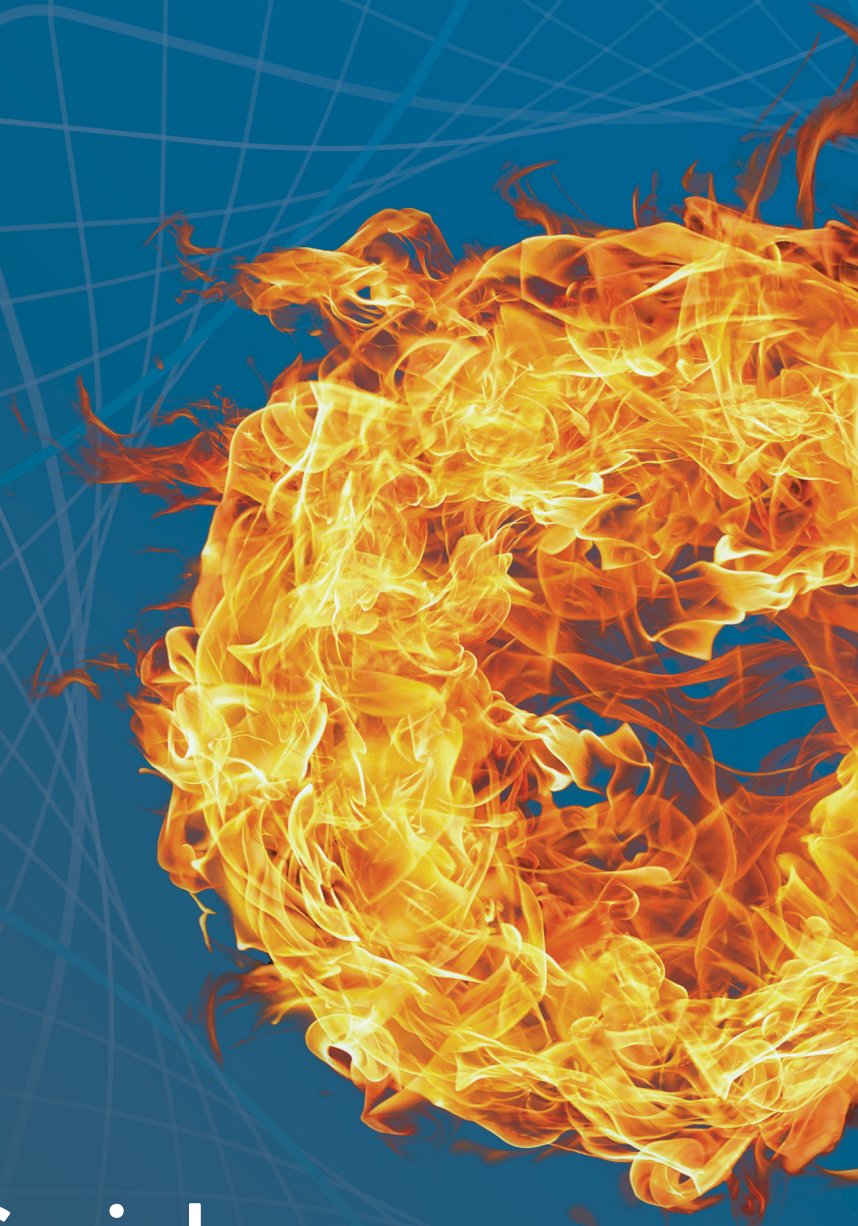




DAVLYN
GROUP

Keeping Heat
in Its Place™



Product Guide

Thermal Protection & High
Temperature Sealing Solutions

DavlynGroup.com



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The information included herein is believed to be accurate and reliable and is subject to change. Davlyn Group makes no warranties as to the accuracy of the information and disclaims any liability in connection with its use. Users should evaluate the products for suitability in their specific applications.



About Us

Davlyn Group is a leading US-based manufacturer of technical textiles specializing in engineered, high temperature products.



Amatex manufactures industrial heat resistant textiles featuring fiberglass products, silica fabrics, and proprietary treated and coated products. These items include broad woven roll goods and narrow products in the form of woven and knitted tapes, sleeving, rope, and gaskets.



Darco Southern specializes in the fabrication of custom gaskets and seals. Darco's offering includes fiberglass and silica cloths, tapes, ropes, and sleeve products, PTFE solid and envelope gaskets, and compressed non-asbestos and rubber sheets and die cut forms.



Davlyn Manufacturing Co. produces high-temperature, narrow textile forms, such as knitted and braided ropes, tapes, and gaskets. Our patented processes allow us to add specialized coatings and attachment methods that enhance product performance and capabilities.



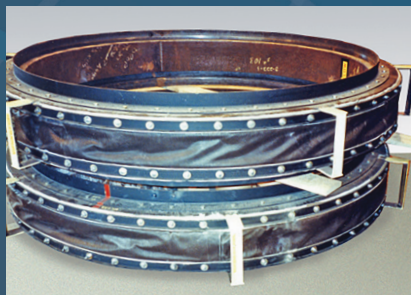
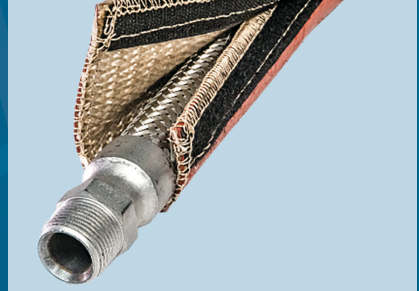
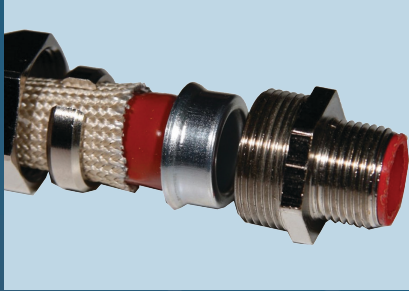
Norfab manufactures textile yarns and fabrics for personal protective garments and gloves, insulation, friction resistance, and composite applications. Norfab blends technical fibers, such as para-aramid, meta-aramid, melamine, phenolic, oxidized PAN, flame resistant rayon, and polybenzimidazole, into yarns providing high levels of heat protection and insulation.

