



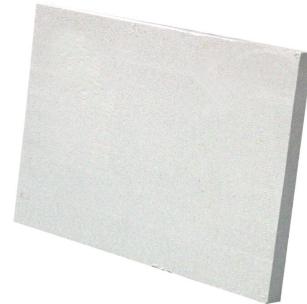
INDUSTRIES 3R

Danville Office
55, route 116 Ouest
Danville (Québec) Canada
J0A 1A0

Phone: 819-839-2793
Fax: 819-839-2797
Toll-free: 800-567-2728
E-mail: info@industries3r.com

PANELS

3R4000



Description

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
Temperature	Continuous: 1093°C (2000°)
Classification temperature	1204°C (2200°)
Density, kg/m ³ (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
Permanent linear shrinkage, %, 24 hours 982°C (1800°F)	2.2
Permanent linear shrinkage, %, 24 hours 1093°C (2000°F)	2.8
Permanent linear shrinkage, %, 24 hours 1204°C (2200°F)	3.4
Thermal conductivity, W/m·K (BTU·in/hr·ft ²), ASTM C201 260°C (500°F)	0.072 (0.5)
Thermal conductivity, W/m·K (BTU·in/hr·ft ²), ASTM C201 538°C (1000°F)	0.101 (0.7)
Thermal conductivity, W/m·K (BTU·in/hr·ft ²), ASTM C201 816°C (1500°F)	0.144 (1)
Thermal conductivity, W/m·K (BTU·in/hr·ft ²), ASTM C201 1093°C (2000°F)	0.216 (1.5)
Composition	SiO ₂ : 56, Al ₂ O ₃ : 42%, Loss of ignition: 4-7%

N.B. The information presented may differ from practice. We recommend conducting tests according to the conditions of use. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products. The data is subject to certain variations without notice.