

# FIBERFRAX® DURABOARD™ HD

Fiberfrax Duraboard HD is a rigid, high temperature board made from bulk ceramic fibers and organic bonding agents. Duraboard HD offers low thermal conductivity, high temperature stability and excellent resistance to thermal shock and chemical attack. Duraboard HD has uniform density across its entire thickness. Its high Modulus of rupture, both as received and after firing to 1260°C, makes it an ideal material for use in thermal areas experiencing vibration, mechanical stress or erosion. It is easily sawed, drilled and is machinable. Fiberfrax Duraboard HD is available in a wide variety of sizes and thicknesses.

## Chemical Properties

Fiberfrax Duraboard HD exhibits excellent chemical stability, resisting attack from most corrosive agents. Exceptions are hydrofluoric, phosphoric, hydrochloric and sulfuric acids, as well as concentrated alkalis. Fiberfrax Duraboard HD also resists oxidation and reduction. If wet by water, steam or oil, thermal and physical properties are restored upon drying. No water of hydration is present. Binder begins to burn out at 177°C and continues up to 538°C at which point the product turns white in colour.

## Typical Applications

- Rigid high temperature gaskets and seals
- High temperature baffles and muffles
- Flue and chimney linings in furnaces and kilns
- Infrared element supports
- Glass tank side and endwall and portneck insulation
- Trough and distribution linings for conveying molten metals
- Thermal insulation where high velocities are encountered
- Heat shields for personnel protection
- Hot gas duct linings
- Refractory back up for brick and castables
- Pouring forms for castables
- Expansion joint materials



## Typical Physical Properties

Colour	Cream
Basic Composition	Alumina, Silica, Organic Binder
Classification Temperature	1260°C
Melting Point	1760°C
Normal Density	433 – 497 kg/m <sup>3</sup>
Typical Modulus of Rupture (as received)	17.3 x 10 <sup>5</sup> N/m <sup>2</sup>
Linear Shrinkage*	
982°C	1.7%
1260°C	4.5%
Dielectric Strength	27 volts/mil
Weight loss on Ignition	6 – 7%

*\*24 hour soak at given soaking heat condition.*

## Availability

- Thickness: 25,38 , 51mm
- Width: 305, 610mm
- Length: 914, 1120mm