“ Davlyn Group has grown to become one of the world’s leading technical textile companies serving mission-critical applications in industrial, commercial, and residential markets. With roots dating back to 1909, we have developed best-in-class engineering and manufacturing capabilities resulting in exceptional on-time delivery performance, and innovative, high quality products designed to solve our customers’ most difficult challenges. We understand the value of continuous improvement in keeping our stakeholders satisfied, and are proud of our ability to delight thousands of customers across more than 50 countries. ”

– Mauricio Zavatti, CEO



Common Product Applications





Silco Sleeve®

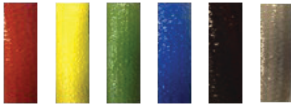
High Grade Silicone Rubber Bonded to Fiberglass Sleeves

A Davlyn Manufacturing Product



Knitted Sleeve shown in Iron Oxide Red

Available in a full range of colors*



Silco Sleeve® is designed to protect hoses, wires and cables from the hazards of high heat and occasional flame. It protects continuously to 500°F/260°C and will withstand a molten splash at 2200°F/1200°C. Made of either knitted or braided fiberglass yarns in a flexible substrate, it is then coated with a high grade silicone rubber.

Resistant to hydraulic fluids, lubricating oils, and fuels, Silco Sleeve® insulates against energy loss in piping and hosing, protects employees from burns and allows “bundling” of wires, hoses, and cables. The braided version is manufactured to AS1072F standards so it can pass AS1055E testing.

Available Sizes (ID): 1/4” (6mm) through 5” (127mm)

Available Versions: Industrial (Knitted) & Aerospace (Braided)

PHYSICAL PROPERTIES			
Fiberglass Type E		Silicone Rubber	
Breaking Tenacity	1.71 gf/TEX Std and Wet	Durometer, Shore A	- Initial 35
Tensile Strength	450,000-500,000 psi		- Aged 240hrs @ 200°C 45
Breaking Elongation	4.81% Std and Wet	Tensile Strength (psi)	- Initial 875
Elastic Recovery	100%		- Aged 240hrs @ 200°C 800
Average Stiffness	2824.3 cn/TEX	Elongation %	- Initial 500
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C		- Aged 240hrs @ 200°C 200
		Flammability, UL94	V-1
		Dielectric Strength (volts/mil)	485
Effects of Acids and Alkalis	Resistance to acids is fair Good resistance to most alkalis		

* Minimum order quantities may apply for some colors



Silco Shield® with Hook and Loop Closure

High Grade Silicone Rubber Bonded to Woven Fiberglass Matting
and Secured with a Hook and Loop Closure

A Davlyn Manufacturing Product



Silco Shield® with a Hook and Loop Closure is designed to protect hoses, wire and cables from the hazards of high heat and occasional flame. It protects continuously to 500°F/260°C and will withstand a molten splash at 2200°F/1200°C. Made of woven fiberglass yarns in a flexible substrate, it is then coated on one side with a high grade silicone rubber. Its unique Hook and Loop Closure System allows application in-situ without the need to dismantle and reconnect fittings and terminations. Repair of existing installations is performed with a minimum of labor and downtime.

Resistant to hydraulic fluids, lubricating oils, and fuels, Silco Shield®, with a minimum average weight per square yard of 96 ounces, insulates against energy loss in piping and hosing; protects employees from burns; and allows shielding of induction furnace cables from splashes of molten metal.

Available Sizes (ID): 1” (25mm) through 12” (305mm)

PHYSICAL PROPERTIES	
Coating	High Grade Flame Resistant Silicone Rubber
Weight, oz/sq yd, nominal	96
Thickness, inches, nominal	0.125
Flame Resistance	Excellent
Oil and Hydrocarbon Resistance	MIL-C-20696, sect. 4.2.4
Abrasion Resistance	Excellent (silicone side)
Temperature Rating:	
Coating:	-65°F to 500°F continuous; transient exposure to 600°F
Base Fabric:	1000°F/540°C continuous
Base Fabric can be certified to:	MIL-Y-1140 MIL-I-24244
Finished Product can be certified to:	MIL-I-24244 ASTM E84.84A ASTM E162



Fiberglass Sleeves

High Temperature Knitted or Braided Fiberglass Sleeves

A Davlyn Manufacturing Product



Our Fiberglass Sleeves are a heavy wall construction of high quality type E glass, available in knitted or braided versions. Rated for 1000°F/540°C, this product provides excellent and affordable thermal insulation as a primary means of protection or as an underlying insulation layer, which makes it ideal in a wide range of applications including protecting industrial hoses, pipes, and cables.

Type E glass will not burn, resists most acids and alkalis, is unaffected by most bleaches and solvents, and is highly flexible and conformable. The basic fiber is manufactured in accordance with specifications outlined in ASTM D-578, ASTM committee D13, and subcommittee D13.18.

Available Sizes (ID): 3/8” (10mm) through 6” (152mm)

Available Versions: Industrial (Knitted) & Aerospace (Braided)

PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	1.71 gf/TEX. Std. 1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	4.81% Std. 4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected



Heat-Treated Fiberglass Sleeves

High Temperature Heat-Treated and Braided Fiberglass Sleeves Designed for Hot Process

A Davlyn Manufacturing Product



Our heat-treated, braided sleeves are constructed of high quality type E glass that will not burn and will withstand continuous exposure to temperatures of 1000°F/540°C. This material resists most acids and alkalis; is unaffected by most bleaches and solvents; and is highly flexible and conformable. The basic fiber is manufactured in accordance with specifications outlined in ASTM D-578, ASTM committee D13, and subcommittee D13.18. Applications include thermal insulation and/or protection of industrial hoses and cables as well as affording personnel protection from high temperature hoses and cables.

