

REFRASIL® Rope Gasket & Sleeving

Rope Gasket & Sleeving Products



Rope Gasket Sealing Material for Temperatures up to 1800°F (982°C)

REFRASIL Rope Gasket is a dimensionally controlled, high-density, braided, high silica (96% SiO₂) product intended for service temperatures up to 1800°F (982°C).

Produced in five sizes - 1/4" through 1" diameter REFRASIL Rope Gasket is braided from texturized yarns, pre-shrunk, and treated with a hydrocarbon finish to improve its abrasion resistance and ease of handling.

Availability - REFRASIL's textiles are available in a variety of product forms to suit each customer's specific needs: cloth, tape, sleeving rope, yarn, cordage, batt and bulk fiber.

All textiles can be purchased through a nationwide network of stocking distributors.

Rope Gasket Properties

Product Code	Nominal Diameter (in.)	Density (lbs./cu.ft.)	Yield (ft./lb.)	Breaking Strength Ambient Temp. (lbs.)	Shrinkage At 1600°F (%)
RG-1/4	.23	44	82	40	.06
RG-3/8	.33	45	38	60	.06
RG-1/2	.47	31	24	140	.06
RG-3/4	.73	31	11	250	.07
RG-1	.96	36	6	470	.08

Packaging - REFRASIL RG-1/4, RG-3/8 and RG-1/2 are packaged as 100 lineal feet spools, two spools to a carton. RG-3/4 and RG-1 are packaged as 50 lineal feet spools, two spools to a carton.

Typical Applications - REFRASIL Rope Gasket can be used where compact, dense, high-temperature performance compressive seals are required, e.g., partial grooves in furnace or oven doors where the rope is not entirely contained. It also is used as a sealing element in many types of manufacturing equipment which handle heat, such as furnaces, boilers and ovens.

In small-diameter high-temperature gasketing applications, REFRASIL Rope Gasket is an excellent alternative to asbestos and ceramic fiber-braided ropes and wicks.



HITCO CARBON COMPOSITES, INC.

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<- REFRASIL heavy wall sleeving (HWS-1) covering assembly line equipment components provides protection against contamination and marking of hot glass containers.



-> REFRASIL sleeving insulates blast furnace water cooling hoses in steel mill.

REFRASIL Asbestos-Free Textiles are Designed To Perform Continuously to 1800°F (982°C)

REFRASIL industrial insulation textiles are pure silica products with the high-performance capabilities of a refractory material. They provide insulation and protection in continuous environments to 1800°F (982°C), retaining their original textile characteristics. REFRASIL is relatively inert and resists most chemical attack. It provides outstanding protection in electrical insulation applications with good dielectric strength of 40 volts/mil of thickness.

With REFRASIL textiles, maintenance time, labor, and energy costs can be reduced. Parts, materials, equipment, personnel, and machinery can be protected from potential damage and destruction caused by molten metal splash, sparks, and radiant heat.

Sleeving Does Not Lose Strength and Remain Flexible to 1800°F - REFRASIL Braided Sleeving is the solution for an efficient, low maintenance thermal insulation. Absolutely fireproof, it is also resistant to oxidation and most corrosive solutions, and does not degrade in the presence of water.

REFRASIL Sleeving is available as standard or heavy wall. The looser braid of standard sleeving can accommodate a large variety of diameters. Heavy wall sleeving has a very tight and thicker braid for maximum thermal protection.

Sleeving Properties

Product	Code	Nominal I.D. (in.)	aximum I.D. (in.)
Standard	UB-3/4	3/4	0.95
	UB-1	1	1.35
Nominal Wall Thickness - .032 in	UB-1-1/2	1-1/2	2.50
	UB-2	2	3.20
	UB-2-1/2	2-1/2	3.30
	HWS-3/8	3/8	.040
Heavy Wall	HWS-1/2	1/2	.060
	Nominal Wall Thickness-.065 in.	HWS-1	1
HWS-1-1/2		1-1/2	1.60

Packaging- REFRASIL Sleeving products are typically packaged as 50 lineal feet spools.



