Mid-Mountain Materials

THE FINAL BARRIER
AGAINST ABRASION,
CHEMICALS AND HEAT

CERMEX® MT1800 NEEDLED SILICA MAT

CERMEX® MT1800 Needled Silica Blanket is a binderless material comprised of high purity, amorphous silica fibers. These long, shot-free fibers are needled into high strength, insulating materials available in varying thicknesses. In demanding applications, the abrasion and vibration resistance of this mat makes this material superior to other products manufactured from shot-containing fibers.

The complete absence of shot and organic binders make this product superior in performance in severe environments where vibration can often degrade shot containing materials. The amorphous silica fibers that make up CERMEX® MT1800 MAT are unaffected by most chemicals, except strong alkalis, hydrofluoric acid or sodium.

Inherent to the chemistry, the silica fibers will have a tendency to shrink on initial exposure to elevated temperatures. For most industrial applications, this does not pose a problem. However, in applications where dimensional stability is critical (at elevated temperatures), CERMEX® MT1800 is available in a pre-shrunk (fired) version.

PHYSICAL CHEMISTRY

Material SiO_2	96% minimum		
Construction	Needled Blanket / Mat		
Filament diameter, micron	6-9		

AVERAGE PHYSICAL PROPERTIES

Temperature Limit, ºF • ºC			
Continuous use	1800 • 982		
Intermittent	2300 • 1260		
Melting temperature	3100 • 1704		
Thickness, inches (density)	1/4 (8.5+/-0.9)	1/2 (9.0+/-0.9)	1 (9.5+/-0.9)
Density, lb/cu ft	8.5 – 9.5 (thickness dependent)		
Width, inches	36		
Roll length, lineal feet	1/4"-116.67' (350 sf/roll)	1/2"-58.35' (175 sf/roll)	1-33.45' (100 sf/roll)
Shot content	None		
Thermal Conductivity, BTU·in/hr-sq ft-ºF (preliminary)	500 • 260		0.45
	1000 • 538		0.78
	1500 • 816		1.39
	1800 • 982		1.93

The technical data presented herein are indicative of representative properties and are intended as a specification guide only. No warranties are expressed or implied as application conditions are beyond our control.

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