Available Sizes (ID): 1/4” (6mm) through 1 1/2” (38mm)

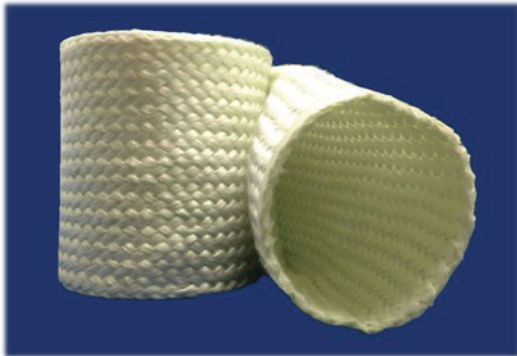
PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	1.71 gf/TEX. Std. 1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	4.81% Std. 4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected



Tetraglas® and Tetraglas® 3000 Sleeves

High Temperature Braided Sleeves

A Darco Southern Product



Tetraglas® Sleeves are braided fiberglass sleeve made with type E texturized yarns. It is available with either a 1/16" (1.6mm) or 1/8" (3.2mm) thick wall and offers a continuous operating temperature of 1000°F/540°C. It provides excellent resistance to most acids, alkalis and solvents. Vermiculite, PTFE, and graphite coatings can be added to this product to add to its versatility.

Tetraglas® 3000 Sleeves are braided from amorphous silica fibers, and offer a continuous operating temperature of 1800°F/980°C and resistance to most acids and alkalis. This product is only available with a 1/16" wall thickness. Vermiculite coating can be applied to add to its abrasion

resistance. In addition to these standard lines, our sewing department has the capability to create sleeves from any of our standard cloths that are too large for braided sleeves or to create a flexible cover with the addition of Hook and Loop or other closures.

Silicone coated knitted or braided fiberglass sleeve are also available. This product offers continuous protection to 500°F/260°C constant and a molten splash up to 2200°F/1200°C. (See Silco Sleeve®, Page 2.)

Available Sizes (ID): 1/4" (6mm) through 5" (127mm)

PHYSICAL PROPERTIES			
Style/Grade	Tetraglas®	Tetraglas® 3000	Silicone Coated
Continuous Temperature Rating	1000°F/540°C	1800°F/980°C	500°F/260°C
Available diameters	1/4" to 5"	1/4" to 4"	1/4" to 5"
Type and Nominal thickness:			
Plain: 1/16"	Yes	Yes	--
1/8"	Yes	--	Yes
Available Modifications:			
Vermiculite Coating (1500°F/815°C)	Yes	Yes	--
PTFE Coating (500°F/260°C)	Yes	--	--
Graphite Coating (1000°F+/540°C+)	Yes	--	--



Vermiculite Coated Sleeves

High Temperature Braided Fiberglass Sleeves
with a Saturated Coating of Vermiculite

A Darco Southern Product



Our braided sleeves are constructed of high quality Type E glass that will not burn and, when coated with vermiculite, will withstand extended exposure to temperatures of 1500°F/815°C. This material resists most acids and alkalis; is unaffected by most bleaches and solvents; and is highly flexible and conformable. The basic fiber is manufactured in accordance with specifications outlined in ASTM D-578, ASTM committee D13, and subcommittee D13.18. The addition of the vermiculite saturant adds rigidity and abrasive strength to the product and reduces the likelihood of end fray. This added rigidity also results in a sleeve that is easy to apply over long lengths. Applications include thermal insulation and/or protection of industrial hoses and cables as well as affording personnel protection from high temperature hoses and cables.

Available Sizes (ID): 1/4" (6mm) through 5" (127mm)

Wall Thicknesses: 1/16" (1.6 mm) or 1/8" (3.2 mm)

PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	1.71 gf/TEX. Std. 1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	4.81% Std. 4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected



Expandable Braided Fiberglass Sleeves

Highly Expandable and Flexible High Temperature Sleeves
Available With or Without an Acrylic Saturated Coating

A Davlyn Manufacturing Product



- Expansion up to 2X freestanding/relaxed diameter
- Protection up to 1000°F/540°C — Sleeves will not burn
- Acrylic saturant increases abrasion resistance and reduced end fray
- Easy to install over long lengths of hoses and tubes
- Color Options: Light caramel (shown) or black

These high temperature braided sleeves are constructed of high quality Type E glass that will not burn and will withstand continuous exposure to temperatures of 1000°F/540°C. The large braid angle facilitates significant expansion and flexibility, which allows for easy installation over long lengths of hoses/tubes with in-line couplings, adapters, fittings, or other hardware. The available acrylic saturant coating adds rigidity and abrasive strength and reduces the likelihood of end fray. Typical applications include automotive, heavy-duty truck, and bus exhaust tubes and pipes and high temperature industrial applications to protect hoses and cables.

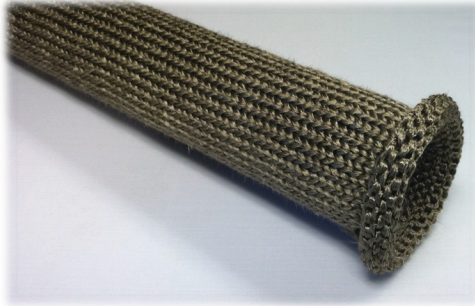
Available Sizes (ID): 1/4” (6mm) through 6” (152mm)

PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	1.71 gf/TEX. Std. /1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	4.81% Std./4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected

Basalt Sleeves

High Temperature Knitted Basalt Insulation Sleeves

A Davlyn Manufacturing Product



- Protection up to 1382°F/750°C
- Exceptional thermal insulation
- Available in precut or continuous lengths up to 100 feet (30.5 meters)
- Expandable and durable for ease of assembly
- Fits a wide range of pipe/tube geometries

Available Sizes (ID): Up to 6” (152mm)

This high temperature Knitted Sleeve is constructed of Basalt yarn, which provides excellent thermal protection and will withstand continuous exposure to temperatures of up to 1382°F/750°C. Typical applications include automotive, heavy-duty truck, and bus exhaust tubes and pipes and high temperature industrial applications to protect hoses and cables. When installed on vehicle exhaust tubes and pipes, our Basalt Sleeve facilitates an increase in the efficiency of a vehicle’s emission control system through the retention of high temperatures as gases flow through the exhaust system. Moreover, the Sleeves reduce radiation of heat to adjacent components to preserve the integrity of these components.

The durable, knitted, and lightweight design is very flexible, which enables ease of assembly over tubes and pipes with bends, flanges, and a wide range of geometries. The dense single wall construction provides optimal coverage and prevents snagging or tearing during assembly.

The Sleeves are available in precut or continuous lengths of up to 100 feet (30.5 meters). Consequently, we can easily, and without tooling, optimize a design to the user’s specification or the user has the flexibility of purchasing the product in continuous lengths and cutting sleeves to exact lengths to accommodate specific design and production needs.

