

Silicone Thermal Transfer Insulator Pad Fabrics: Fiberglass reinforced and polyimide reinforced -150°F to 400°F / -100°C to 204°C: DeltaGlass™



- Type 4500 fabric was designed for LED and Power semiconductor applications for maximum reliability.
- Fiberglass core or Kapton® core.
- This material resists heat, humidity and shock.
- Conforms to surface topography, maximizing contact area for uniform heat transfer.
- UL94 V-0 flame rating.
- 150°C RTI (Relative Thermal Index).
- Halogen free, RoHS compliant.
- Formulated for superior heat transfer characteristics.

Thermal Transfer Insulator Pad Fabric – Fiberglass core		
Property	Typical Value	Test Method
Color	Mauve or Gray	Visual Inspection
Thickness	7 to 20 mils / 0.18 – 0.51mm	ASTM D374
Construction	Supported	N/A
Supporting Material	Fiberglass	N/A
Hardness	77 Shore A	ASTM D2240
Tensile Strength	850 PSI / 5.9 MPa	ASTM D412
Elongation, machine direction	4%	ASTM D412
Elongation, 45 Warp and Fill	20%	ASTM D412
Thermal Conductivity	0.87 btu/(hr*ft°F) / 1.5 W/m-K	ASTM D5470
Thermal Impedance @ 40 PSI	0.3 in ² * C/W / 1.9e ⁻⁴ m ² * K/W	ASTM D5470
Glass Transition Temperature	-180F / -118C	ASTM D3418
Operating Range	-150 to 400F / -100 to 204C	N/A
Dielectric Strength, kVac	> 500 V/mil / > 19 kV/mm	ASTM D149
Flammability Rating	V-0	UL 94
RTI, Mechanical	300F / 150C	UL 746
RTI, Electrical	300F / 150C	UL 746
Hot Wire Ignition (HWI)	4 @ 7 mils / 3 @ 20 mils 4 @ 0.17mm / 3 @ 0.51mm	UL 746
High Current Arc Ignition (HAI)	3 @ 7 mils / 2 @ 20 mils 3 @ 0.17mm / 2 @ 0.51mm	UL746

Thermal Transfer Insulator Pad Fabric – Kapton® core		
Property	Typical Value	Test Method
Color	Mauve	Visual Inspection
Thickness	6 to 7.5 mils / 0.15 – 0.19mm	ASTM D374
Construction	Supported	N/A
Supporting Material	Kapton® MT, 1 mil	N/A
Hardness	77 Shore A	ASTM D2240
Elastic Modulus (< or = 1% strain)	38,900 PSI / 268 MPa	ABTG TMS A1
Shear Modulus (< or = 25% strain)	145 PSI / 1.0 MPa	ASTM D412
Elongation, 45 Warp and Fill	20%	ASTM D1002
Thermal Conductivity	0.87 btu/(hr*ft°F) / 1.5 W/m-K	ASTM D5470
Thermal Impedance @ 40 PSI	0.27 in ² * C/W / 1.8e ⁻⁴ m ² * K/W	ASTM D5470
Glass Transition Temperature	-180°F / -118°C	ASTM D3418
Operating Range	-150 to 400°F / -100 to 204°C	N/A
Dielectric Strength, kVac	➤ 1000 V/mil / > 39 kV/mm	ASTM D149
Flammability Rating	V-0	UL 94
RTI, Mechanical	300°F / 150°C	UL 746
RTI, Electrical	300°F / 150°C	UL 746
Hot Wire Ignition (HWI)	3	UL 746
High Current Arc Ignition (HAI)	2	UL746

Thermal Transfer Insulator Pad Fabrics 16” roll width – 125 yards roll length Custom die cutting service available		
Part Number	Thickness, in.	Substrate
F-FG-SR-4500-XX	.007 to .020	Fiberglass
F-KAP-SR-4500-XX	.006 to .0075	Kapton®

- The “XX” value is thickness measured in mils.

