DESCRIPTION

Pyro Log™ is the only 152mm thick, high purity, needled blanket available in standard uncompressed densities up to 240kg/m^3.

Vertically-fiberized Pyro-Log fibre is of exceptional uniformity of dimensions and of naturally low shot content.

Pyro-Log offers a unique solution to the problems encountered in designing linings for use in the toughest of furnace environments.

TYPE

High density blanket slabs.

MAXIMUM CONTINUOUS USE TEMPERATURE

Pyro-Log™ Standard (R Grade): 1260°C
Pyro-Log™ Zirconia (H Grade): 1425°C

The maximum continuous use temperature depends on the application. In case of doubt, refer to your local Thermal Ceramics distributor for advice.

FEATURES

- Resistant to devitirification at high temperature.
- Pyro-Log is available in standard uncompressed densities up to 240kg/m^3. Lubricant in the Log allows for extra compression during installation, ensuring good, tight joints.
- Combination of high density and opacity of its fibres to infra-red radiation maintains the low thermal conductivity of Pyro-Log to high temperature.
- Pyro-Log has the unique characteristic that on firing it converts from a relatively soft, easily compressible slab to a tough, near monolithic structure with a board-like texture.
- The hard surface obtained after firing gives exceptionally high resistance to abrasion by flowing gases. This resistance can be enhanced by spraying the hot-face surface with Cerapreg or Kaowool hardener (up to 40-45m/s) or by coating with Kaowool White Cement (up to 50-55m/s).
- The almost monolithic structure obtained after firing confers on Pyro-Log some load bearing capacity which can be utilised in lightly loaded hearths.
- Pyro-Log is easily cut and shaped on site, or pre-shaped in the factory, to accommodate irregular sections or changes of profile, such as from oblong to round cross section in ducts.
- The unique log structure allows us to produce L-shaped corner modules which ensures join-free linings around corners, both inside and outside.
- Thermal shock resistance
- Good acoustic insulation

APPLICATIONS

Pyro Log has a multitude of uses in heat containment applications in all industry groups, a selection of which are as follows:

- Ceramic Industry (kiln car insulation - furnace floors)
- Iron and Steel (walking beam furnace skid rail insulation)
- General (engineered shapes)
- Pyro-Log is the precursor material for the Pyro-Bloc range of mechanically fixed modules

MAIN PROPERTIES

Maximum continuous use temperature		**Standard (R Grade)**	**Zirconia Fibre (H Grade)**
	°C	1260	1425

Properties Measured at Ambient Conditions (23°C/50% RH)

• Colour			white			white	
• Density un-compressed	kg/m^3	160	192	240	160	192	240

High Temperature Performance

• Loss on ignition after 2 hours at 800°C	%		<0.25			<0.25	
• Permanent linear shrinkage after 24 hours isothermal heating at:							
1000°C	%		1.6			0.6	
1100°C	%		2.3			1.0	
1200°C	%		3			1.6	
1300°C	%		-			3.2	
1400°C	%		-			3	

• Thermal conductivity (ASTM) at mean temperature of:

		Blanket - Laid			Edge - Grain		
		160	192	240	160	192	240
400°C	W/m.K	0.08	0.08	0.07	0.10	0.10	0.09
600°C	W/m.K	0.12	0.11	0.10	0.17	0.16	0.14
800°C	W/m.K	0.17	0.15	0.13	0.25	0.23	0.20
1000°C	W/m.K	0.22	0.19	0.17	0.34	0.32	0.28

• Specific heat capacity at 1080°C	kJ/kg.K		1.13			1.13	

Availability and Packaging

Normally available in slabs 152mm thick.

Standard log size 1000 x 610 x 152mm.

Special sizes (subject to quantity) cut to order from the overall log size of 152 x 1220 x 11940mm.

Also subject to quantity, log can be made available in 100mm and 125mm thicknesses.

Packed into cartons.

Your local contact:

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