PHYSICAL PROPERTIES	
Melting temperature	1450°C/2642°F
Continuous operating temperature	750°C/1382°F
Maximum operating temperature	980°C/1796°F
Minimum operating temperature	-260°C/-436°F
Thermal conductivity	0.031-.0.038 W/m K



Silco Tape[®]

High Grade Silicone Rubber Bonded to Fiberglass Tape

A Davlyn Manufacturing Product



Silco Tape[®] is designed to protect hoses, wires and cables from the hazards of high heat and occasional flame. It protects continuously to 500°F/ 260°C and will withstand a molten splash at 2200°F/1200°C. Made of knitted fiberglass yarns in a flexible substrate, it is then coated with a high grade silicone rubber.

Resistant to hydraulic fluids, lubricating oils, and fuels, Silco Tape[®] insulates against energy loss in piping and hosing, protects employees from burns and allows “bundling” of wires, hoses, and cables.

Available Sizes (Width): 1” (25mm) through 5” (127mm)

PHYSICAL PROPERTIES			
Fiberglass Type E		Silicone Rubber	
Breaking Tenacity	1.71 gf/TEX Std and Wet	Durometer, Shore A	-initial 35
Tensile Strength	450,000-500,000 psi		-aged 240hrs @ 200°C 45
Breaking Elongation	4.81% Std and Wet	Tensile Strength (psi)	-initial 875
Elastic Recovery	100%		-aged 240hrs @ 200°C 800
Average Stiffness	2824.3 cn/TEX	Elongation %	-initial 500
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C		-aged 240hrs @ 200°C 200
		Flammability, UL94	V-1
		Dielectric Strength (volts/mil)	485
Effects of Acids and Alkalis	Resistance to acids is fair Good resistance to most alkalis		



Fiberglass Tapes

High Temperature Knitted Fiberglass Yarns Designed For Hot Process

A Davlyn Manufacturing Product



Our tapes are constructed of high quality type E glass that will not burn and will withstand continuous exposure to temperatures of 1000°F/ 540°C. This material resists most acids and alkalis; is unaffected by most bleaches and solvents; and is highly flexible and conformable. The basic fiber is manufactured in accordance with specifications outlined in ASTM D-578, ASTM committee D13, and subcommittee D13.18. Applications include boiler, coke oven, industrial oven, and wood stove doors; crucible packing and pollution control equipment; high temp tying and lacing cords; and pipe wrap.

Most tape products are available in black. In addition, any plain knit tape can be coated with high temperature flame resistant silicone rubber.

Available Sizes (Width): 1” (25mm) through 5” (127mm)

Available Versions: Plain Knit or Bolt Hole Styles

PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	1.71 gf/TEX. Std. 1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	4.81% Std. 4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected

High Temperature Woven Tapes

Industrial Grade, Tetraglas[®], Tetraglas[®] 3000, and Ceramic Tapes

A Darco Southern Product



Tetraglas[®] is a woven fiberglass tape made with type E texturized yarns. Available in both a plain and drop warp weave, it has a continuous operating temperature of 1000°F/540°C and has excellent resistance to most acids, alkalis and solvents. We also offer a lighter weight **Industrial Grade** material. Both constructions can be coated with Vermiculite or PTFE.

Tetraglas[®] 3000 is constructed from amorphous silica fibers and has a continuous operating temperature of 1800°F/980°C. It is also available as both a plain and drop warp tape. Vermiculite coating can be added to increase abrasion resistance.

Ceramic fiber tape has a continuous operating temperature of 2300°F/1260°C. It is woven with an insert material of either glass fibers or inconel wire for added strength and durability.

PHYSICAL PROPERTIES				
Style/Grade	Industrial	Tetraglas [®]	Tetraglas 3000 [®]	Ceramic
Continuous Temperature Rating	1000°F / 540°C	1000°F / 540°C	1800°F / 980°C	2300°F/1260°C
Construction	Standard	Heavy Duty	Heavy Duty	Heavy Duty
Available widths	1/2" to 6"	1/2" to 6"	1/2" to 4"	1/2" to 6"
Type and Nominal thickness:				
Plain:	1/16"	Yes	Yes	Yes
	1/8"	Yes	Yes	Yes
	1/4"	--	Yes	Yes*
Drop Warp:	1/16"	Yes	Yes	Yes
	1/8"	Yes	Yes	Yes
	1/4"	--	Yes	Yes*
Available modifications:				
Vermiculite Coating (1500°F/ 815°C)	Yes	Yes	--	--
PTFE Coating (500°F/260°C)	Yes	Yes	--	--
PSA (180°F/82°C)	Yes	Yes	Yes	--
Graphite Coating (1000°F+/540°C)	Yes	Yes	--	--

**Layered and stitched - other custom sizes and thicknesses can be manufactured by layering and stitching.*



Fiberglass Ropes

High Temperature Kintted Fiberglass Yarns Designed for Hot Process Applications

A Davlyn Manufacturing Product



Our ropes are constructed of high quality type E glass that will not burn and will withstand continuous exposure to temperatures of 1000°F/540°C. This material resists most acids and alkalis; is unaffected by most bleaches and solvents; and is highly flexible and conformable. The basic fiber is manufactured in accordance with specifications outlined in ASTM D-578, ASTM committee D13, and subcommittee D13.18. Applications include boiler, coke oven, industrial oven, and wood stove doors; crucible packing and pollution control equipment; high temperature tying and lacing cords; and tadpole tape/gasket core ropes.

Most rope products are available in black. In addition, most ropes can be wire jacketed for better abrasion resistance; coated with high temperature flame resistant silicone rubber; over-braided in sizes through 4" (102mm); or supplied with a pressure sensitive adhesive tape to facilitate gasket installation.

