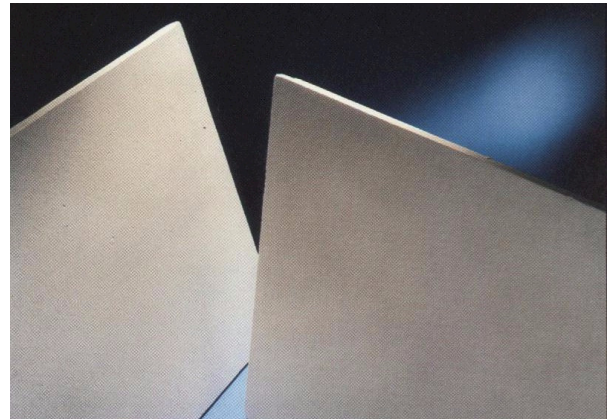
Binding Agents

Fiberfrax Duraboards are manufactured using a combination of both organic and inorganic binding agents. In certain applications, the presence of organic binders and low temperature burnout associated with this product may be unacceptable.

Following binder burnout between 230°C and 320°C during initial heat up, Fiberfrax Duraboards revert to its original white colour.

Chemical Resistance

Fiberfrax Duraboards exhibits excellent resistance to attack from most corrosive agents with the exception of hydrofluoric, phosphoric, hydrochloric and sulfuric acids, as well as concentrated alkalis. The fibers also effectively resist oxidation and reduction. If wet by water or steam, thermal and physical properties are restored upon drying.



Typical Applications

- Furnace, Kiln and Boiler Hot Face insulation
- Back up insulation for hard refractory
- Glass slumping applications
- Expansion joint gasketing
- Launder back up insulation

Thermal Conductivity Data (W/mK)

Mean Temp	Fiberfrax Duraboard	Fiberfrax Duraboard H
250°C	0.084	0.084
500°C	0.116	0.116
750°C	0.164	0.164
1000°C	0.228	0.228
1250°C	0.309	0.309

Permanent Linear Shrinkage (24 hour soak)

982°C	1.8%
1260°C	4.5%

Typical Physical Properties

	Fiberfrax Duraboard	Fiberfrax Duraboard H
Basic Composition	Alumina – Silicate and Binders	
Classification Temperature	1260°C	1260°C
Melting Point	1760°C	1760°C
Normal Density	270 - 300 kg/m ³	270 - 300 kg/m ³
Modulus of Rupture (Green)	1.24 x 10 ⁶ N/m ²	1.50 x 10 ⁶ N/m ²
Weight loss on Ignition	6-7%	6-7%

Data are average results conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.

Availability

	Thickness	Width	Length
Duraboard 1200	5 -75mm	500, 600mm	500, 600, 1000mm
	5-25mm	1000mm	1000, 1200mm
Duraboard H	5 -75mm	500, 600mm	500, 600, 1000mm
	5-25mm	1000mm	1000, 1200mm
Duraboard 1400	5 -75mm	500, 600mm	500, 600, 1000mm
	5-25mm	1000mm	1000, 1200mm
Duraboard Z	5 -75mm	500, 600mm	500, 600, 1000mm
	5-25mm	1000mm	1000, 1200mm
Duraboard 1600	5 -75mm	500, 600mm	500, 600, 1000mm
	5-25mm	1000mm	1000, 1200mm

Data are average results conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.