

ZRCI Alumina-Silica Blanket Types RSBL-2300 and RSBL-2600 are mechanically-needed ceramic-fiber blankets that provide effective solutions to a variety of thermal management problems. RSBL-2300 and RSBL-2600 blankets exhibits good strength and handleability. They are low density with good chemical stability. RSBL-2300 and RSBL-2600 provide low thermal conductivity in numerous high-temperature laboratory and aggressive industrial environments. They have low shot content and are easily cut with scissors or knife. They are available in a wide range of density and thickness combinations.



They are available in two temperature ratings:

RSBL-2300 is made from spun Al_2O_3 - SiO_2 refractory ceramic fibers (RCF) and is capable of long service life in applications with temperatures to 1260°C (2300°F).

RSBL-2600 is made from spun Al_2O_3 - SiO_2 - ZrO_2 refractory ceramic fibers (RCF) and exhibits extended service life in applications with temperatures to 1427°C (2600°F).

Types RSBL-2300 & RSBL-2600 Alumina Silica Blankets are ideal for use as furnace insulation in sintering, heat treating and chemical thermal process systems.

SUGGESTED APPLICATIONS

- High temperature furnace and kiln linings.
- Boiler insulations.
- High temperature gaskets and seals.
- Pipe and duct insulation.
- Backup thermal insulation in furnaces, solid oxide fuel cells and thermal process systems operating to high temperatures.
- General high-temperature furnace repair.
- Investment casting mold wrappings.
- Soaking pit seals.
- Glass furnace crown insulation.



ZIRCAR Refractory Composites, Inc.

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Technical Data

Bulletin No. ZRCI-460

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**ALUMINA SILICA BLANKETS
TYPE RSBL-2300 & RSBL-2600**

TYPE	RSBL-2300	RSBL-2600
Nominal Composition, wt%		
Al ₂ O ₃	45	30
SiO ₂	55	54
ZrO ₂	0	16
Other Oxides	<0.5	<0.1
Density, gm/cc(pcf)	96.11 (6)	128.5(8)
Max. Use Temp.*, °C(°F)	1260(2300)	1427(2600)
Fiber Diameter, microns	2.5-3.5	3.5
Thermal Conductivity, W/m ² K(BTU/hr. ft ² °F/in)		
260°C(500°F)	0.06(0.45)	0.05(0.39)
538°C(1000°F)	0.13(0.94)	0.11(0.78)
816°C(1500°F)	0.24(1.70)	0.18(1.13)
1093°C(2000°F)	0.40(2.80)	0.29(2.02)
Linear Shrinkage‡, %		
1260°C(2300°F)	3.3	2.1
1426°C(2600°F)	-	5.1
Fiber Specific Gravity, g/cc (pcf)	2.73(170.4)	2.73(170.4)
Specific Heat, J/kg °K (BTU/lb °F)	1130(0.27)	1130 (0.27)
1093°C (2000°F)		

* Maximum use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences.

** Properties expressed parallel to thickness.

^ Properties expressed perpendicular to thickness.

AVAILABILITY

NS70	RSBL-2300-6, 24" x 25' x 1/2"T	NS81	RSBL-2300-8, 48" x 25' x 1/2"T
NS71	RSBL-2300-6, 48" x 25' x 1/2"T	NS82	RSBL-2300-8, 24" x 25' x 1"T
NS72	RSBL-2300-6, 24" x 25' x 1"T	NS83	RSBL-2300-8, 48" x 25' x 1"T
NS73	RSBL-2300-6, 48" x 25' x 1"T	NS84	RSBL-2300-8, 24" x 12.5' x 1.5"T
NS74	RSBL-2300-6, 24" x 12.5' x 1.5"T	NS85	RSBL-2300-8, 48" x 12.5' x 1.5"T
NS75	RSBL-2300-6, 48" x 25' x 1.5"T	NS86	RSBL-2300-8, 24" x 12.5' x 2"T
NS76	RSBL-2300-6, 24" x 12.5' x 2"T	NS87	RSBL-2300-8, 48" x 12.5' x 2"T
NS77	RSBL-2300-6, 48" x 12.5' x 2"T	NS90	RSBL-2600-8, 24" x 25' x 1/2"T
NS80	RSBL-2300-8, 24" x 25' x 1/2"T	NS91	RSBL-2600-8, 24" x 25' x 1"T

Custom boards, shapes and preparations are available on request. Our forming processes, large inventory of custom tooling and state of the art machining techniques allow a wide variety of sizes and shapes to be made. Special geometries such as disks, rings and custom-machined shapes can be fabricated. Tight tolerance machining, compositional variations and the application of surface, rigidizers and hardening agents are available. Please contact us with your special requirements.



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