Available Sizes (OD): 1/16" (1.6mm) through 4" (102mm)*

Available Versions: Soft and Dense

**Additional sizes may be available, consult factory.*

PHYSICAL PROPERTIES			
Fiber Type	E Glass	Specific Gravity	2.54-2.69
Breaking Tenacity	1.71 gf/TEX. Std. 1.71 gf/TEX Wet	Effect of Heat	<ul style="list-style-type: none"> Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C
Tensile Strength	450,000-500,000 psi.	Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Breaking Elongation	4.81% Std. 4.81% Wet		
Elastic Recovery	100%	Effect of Bleaches and Solvents	Unaffected
Average Stiffness	2824.3 cn/TEX		



High Temperature Rope Products

Tetraglas®, Tetraglas® 3000, and Ceramic Rope

A Darco Southern Product



Tetraglas® round knitted, twisted, and square braided ropes are constructed of high quality type E fiberglass yarns, which offer a continuous service temperature up to 1000°F/540°C. This material resists most acids and alkalis; is unaffected by most bleaches and solvents; and is highly flexible and conformable. Knitted Tetraglas® rope is offered in two styles: soft and dense.

Tetraglas® 3000 ropes are constructed from amorphous silica fibers and support continuous operating temperatures up to 1800°F/980°C. Even at elevated temperatures this material is resistant to most acids and alkalis. This rope is available in round knitted, twisted and square braided constructions.

Ceramic fiber rope supports the highest continuous operating temperature, at 2300°F/1260°C. It possesses excellent chemical stability as well as strong corrosion and thermal shock resistant. This rope is available in round braided, 3-ply twisted and square braided constructions.

Tetraglas® rope is also available with a stainless steel wire mesh core and/or silicone coatings.

PRODUCT AVAILABILITY			
Style/Grade	Tetraglas®	Tetraglas 3000®	Ceramic
Continuous Temperature Rating	1000°F/540°C	1800°F/980°C	2300°F/1260°C
Available Sizes:			
Knitted -- Soft	1/8" to 1-1/2" **	--	--
Dense	1/8" to 3" **	1/4" to 1-1/2"	1/4" to 2"
Twisted	1/8" to 2"	1/4" to 1"	1/4" to 2"
Square Braid	1/4" to 2"	1/4" to 2"	1/4" to 2"
Available Modifications:			
Vermiculite Coating (1500°F/815°C)	Yes	Yes	--
PTFE Coating (500°F/260°C)	Yes	--	--
Graphite Coating (1000°F+/540°C+)	Yes	--	Yes

** See Fiberglass Rope page in this guide for larger sizes



Silco Rope®

High Grade Silicone Rubber Bonded to Knitted Fiberglass Rope

A Davlyn Manufacturing Product



Silco Rope® is designed to provide a seal in environments that are exposed to the hazards of high heat and occasional flame. It protects continuously to 500°F/260°C and will withstand a molten splash at 2200°F/1200°C. Made of knitted type E fiberglass rope, it is then coated with a high grade silicone rubber.

Resistant to hydraulic fluids, lubricating oils, and fuels, Silco Rope® provides an excellent high temperature seal for a variety of industrial uses.

Available Sizes (OD): 1/16” (1.6mm) through 1 3/4” (44mm)

PHYSICAL PROPERTIES			
Fiberglass Type E		Silicone Rubber	
Breaking Tenacity	1.71 gf/TEX Std and Wet	Durometer, Shore A - Initial	35
Tensile Strength	450,000-500,000 psi	- Aged 240hrs @ 200°C	45
Breaking Elongation	4.81% Std and Wet	Tensile Strength (psi) - Initial	875
Elastic Recovery	100%	- Aged 240hrs @ 200°C	800
Average Stiffness	2824.3 cn/TEX	Elongation % - Initial	500
Effect of Heat	Will not burn Retains 75% tensile at 343°C Softens at 732-877°C Melts at 1121-1182°C	- Aged 240hrs @ 200°C	200
		Flammability, UL94	V-1
		Dielectric Strength (volts/mil)	485
Effects of Acids and Alkalis	Resistance to acids is fair Good resistance to most alkalis		

Custom and Kiln Car Seals

High Temperature Fiberglass Rope with a Knitted Stainless Steel Wire Jacket

A Davlyn Manufacturing Product



Our Custom Seals are constructed of high quality Type E glass yarns with a knitted 304 stainless steel wire jacket for superior abrasion resistance. The high temperature glass yarns will not burn and provide continuous exposure to temperatures of 1000°F/540°C. Moreover, the compressive strength of the knitted fiberglass rope preserves the shape of the Seal after repeated use.

Each seal can be supplied cut to length or as continuous lengths. Custom Seals can be fabricated from a wide variety of diameters, and configurations to provide the precise thickness and depth of seal for each U channel design specification.

PHYSICAL PROPERTIES	
Fiber Type	E Glass
Breaking Tenacity	<ul style="list-style-type: none"> • 1.71 gf/TEX. Std. • 1.71 gf/TEX Wet
Tensile Strength	450,000-500,000 psi.
Breaking Elongation	<ul style="list-style-type: none"> • 4.81% Std. • 4.81% Wet
Elastic Recovery	100%
Average Stiffness	2824.3 cn/TEX
Specific Gravity	2.54-2.69
Effect of Heat	<ul style="list-style-type: none"> • Will not burn • Retains 75% tensile at 343°C • Softens at 732-877°C • Melts at 1121-1182°C
Effect of Acids and Alkalis	Resistance to acids is fair. Good resistance to most alkalis.
Effect of bleaches and solvents	Unaffected



Silco Steel® Gaskets

High Grade Silicone Rubber Bonded to 304 Stainless Steel

A Davlyn Manufacturing Product



Silco Steel® products combine the compressive strength and flexibility of stainless steel with the insulation and protective properties provided by our high quality, self extinguishing silicone rubber.

Our silicone Rubber coating is designed to protect continuously to 500°F/260°C and will withstand molten splash at 2200°F/1200°C. It is resistant to hydraulic fluids, lubricating oils and fuels, Silco Steel® products are the perfect solution for any number of products requiring a recurring, non-memory seal between two mating surfaces. Call us and let our engineers help you with your specific needs.