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Fiberglass Reinforced Silicone Rubber Sheet – AMS3320 & AMS3315 500°F / 260°C: FlameShield™ - High Temperature, Heat & Flame Resistant Hot process protection



- Used as a gasket material due to excellent dimensional stability.
- Used as an expansion joint material.
- Resistant to weathering and engine oil.
- Thicknesses of .032", .062", .093", .125", & .250". 36" and 48" roll widths.
- Resistant to weld splatter, grinding sparks, solder drips, brazing.
- Tensile 1300 psi.
- Fiberglass layer: 20x18 weave. .014" thickness. 12.5 oz/yd².
- Meets AMS3320 & AMS3315 for baffle sealing.
- Rolls lengths vary during production – please call for availability.
- Available slit into tapes for engine baffle use or precision cut to size for round, square or special shape gaskets.

FlameShield™ High Temperature Fiberglass Reinforced Silicone Rubber Sheet Meets AMS3320 & AMS3315 Specifications

Part Number	Durometer	Roll Width	Thickness in / mm
F-FGSR70-AMS-36-032-X	70	36"	1/32" / .032" / 0.79
F-FGSR70-AMS-36-062-X	70	36"	1/16" / .062" / 1.57
F-FGSR70-AMS-48-062-X	70	48"	1/16" / .062" / 1.57
F-FGSR70-AMS-36-093-X	70	36"	3/32" / .093" / 2.36
F-FGSR70-AMS-36-125-X	70	36"	1/8" / .125" / 3.18
F-FGSR70-AMS-48-125-X	70	48"	1/8" / .125" / 3.18
F-FGSR70-AMS-36-250-X	70	36"	1/4" / .250" / 6.35

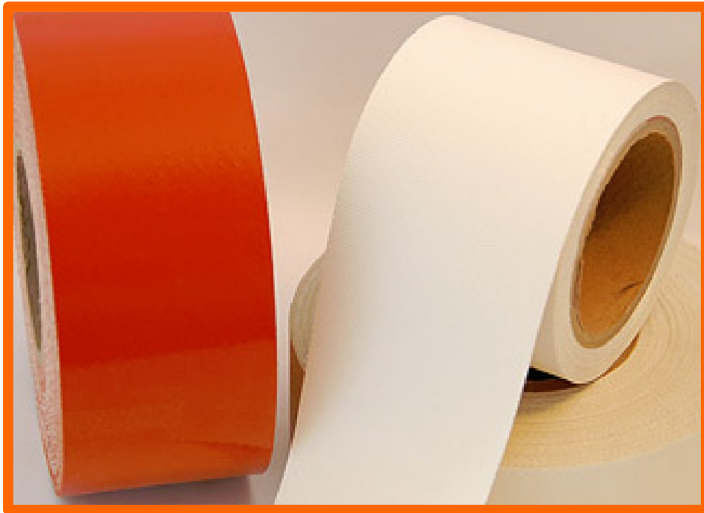
- For the "X" value, specify length in yards.
- Minimum order is 2 yards

These materials can be easily used to make shields and covers that are assembled with mechanical fasteners. Easily punched or drilled for installation of grommets, or insertion of sheet metal screws or bolts.

Can be easily slit by hand with a straight edge and knife into tapes for fitting engine baffles by hand. Rolls can also be machine slit.

The edges of this material may be sealed with liquid silicone or paste in order to seal the fiber ends to prevent wicking of liquids or contamination. See our part numbers US-ESD (liquid silicone) and US-ESP (paste silicone).

Fiberglass Fabric with Silicone Rubber Impregnation - Premium Grade -100°F to 450°F / -73°C to 232°C: High Temperature Heat & Chemical Resistance DeltaGlass™



- e-fiberglass core.
- Silicone rubber coating.
- Excellent release properties.
- High dielectric factor.

This fabric offers higher temperature range with excellent resistance to almost all solvents, caustics and acids. Non-porous finish. Welding splatter, spark and molten splash resistant.

The base fabric is rated to 1200°F / 648°C.

Used as gaskets, safety curtains, conveyor belts. Rolls easily slit to specific widths to use as tapes.

