

FIBERFRAX® ROPE, HIGH DENSITY ROPE, ROUND AND SQUARE BRAID

Fiberfrax Textile products are durable, high temperature, ceramic fiber packing materials that are well suited for industrial applications. They are noted for their superior insulating and sealing abilities up to 1260°C.

These materials contain approximately 20% organic carrier fiber to facilitate the carding process. The carrier fiber burns out at low temperature with no effect on the ceramic fiber properties.

Fiberfrax rope is a twisted multi-ply ceramic fiber packing manufactured from Fiberfrax wicking. Standard 3-ply rope is a low density, highly compressive product form. HD rope is up to 9-ply and provides increased compression resistance and strength and is approximately 40-65% denser than regular Fiberfrax rope.

Fiberfrax Braids are used where high density and resistance to compression and mechanical abuse are required, such as in packing applications. Round and square versions are available.

Chemical Properties

Fiberfrax rope, high density rope, round and square braid exhibit excellent chemical stability resisting attack from most corrosive agents. Exceptions are hydrofluoric and phosphoric acids, and concentrated alkalis. Rope and Square Braid also resist oxidation and reduction. If wet by water or steam, thermal and physical properties are completely restored on drying. No water of hydration is present.

Availability

Fiberfrax Braids are available in the following diameters/thicknesses:

- 6.4mm, 9.5mm, 13.0mm, 16.0mm, 19.0mm, 25.0mm, 32.0mm, 38.0mm, 50.0mm, 100mm.



Typical Physical Properties

Classification Temperature	1260°C
Melting Point	1790°C
Nominal Density	
Rope	320 kg/m ³
HD Rope	529 kg/m ³
Round Braid	529 kg/m ³
Square Braid	577 kg/m ³
Breaking Strength	
Rope, as produced	356 N
Rope, after 24 hrs. @ 980°C	44 N
HD Rope, as produced	490 N
HD Rope, after 24 hrs. @ 900°C	62 N

Typical Applications

- Furnace door insulation and seal
- Expansion joint packing in boiler and furnaces
- Skid rail insulation
- Coke oven door jam seal
- Hot top seal
- Glass furnace tuckstone seal
- Gasket for vacuum degassing of steel during pouring
- High temperature gasketing and packing
- Woodburning stove door seal
- Tadpole gasket bulb material
- Continuous casting starter block plug

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