PHYSICAL PROPERTIES		
Silicone Rubber		
Durometer, Shore A	- Initial	35
	- Aged 240hrs @ 200°C	45
Tensile Strength (psi)	- Initial	875
	- Aged 240hrs @ 200°C	800
Elongation %	- Initial	500
	- Aged 240hrs @ 200°C	200

High Temperature Tadpole Gaskets

Fiberglass and Stainless Steel Gaskets with a "Tadpole" Attachment

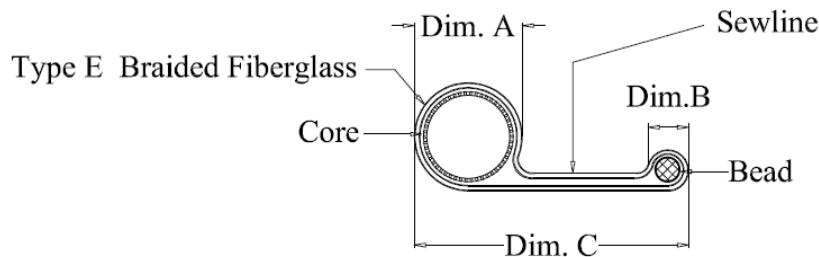
A Davlyn Manufacturing Product



Our tadpole gaskets are designed to provide a high temperature thermal seal in industrial, laboratory, commercial, and residential ovens and dryers with a maximum continuous operating temperature of 1000°F/540°C. Constructed with type E fiberglass, the bulb may be filled with various constructions of either fiberglass or stainless steel in order to achieve the proper design compression.

Additionally, the bead of the tadpole may also be filled to accommodate various door constructions. Textile engineering, coupled with our heat treating and coating expertise, allow for a wide variety of constructions in order to meet unique environmental and design constraints.

GASKET DESIGN DETAILS



Core diameters are typically 1/4" - 3/4"

Both the Core and Bead may be filled with the following optional materials or left hollow:

- Type 304 stainless steel knitted wire hollow bulb
- Type 304 stainless steel solid mesh
- Knitted type E fiberglass rope

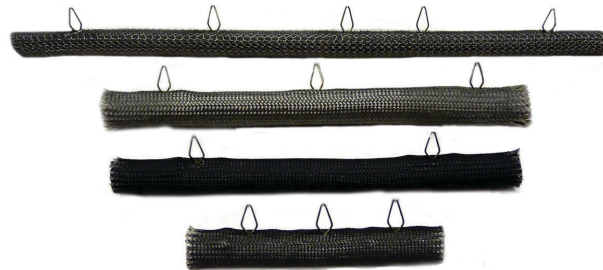
In addition, the gasket can be provided with a stainless steel knitted jacket or a coating of either PTFE or silicone rubber. The bead (Dimension B) may also be eliminated. Our engineering staff will be happy to assist in meeting all your design needs.



High Temperature Clip Gaskets

Fiberglass and Stainless Steel Gaskets with a Unique Wireform Clip Attachment Method

A Davlyn Manufacturing Product



Our proprietary Clip Gasket is designed to provide a high temperature thermal seal in environments with a maximum continuous operating temperature of 1000°F/540°C. Constructed of a 304 stainless steel knitted wire core over-braided with type E fiberglass, the gasket has a unique attachment method consisting of randomly spaced, individual wire form clips. The clip is designed for insertion, with minimal force, in a predrilled hole in the door or frame of the enclosure. The design flexibility of random spacing allows us to accommodate corner radii and structural anomalies, providing a secure mount that is as easy to replace as it is to install. The gasket can also be provided with a wire outer jacket for enhanced abrasion protection or to provide EMI/RFI shielding. Additionally, a coating of either silicone rubber or PTFE may be applied to address specific design considerations. This attachment method can be adapted to a variety of yarns and monofilaments, providing gaskets for a wide range of temperatures and harsh or critical environments.

Typical gasket diameters range from .250"-.800". The type 304 stainless steel knitted wire bulb can be constructed with diameters of .004"-.007" in order to vary the compressive strength of the gasket. Optional coatings and wire jacketing are also available.

Consult factory for details.



Tetraglas® Fiberglass Cloth

High Temperature Woven Fiberglass Cloth

A Darco Southern Product



Tetraglas® Fiberglass Cloth, a woven material made with highly texturized yarns, has a continuous operating temperature of 1000°F/540°C. It has excellent resistance to most acids, alkalis, and solvents.

Available in 50 linear yard rolls and widths of 40 or 60 inches, Tetraglas® can be coated with Silicone (see Cloths with Silicone), Vermiculite, foil, graphite or PTFE making it the ideal material for gaskets, expansion joints, welding blankets and curtains, insulation blankets/pads, folded and stitched strips or tapes, and tadpole tapes.

Tetraglas® Fiberglass Cloth provides a versatile solution to your high temperature protection needs in the construction, power plant, chemical processing, refinery and mining industries, among many others. Our Style 60 has MSHA-BC-109 approval.

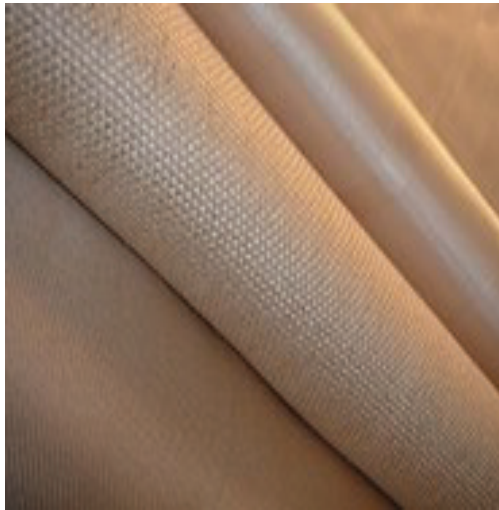
PRODUCT AVAILABILITY & PHYSICAL PROPERTIES						
Style	2025-9383	45	60	65	90	110
Weight - oz./yd ² (g/m ²)	17.7 (627)	24 (813)	30 (1017)	35 (1186)	40 (1356)	62 (2170)
Construction (Warp x Fill)	20 x 14	20 x 8	20 x 7	20 x 7	20 x 8	10 x 7
Thickness - inches (mm)	.035 (0.88)	.060 (1.52)	.065 (1.65)	.080 (2.03)	.080 (2.03)	.125 (3.18)
Break strength-Warp:						
Lbs/in	240 (2101)	240 (2101)	240 (2101)	240 (2101)	240 (2101)	460 (4027)
(Newtons/5cm)	100 (875)	300 (2626)	300 (2626)	450 (3940)	475 (4159)	420 (3677)
Temperature °F (°C)	1000 (540)	1000 (540)	1000 (540)	1000 (540)	1000 (540)	1000 (540)
K Factor - BTU/inch/ft ² /F	0.3399	0.3399	0.3399	0.3399	0.3399	0.3399
Abrasion Resist. Taber Test	536	700	<250	700	300	1000
Available modifications:						
Vermiculite Coating (1500°F/815°)	Yes	Yes	Yes	Yes	Yes	Yes
Foil one side (500°F/260°C)	-	Yes	-	-	-	-
Graphite (1000°F+/540°C+)	Yes	Yes	Yes	Yes	Yes	Yes
PTFE (500°F/260°C)	Yes	Yes	Yes	Yes	Yes	Yes