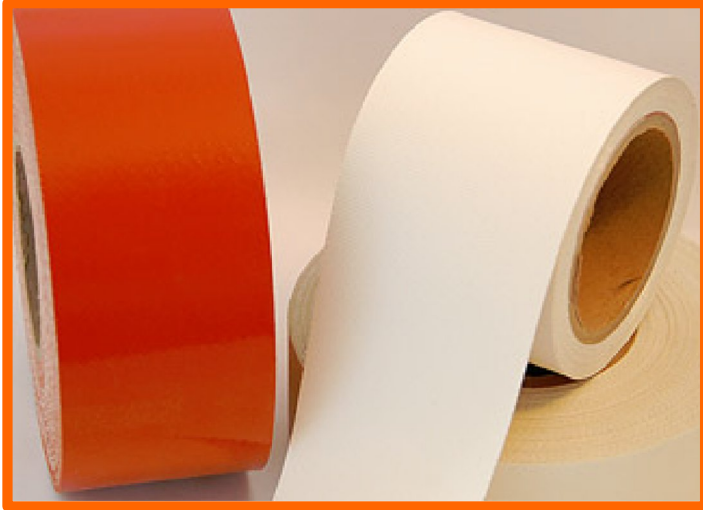
450°F / 232°C continuous rating, high insulation value & excellent personnel protection

High Temperature, Heat & Chemical Resistance DeltaGlass™ E-glass Fiberglass Fabric with Silicone Rubber Coating – Premium Grade				
Part Number	Thickness, in.	Tensile warp lbs/in	Width, in.	Weight oz/yd ²
F-FG-SR2-P-009339-10-W	.0093	74	39	10
F-FG-SR2-P-015039-16-R/W	.0150	229	39	16
F-FG-SR2-P-020339-22-R	.0203	263	38	22
F-FG-SR2-P-022039-22-R/W	.0220	285	39	22
F-FG-SR1-P-023037.5-24-R*	.0230	350	37.5	24
F-FG-SR2-P-029539-32-R	.0295	286	39	32
F-FG-SR2-P-040039-41-W	.0400	410	39	41

- * This fabric is coated with a saturation process that leave the reverse side fabric sealed but with no extra coverage over the base fabric.
- W at the end of the part number indicates white color. R indicates red color.
- Full roll lengths are available at 18 yards and 36 yards.
- ¹ Minimum order for cut lengths is 2 yards. ² Minimum order for cut lengths is 1 yards

This Product is Available By-The-Yard: Discounts for full roll purchases

**Fiberglass Fabric with Silicone Rubber Impregnation - Premium Grade
FDA 21CFR177.1550 compliant for direct food contact
-100°F to 350°F / -73°C to 176°C: High Temperature Heat & Chemical Resistance
DeltaGlass™**



- e-fiberglass core
- silicone rubber coating both sides or PTFE one side and silicone rubber on the other side
- excellent release properties
- High dielectric factor

This fabric offers higher temperature range with excellent resistance to almost all solvents, caustics and acids. Non-porous finish.

The base fabric is rated to 1200°F / 648°C.

Used in food processing for baking and conveyor applications.

450°F / 232°C continuous rating, high insulation value & excellent personnel protection

High Temperature, Heat & Chemical Resistance DeltaGlass™ E-glass Fiberglass Fabric with Silicone Rubber Coating – Premium Grade FDA complaint 21CFR177.1550 for direct food contact				
Part Number	Thickness, in.	Tensile warp lbs/in	Width, in.	Weight oz/yd ²
F-FG-SR2-FDA-009339-10-W	.0095	155	38	12.6

This Product is Available By-The-Yard: Discounts for full roll purchases

One Side Silicone Rubber Coated Fiberglass Cloth: Heavy Duty
500°F / 260°C: FlameShield™ High Temperature, Heat & Flame Resistant
Molten Metal SplashGuard™ / Fire Blanket / Welding Blanket / Curtains-Shields



- Heavy Duty Coated One Side: 98 oz/yd².
- Resists Molten Metal Splash, Welding Splatter & Grinding Spark.
- Used to fabricate shields and curtains. Can be sewn with Hook & Loop closure to form a protection sleeve for hoses & cables.
- Used for high temperature flexible joints.
- Robotic welding arm and elbow covers & cable protectors.
- This is the heaviest most severe duty fabric available for molten metal & slag protection.
- Can be fabricated into shields and covers, custom sleeves for EAF cable protection.

