

FIBERFRAX® DURABOARD™ Z

Fiberfrax Duraboard Z is a high temperature rigid product manufactured by a wet forming process using Fiberfrax AZS Bulk Fibers and binders.

Fiberfrax Duraboard Z offer low thermal conductivity and high temperature stability in application 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.

General Characteristics

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

- Excellent thermal and physical stability up to 1430°C
- Thermal shock resistance
- Light weight
- Resiliency
- Excellent cold handling strength
- Excellent corrosion resistance

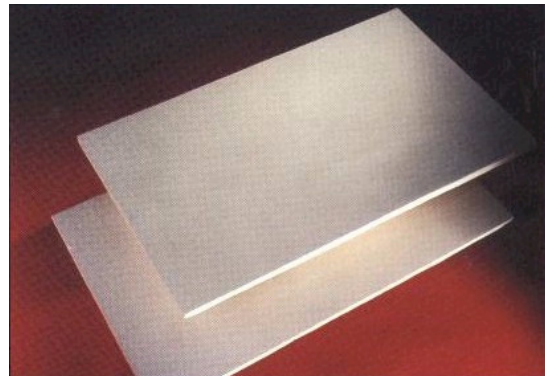
Binding Agents

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 association 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 exhibit 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)

400°C	0.09
600°C	0.11
800°C	0.16
1000°C	0.24
1200°C	0.36

Permanent Linear Shrinkage (24 hour soak)

1300°C	2.5%
1430°C	3.0%

Typical Physical Properties

Basic Composition	Alumina, Silica and Zirconia
Classification	1430°C
Temperature	
Melting Point	1760°C
Normal Density	180 - 275 kg/m ³
Modulus of Rupture (Green)	1.24 x 10 ⁶ N/m ²
Weight loss on Ignition	6-7%

Availability

- Thickness Range: 5 – 75mm
- Standard Sizes: 500 x 1000mm, 1000 x 1200mm
- Other sizes available, subject to order.

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