Tetraglas® 3000 Silica Cloth

High Temperature Woven Silica Cloth

A Darco Southern Product



Tetraglas® 3000 silica cloth, a woven material made from amorphous silica, has a continuous operating temperature of 1800°F/980°C. It has excellent resistance to most acids, alkalis, solvents, and is an excellent alternative to Refractory Ceramic Fiber (RCF).

Available in 50 linear yard rolls, Tetraglas 3000® can be coated with Vermiculite, foil, graphite, and silicone (also see Cloths with Silicone) making it the ideal material for gaskets, expansion joints, welding blankets and curtains, insulation blankets/pads, folded and stitched strips or tapes, and tadpole tapes. Style 90 is also available in temperature indicating blue.

Tetraglas® 3000 silica cloth provides a versatile solution to high temperature protection needs in the construction, power plant, primary metals, chemical processing, shipyards, refinery, and mining industries, among many others.

PHYSICAL PROPERTIES			
Style	30	54	90
Weight - oz./yd ² (g/m ²)	18 (644)	36 (1221)	40 (1356)
Construction (Warp x Fill)	48 X 33	51 X 33	20 X 7
Weave	8HS	12HS	PLAIN
Thickness - inches (mm)	.030 (.76)	.054 (1.37)	.080 (2.03)
Temperature Cont. - F (C)	1800 (980)	1800 (980)	1800 (980)
K Factor - BTU/inch/ft ² /F	0.3385	0.3385	0.3385
Silica content %	96 Min.	96 Min.	96 Min.
% Shrinkage @ 2150°F (1177°C)	8-10	8-10	8-10
Pre shrunk available	Yes	-	-
Width – Inches (mm)	36 (914) 60 (1524)	36 (914) 60 (1524)	38 (965)
Available modifications:			
Vermiculite Coating (1500°F/815°C)	Yes	Yes	Yes
Foil one side (500°F/260°C)	Yes	Yes	-
Graphite (1000°F+/540°C+)	Yes	Yes	Yes
Temperature indicating Blue 36" wide	-	-	Yes



Woven Cloth with Silicone

High Grade Silicone Rubber Bonded Temperature Woven Cloth

A Darco Southern Product



Tetraglas[®] and Tetraglas 3000[®] woven cloths with high grade silicone rubber are a versatile solution to high temperature protection needs. With a continuous operating temperature up to 500°F /260°C, our silicone coated cloths will withstand a molten splash at 2200°F/1200°C and are resistant to hydraulic fluids, lubricating oils, and fuels.

Tetraglas[®] is made with highly texturized fiberglass while Tetraglas 3000[®] is made of amorphous silica.

Either product is excellent for use in removable insulation covers, welding blankets, insulation strips for boilers and curtains, expansion joints, tape, gaskets, tadpole tapes, removable sleeving covers for piping, hoses, cables, wiring and a variety of specialty products.

PHYSICAL PROPERTIES				
Style	17	32	96	54
	Tetraglas [®]	Tetraglas [®]	Tetraglas [®]	Tetraglas [®] 3000
Base Material	Fiberglass	Fiberglass	Fiberglass	Silica
Silicone Application	Impregnated	Impregnated	One side only	One side only
Silicone Color	Silver	Silver	Red	Red
Weight - oz./yd ² (g/m ²)	17 (576)	32 (1085)	96 (3255)	44 (1247)
Thickness - inches (mm)	.020 (0.55)	.032 (0.80)	.125 (3.1)	.058 (1.47)
Width	60"	60"	40"	36"
Break Strength:				
Lbs/in				
(Newton/5cm)				
Warp	275 (2408)	275 (2408)		
Fill	250 (2189)	250 (2189)	N/A	N/A
Tear Strength:				
Lbs/in				
(Newton/5cm)				
Warp	65 (569)	65 (569)		
Fill	55 (482)	55 (482)	N/A	N/A
Mullen Burst lbs/in (Megapascals)	750 (5.18)	750 (5.18)	N/A	N/A



Silco Shield®

High Grade Silicone Rubber Bonded to Woven Fiberglass Matting

A Davlyn Manufacturing Product



Silco Shield® is designed to protect hoses and cables from the hazards of high heat and occasional flame. It protects continuously to 500°F/260°C and will withstand a molten splash at 2200°F/1200°C. Made of woven fiberglass yarns in a flexible substrate, it is then coated with a high grade silicone rubber. Resistant to hydraulic fluids, lubricating oils, and fuels, Silco Shield® insulates against energy loss in piping and hosing; protects employees from burns; and allows shielding of induction furnace cables from splashes of molten metal. With a minimum average weight per square yard of 96 ounces, it is available in 40 inch wide, cut-to-length rolls.

PHYSICAL PROPERTIES	
Coating	High Grade Flame Resistant Silicone Rubber
Weight, oz/sq yd, nominal	96
Thickness, inches, nominal	0.125
Flame Resistance	Excellent
Oil and Hydrocarbon Resistance	MIL-C-20696, sect. 4.2.4
Abrasion Resistance	Excellent (silicone side)
<i>Temperature Rating:</i> Coating:	-65°F to 500°F continuous; Transient exposure to 600°F
Base Fabric:	1000°F/540°C continuous
Base Fabric can be certified to:	MIL-Y-1140 MIL-I-24244
Finished Product can be certified to:	MIL-I-24244 ASTM E84.84A ASTM E162



Ceramic Cloth

High Temperature Woven Ceramic Cloth

A Darco Southern Product



Our ceramic cloth is a woven material made from alumina-silica ceramic fiber and has a continuous operating temperature of 2300°F/1260°C. It has excellent chemical stability and strong resistance to thermal shock and corrosion attack.

