

MightyLite

MightyLite Material Overview

MightyLite is Refractory Specialties Inc's structural supporting insulation material. It uses Xonontlite chemistry to provide a strong insulation board. MightyLite resists thermal shock allowing for faster cycle times. RSI's vast forming and machining capabilities allow MightyLite to be made in a variety of shapes, besides standard boards and blocks, and can be tailor made to customer required shapes and specifications. To answer any questions, or if you have special requirements that aren't covered by this product, call for our expert assistance at (330) 938-2101.

MightyLite Technical Information

<u>Property</u>	<u>L Grade</u>	<u>M Grade</u>	<u>H Grade</u>	<u>X Grade</u>	<u>S Grade</u>
Density	18 lb/ft ³	28 lb/ft ³	35 lb/ft ³	40 lb/ft ³	55 lb/ft ³
Flexural Strength	260 lb/in ²	550 lb/in ²	800 lb/in ²	1000 lb/in ²	1400 lb/in ²
Compressive Strength (10% Compression)	64800 lb/ft ²	129600 lb/ft ²	230400 lb/ft ²	288000 lb/ft ²	604800 lb/ft ²
Maximum Use Temperature	1800° F	1800° F	1700° F	1700° F	1700° F
Linear Shrinkage at 1700F	1.00 %	0.90 %	1.50 %	0.80 %	0.70 %
Thermal Conductivity (Btu-in/hr/ft ² /°F)					
400° F	0.61	0.66	0.70	0.70	0.97
800° F	0.73	0.80	0.80	0.80	1.05
MightyLite X Consolidation Under Load	Deflection Under Load		Permanent Consolidation		
200 lb/in ²	0.008 in/in		0.002 in/in		
500 lb/in ²	0.014 in/in		0.002 in/in		
1000 lb/in ²	0.022 in/in		0.003 in/in		
2000 lb/in ²	0.059 in/in		0.005 in/in		
3000 lb/in ²	0.120 in/in		0.057 in/in		
4000 lb/in ²	0.243 in/in		0.164 in/in		
5000 lb/in ²	0.325 in/in		0.248 in/in		
6000 lb/in ²	0.364 in/in		0.287 in/in		
7000 lb/in ²	0.412 in/in		0.337 in/in		
MightyLite S					
Deformation Under Load After Heat Exposure	300° F	400° F	600° F	800° F	1000° F
500 lb/in ²	0.008 in	0.008 in	0.052 in	0.052 in	0.056 in
1000 lb/in ²	0.012 in	0.013 in	0.056 in	0.050 in	0.060 in
2000 lb/in ²	0.017 in	0.017 in	0.062 in	0.053 in	0.066 in
3000 lb/in ²	0.022 in	0.019 in	0.066 in	0.068 in	0.072 in
4000 lb/in ²	0.028 in	0.022 in	0.076 in	0.076 in	0.079 in
5000 lb/in ²	0.030 in	0.027 in	0.076 in	0.089 in	0.100 in
6000 lb/in ²	0.044 in	0.037 in	0.084 in	0.099 in	0.125 in
MightyLite S					
Consolidation Under Load After Heat Exposure	300° F	400° F	600° F	800° F	1000° F
500 lb/in ²	0.000 in	0.001 in	0.001 in	0.002 in	0.002 in
1000 lb/in ²	0.000 in	0.001 in	0.001 in	0.002 in	0.002 in
2000 lb/in ²	0.001 in	0.002 in	0.002 in	0.002 in	0.002 in
3000 lb/in ²	0.001 in	0.002 in	0.002 in	0.003 in	0.004 in
4000 lb/in ²	0.001 in	0.002 in	0.002 in	0.004 in	0.005 in
5000 lb/in ²	0.001 in	0.004 in	0.003 in	0.006 in	0.010 in
6000 lb/in ²	0.002 in	0.004 in	0.014 in	0.011 in	0.014 in

Other Information

The information given herein is based on data believed to be reliable; however, Refractory Specialties, Incorporated makes no expressed or implied warranties as to its accuracy and assumes no liability arising out of its use by others. This information does not constitute a license to use or infringe any patents. Further, the data is found to be typical and should not be construed as product specification/s.

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