Fedmet

INFORMATION BULLETIN

Ceramic Fiber

DESCRIPTION: Ceramic Fiber is a fire-resistant insulation material. Ceramic Fiber blankets help maintain good tensile strength, toughness and fiber structure without any binding agent.

USES INCLUDE:
Industrial furnace wall lining
Backing material
High temperature pipe insulation
Furnace masonry expansion joints, door, roof insulation sealing.

TYPICAL CHEMICAL ANALYSIS (% by weight):

Chemical Composition (%)	STD RCF Blanket	HP RCF Blanket	HZ RCF Blanket
Al_2O_3	≥ 44	≥45	≥34
SiO_2	≥ 52	≥ 54	≥ 50
Fe_2O_3 + TiO_2	≤ 1	≤ 0.5	≤ 0.5
ZrO_2	-	-	≤ 15
K_2O+Na_2O	≤ 1	≤ 0.2	≤ 0.2

TYPICAL AS RECEIVED PROPERTIES:

Physical Properties	STD RCF Blanket		HP RCF Blanket			HZ RCF Blanket		
Density (kg/m^3)	96	128	96	128	160	96	128	160
Classification Temperature (°C)	1260		1260			1430		
Fiber Diameter (um)	3.5		3.5			3.5		
Shot Content (%)	≤ 15		≤ 15			≤ 12		
Linear Shrinkage after heating (%)	1000°C 24h≤2.5		1100°C 24h≤2.5			1350°C 24h≤3.5		
Thermal Conductivity (W/m.k)								
400 C	0.090	0.095	0.124	0.114	0.101	0.138	0.122	0.118
500 C	0.119	0.123	0.145	0.135	0.120	0.179	0.153	0.149
600 C	0.152	0.158	0.202	0.191	0.175	0.233	0.184	0.172
Tensile Strength (Mpa)	0.040	0.050	0.050	0.060	0.075	0.050	0.060	0.075

The values reported above are average values derived from production data encompassing many different sizes and shapes. Actual data will vary to a small degree naturally, and as a function of size and shape. This form is not intended to be used for purposes of specification, it is informational only.
Version 16.09

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