Available with either inconel wire or fiberglass filament insert to increase handling strength and enhance fiber durability, standard rolls are 36 inch wide by 50 feet long. It can be coated with vermiculite or graphite and is an ideal material for gaskets, expansion joints, welding blankets and curtains, and insulation blankets/pads, folded and stitched strips and tapes, and tadpole tapes.

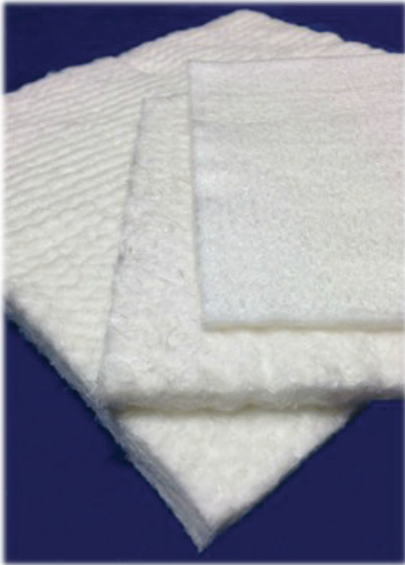
Our ceramic cloth provides a versatile solution to your high temperature protection needs in the construction, power plant, primary metals, chemical processing, shipyards, refinery, mining and many other industries.

PHYSICAL PROPERTIES		
Insert Material	Glass	Inconel
Alumina Al ₂ O content	47%	47%
Silica SiO ₂ content	53%	53%
Thickness - inches (mm)	.125 (3.18)	.125 (3.18)
Width - inches	36	36
Square feet per roll	150	150
Tensile Strength grip lb/f	63	63
Temperature Continuous - °F (°C)	2300 (1260)	2300 (1260)
Melting Point - °F (°C)	3200 (1760)	3200 (1760)
Insert Material Temperature Max. - °F (°C)	1200 (649)	2000 (1093)
Color	White	White
Available modifications:		
Vermiculite Coating	Yes	Yes
Graphite	Yes	Yes

Needled Blankets

Fiberglass, Silica, and Ceramic Needled Blankets

A Darco Southern Product



We offer three types of blanket materials that provide thermal insulation and protection at high temperatures while offering excellent resistance to most acids, alkalis and solvents. These blankets are made from fibers that are mechanically needled together without chemical binders.

Tetraglas® made of 100% E type glass fibers has a continuous operating temperature of 1000°F/540°C.

Tetraglas® 3000 made of amorphous silica filament fibers has a continuous operating temperature of 1800°F/980°C.

Ceramic, made of high strength spun ceramic fibers, is available in three grades: Standard (has a continuous operating temperature of 1800°F/980°C), High Purity (has a continuous operating temperature of 2300°F/1260°C) and Zirconia (has a continuous operating temperature of 2600°F/1430°C).

PHYSICAL PROPERTIES					
Style	Tetraglas®	Tetraglas® 3000	Ceramic	Ceramic	Ceramic
Grade	Standard	Standard	Standard	High Purity	Zirconia
Continuous Temperature Rating	1000°F/540°C	1800°F/980°C	1800°F/980°C	2300°F/1260°C	2600°F/1430°C
Density in pounds	9	10	6 or 8	6 or 8	6 or 8
Available thicknesses:					
1/4"	Yes	Yes	--	--	--
1/2"	Yes	Yes	Yes	Yes	Yes
1"	Yes	Yes	Yes	Yes	Yes
1 1/2"	--	--	Yes	Yes	Yes
2"	--	--	Yes	Yes	Yes
Available widths	60"	36"	24" & 48"	24" & 48"	24" & 48"
Color	White	Tan	White	White	White



Silco End Seal Wrap

Self-Fusing Unsupported Silicone Rubber Tape

A Davlyn Manufacturing Product



Silco End Seal Wrap is a self fusing, non-adhesive silicone rubber wrap that is used in a wide range of insulating, repairing, and sealing applications. Commonly used to cover the exposed ends of our Silco Sleeve® products, the tape is available in 1" (25mm) and 1 1/2" (38mm) widths. Conforming smoothly when wrapped around complex forms, the tape bonds at room temperature into a single inseparable layer after 24 hours.

The 1" wide tape comes with a triangular cross section that makes it possible to quickly and neatly apply a consistent thickness of silicone rubber over the transition from the end of the Silco Sleeve to the surface of the hose being protected. The 1 1/2" tape has a rectangular cross section.

The specially formulated silicone rubber provides a self-fusing, inseparable, cohesive moisture resistant barrier over a range of temperatures from -65°F/-54°C up to 500°F/260°C. The product remains non-tacky to the touch and is inherently flame retardant, providing a superior alternative to the standard band clamp.

Available Sizes (Width): 1"(25mm) and 1 1/2" (38mm)

PHYSICAL PROPERTIES	
Thickness at peak (in.)	0.020
Width (in.)	1.00 or 1.50
Roll length (yards)	12
Elongation	350%
Tensile Strength (min. PSI)	700
Dielectric Strength (min. VPM)	450
Thermal Stability	Class H
Temperature Range	-65°F to +500°F
Hardness	50+/-10 Shore A
Moisture Absorption	.9% 96 hrs. in H2O@ 70°F
Military Specification	MIL-I-46852C Type II



Stainless Steel Mesh Cable

304 Stainless Steel Knitted Mesh Cables and Tapes

A Davlyn Manufacturing Product



Our knitted mesh cables and tapes are used in a variety of products and applications. Our cables provide compressive strength as the fill in the bulb or tail of high temperature industrial and commercial gaskets. Our tapes are widely used to provide EMI/RFI shielding for electronic enclosures, and in combination with silicone gels to offer an additional environmental seal.

Merging two of our core capabilities, textile engineering and materials science, we have combined knitted metal mesh structures with other high temperature textiles to form seals and gaskets, in unique and demanding designs.

Available Sizes (OD):

Solid Mesh 1/4" (6mm) to 1 1/2" (38mm)

Hollow Mesh 1/4" (6mm) to 3/4" (19mm)

Additional sizes may be available, consult factory.

Mesh cables are also available in inconel and monel.

Optional hollow core constructions and flat mesh tapes are also available.

Consult factory for availability.