



industries3r.com

Danville office

Industries 3R inc.
55, Road 116 West
Danville (Quebec)
Canada J0A 1A0

Telephone: (819) 839-2793
Fax: (819) 839-2797
Toll-free: (800) 567-2728
Email: info@industries3r.com

Montreal office

Industries 3R inc.
1479, Begin street
Ville St-Laurent (Quebec)
Canada H4R 1V8

Telephone: (514) 333-3971
Fax: (514) 333-7224
Email: info@industries3r.com

3R4000

MBOARD

This refractory vacuum formed board is rigid and self-supporting and is composed from a mixture of ceramic fibers and binders. It offers low thermal conductivity, excellent strength and thermal stability at elevated temperatures. It resists to chemical attacks, in exception to hydrofluoric acid, phosphoric acid and strong alkali.

The 3R4000 is an inexpensive product, designed to meet a wide variety of applications. It is available in several thicknesses and can be manufactured in different sizes to meet specific needs.



APPLICATIONS

This board can be used as : appliance and heat processing insulation, crucible and molten metal tray insulation, dynamic covers for places with high mechanical tension, furnaces, industrial furnaces, hot surface covers, for trough casting molten aluminum insulation, shields, etc.

SPECIFICATIONS

Technical data

Color	Beige
Continuous use temperature	1093°C (2000°)
Classification temperature	1204°C (2200°)
Density, kg/m³ (pcf)	288-320 (18-20)
Modulus of rupture MOR, MPa (psi) *unfired	0.69-0.90 (100-130)
Compressive strength @ 5% deformation, MPa (psi)	0.14-0.21 (20-30)
Compressive strength @ 10% deformation, MPa (psi)	0.21-0.28 (30-40)
Permanent linear shrinkage, %, 24 hours	
815°C (1500°F)	1.2
982°C (1800°F)	2.2
1093°C (2000°F)	2.8
1204°C (2200°F)	3.4

Thermal conductivity, W/m·K (BTU·in/hr·ft²), ASTM C201

260°C (500°F)	0.072 (0.5)
538°C (1000°F)	0.101 (0.7)
816°C (1500°F)	0.144 (1)
1093°C (2000°F)	0.216 (1.5)
Chemical composition, %	
Alumina, Al ₂ O ₃	42
Silica, SiO ₂	56
Loss of ignition, LOI	4-7

N.B. The information, details and values indicated are to the best of our knowledge. We recommend to conduct tests according to local conditions. The data is subject to some variations without notice.