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REFRASIL[®] Tape

Woven • Wide woven • Slit



REFRASIL Woven, Wide Woven and Slit Tapes Proven in Numerous Applications Involving Thermal Insulation, Energy Savings, Safety and Electrical Insulation.

With a long service life and greater thermal performance than other textiles, REFRASIL tapes lower your maintenance cost and provide high performance protection. In addition, REFRASIL's excellent dielectric strength makes it an outstanding high-temperature electrical insulator, while its chemical properties contribute to its resistance to oxidation and attack by most corrosive solutions.

Standard REFRASIL tapes are high silica (>96% SiO₂) products intended for high temperature applications with continuous service up to 1800°F (982°C). Woven tape is available in "pre-shrunk" form, which is fired at 1800°F to reduce any further shrinkage in the service applications. Wide woven tape in thicknesses of .060" and .125" is produced as standard REFRASIL and is subject to shrinkage when exposed to sustained temperatures above 1800°F.

Irish REFRASIL extends the stability and flexible characteristics of standard REFRASIL slit tapes to 2300°F (1260°C). High excursion temperatures or "spikes" over 2000°F (1093°C) may cause embrittlement, but the REFRASIL continues to insulate. REFRASIL is relatively inert and resists most chemical attack. It provides outstanding protection in electrical insulation

applications with good dielectric strength of 40 volts/mil of thickness.

REFRASIL includes a complete range of textile forms for protection against all these adverse conditions. And they're all non-asbestos materials.

Typical Applications -

- Mop Curtains for continuous belt furnaces
- Electrical lead wire insulation
- Welding blanket edge & seam binding
- Cooling hose wrap insulation
- Instrumentation wire insulation
- Power cable insulation

Packaging -

REFRASIL tape products are packaged as 50 or 100 lineal feet spools depending on type and thickness.

Availability -

REFRASIL's textiles are available in a variety of product forms to suit each customer's specific needs - cloth, tape, sleeving, rope, yarn, cordage, batt and bulk fiber. All textiles can be purchased through a nationwide network of stocking distributors.



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REFRASIL[®] Tape

Woven • Wide woven • Slit



← REFRASIL Irish slit tape is spiral wrapped around water cooled skid pipe in steel mill slab reheat furnace, securing REFRASIL RB1800 blanket insulation, providing protection in environments up to 2300°F.

Adhesive backed → REFRASIL UT series slit tape makes application quick and easy.



Wide Woven Tape Properties

Product Description	Product Code	Nominal Thickness (in.)	Nominal Width (in.)
Standard Tape*	UT100-41	.060	1
	UT100-42	.060	2
	UT100-44	.060	4
	UT100-46	.060	6
	UT100-81	.125	1
Standard Tape**	UT100-82	.125	2
	UT100-84	.125	4
	UT100-86	.125	6

*Nominal tape roll size 100 LF ± 10% lineal feet
 ** Nominal tape roll size 50 LF ± 10% lineal feet

Slit Tape Properties

Product Description	Product Code	Nominal Thickness (in.)	Nominal Width (in.)
Standard Tape (w/adhesive)	UT48-2	.026	2
	UT48-4	.026	4
	UT96-2	.050	2
	UT96-4	.050	4
	AR48-2	.033	2
Abrasive Res. Tape (sealed edges)	AR48-4	.033	4
	AR96-2	.060	2
	AR96-4	.060	4
Irish Tape	2221-96-2	.052	2
	2221-96-4	.052	4

Available in rolls 100 ± 10% lineal feet. No roll contains more than 2 pieces with single pieces not less than 10 lineal feet.

Slit tapes are produced from Standard UC Series, AR Series, and Irish REFRASIL cloth. A standard 50 LY roll can be custom slit to any specified width for a special handling charge. Stock widths are 2" and 4". Standard tape is slit from UC Series cloth coated one side with pressure-sensitive adhesive protected by a release paper cover. The adhesive provides an aid to applying the tape in various field and shop conditions. Abrasion resistant AR Series and Irish slit tape have no adhesive; the edges are sealed with a refractory coating to prevent unraveling.



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