Thermal Ceramics Superwool 607 PM Board





Superwool 607 PM boards are processed from a slurry consisting of Superwool bulk and organic binders. This board product is noted for its excellent surface finish, thickness uniformity and high insulating value at elevated temperatures.

Superwool provides stability and resistance to chemical attack. Exceptions include hydrofluoric acid, phosphoric acid and strong alkalies (i.e. NaOH, KOH). Superwool is unaffected by incidental spills of oil or water. Thermal and physical properties are restored after drying.

The non-wetting characteristics of the Superwool 607 PM Board composition make is an excellent alternative for molten aluminium contact.

Туре

Alkaline Earth Silicate (AES) wool CAS number: 329211-92-9

Features

- Continuous temperature rating of 1832°F
- · Low thermal conductivity and heat storage
- Very close thickness tolerance
- Excellent surface finish and uniformity
- Easily fabricated and die-cut

Applications

- Appliance and heat processing equipment insulation
- Combustion chamber construction for domestic appliance construction
- Heat shields
- High temperature gaskets and seals
- Back-up insulation to dense refractories

Product Information

Physical properties	
Recommended continuous use limit	1832°F <i>(1000°C)</i>
Density, nominal pcf, (kg/m ³)	15-17 <i>(240-272)</i>
Color	beige
Melting point	2327°F <i>(127</i> 5°C)
Modulus of rupture, psi (kg/cm ²)	200-250 (14-18)
Compressive strength, psi	
@ 5% deformation	15-25
@ 10% deformation	25-40
Linear shrinkage, nominal %	
24 hrs @ 1800°F	1.0
Thickness, in. <i>(cm)</i>	¹ /8- ¹ /4 (0.312-0.625)
Standard sizes, in (cm)	24 x 36 <i>(60 x 90)</i>
	24 x 48 <i>(60 x 120)</i>
	36 x 48 <i>(90 x 120)</i>
	42 x 48 (105 x 120)
Chemical Composition	
Silica, SiO ₂	67
Calcium, CaO	27
Magnesium, MgO	5
Other	1
Loss of ignition, LOI	2 - 4
Thermal Conductivity	
BTU•in./hr•ft ² •°F (kcal/m•hr•°C) (ASTM C 201)	
Mean temperature, 4 pcf	
@ 500°E (260°C)	0.40.(1.08)

@ 500°F (260°C)	0.40 (1.08)
	()
@ 1000°F <i>(</i> 538°C)	0.62 (1.68)
@ 1500°F <i>(816</i> °C)	0.99 (2.68)
@ 1800°F <i>(1093°C)</i>	1.31 <i>(3.55)</i>

Chemical Properties

Dhualaal waamaatiaa

A small amount of combustible organic binder will burn out at approximately 300°F. Caution should be exercised during the initial heating. Adequate ventilation should be provided to avoid potential flash ignition of the binder out-gassing and to avoid air entry while at elevated temperature.

The values given herein are typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information.

This product may be covered by one or more of the following patents or foreign equivalents: US5332699, US5714421, US5811380, US5821183, US5928975, US595389, US5994247, US6180546, EP0906250, GB2348640. A list of foreign patent numbers is available upon request to The Morgan Crucible Company plc. Thermal Ceramics, Superwool and 607 are trademarks of The Morgan Crucible Company plc.

Marketing Communications Offices Thermal Ceramics Americas T: (706) 796 4200 F: (706) 796 4398 Thermal Ceramics Asia Pacific T: +65 6733 6068 F: +65 6733 3498 Thermal Ceramics Europe T: +44 (0) 151 334 4030 F: +44 (0) 151 334 1684 North America - Sales Offices Canada T: +1 (905) 335 3414 F: +1 (905) 335 5145 Mexico T: +52 (555) 576 6622 F: +52 (555) 576 6622 United States of America Eastern Region T: +1 (806) 785 2764 Western Region T: +1 (866) 785 2738 F: +1 (866) 785 2760

South America - Sales Offices Argentina

Argentina T: +54 (11) 4373 4439 F: +54 (11) 4372 3331 Brazil T: +55 (21) 2418 1366 F: +55 (21) 2418 1205 Chile T: +56 (2) 854 1064 F: +56 (2) 854 1952 Colombia T: +57 (2) 2282935/2282803/2282799 F: +57 (2) 2282935/2282803/23722085 Guatemala T: +50 (2) 4733 295/6 F: +50 (2) 4730 601 Venezuela T: +58 (241) 878 3164 F: +58 (241) 878 6712