500°F / 260°C continuous rating with weld splatter / molten metal splash protection.
 2200°F / 1205°C for short term exposure and short peak excursions to 3000°F / 1650°C.

FlameShield™ 1 side silicone rubber coated high temperature fiberglass fabric Roll lengths of 25 and 34 yards			
Part Number	Weight per Linear foot oz/yd ²	Roll Width In / cm	Thickness In / mm
F-FG-SR1-12540-98	2.20 lbs / 98	40 / 101	0.125 / 3.175

The color of this fabric is oxide-red

Heavy Duty 98 oz/yd² SplashGuard™ is an extreme duty fabric often fabricated into sleeves or other forms to protect hoses, cables and equipment from extreme industrial environments. Can be used to drape over moulds and forms during liquid metal pouring operations to slow the cooling rate of the ingot. Excellent molten metal splash protection.

All of these fabrics provide excellent cold temperature performance with flexibility to -76°C for refrigeration and cryogenic applications. These materials can be easily used to make shield and covers that are assembled with mechanical fasteners. Easily punched or drilled for installation of grommets, or insertion of sheet metal screws or bolts.

This Product is Available By-The-Yard / Metre: Discounts for full roll purchases
Custom Slitting to Any Width Available



F-FG-SR1-12540-98 Specifications

PRODUCT COMPOSITION		ENGLISH	METRIC
Silicone Rubber – proprietary formulation		0.045 inch	114 micr
Heat-Treated Fiberglass Fabric – plain weave		0.055 inch	140 micron
		42.0 oz/yd ²	1.4 kg/m ²
PHYSICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Composite Weight	ASTM D3776	96 oz/yd ²	3.3 kg/m ²
Nominal Thickness	ASTM D1777	0.100 inch	254 micron
Tensile Strength	ASTM D5035	warp 225 lbs/inch fill 55 lbs/inch	40.2 kg/cm 22.8 kg/cm
Tear Strength	ASTM D5035	warp 30 lbs/inch fill 20 lbs/inch	13.6 kg/cm 9.1 kg/cm
Bursting Strength	ASTM D3786	550 psi	38.5 kg/cm ²
Low Temperature Resistance	-40°F [-40°C]	Remains Flexible No Delamination	
High Temperature Resistance	+500°F [+260°C]	Remains Flexible No Delamination	
Base Fabric/Weave	Fiberglass/plain weave		
Color/Coating	Red Iron Oxide/silicone rubber		

One Side Silicone Rubber Coated Fiberglass Cloth: Medium Duty
500°F / 260°C: FlameShield™ High Temperature, Heat & Flame Resistant
Molten Metal SplashGuard™ / Fire Blanket / Welding Blanket / Curtains-Shields



- **Medium Duty Silicone Rubber Coated One Side: 50 oz/yd².**
- **Molten Metal Splash, Welding Splatter & Grinding Spark Shields and Curtains.**
- **Robotic welding arm and elbow covers & cable protectors.**

500°F / 260°C continuous rating with weld splatter / molten metal splash protection.
2200°F / 1205°C for periods up to 15 minutes and short excursions to 3000°F / 1650°C.

FlameShield™ 1 side coated high temperature fiberglass fabric			
Part Number	Weight Linear foot / oz/yd²	Roll Width In / cm	Thickness In / mm
F-FG-SR1-06336-50*	1.10 lbs / 50	36 / 91	0.063 / 1.60

The color of this fabric is oxide-red
Available in 50 yard rolls

Medium Duty 50 oz/yd² and other lighter fabrics and 2 side coated fabrics are used as high temperature curtains and shields, weld splatter and pyro resistant sleeves and jackets, weather or spray-down / wash-down resistant high temperature fabric for making protective covers, sleeves, jackets. Very good molten metal splash protection.

All of these fabrics provide excellent cold temperature performance with flexibility to -76°C for refrigeration and cryogenic applications. These materials can be easily used to make shield and covers that are assembled with mechanical fasteners. Easily punched or drilled for installation of grommets, or insertion of sheet metal screws or bolts.

**This Product is Available By-The-Yard / Metre: Discounts for full roll purchases
Custom Slitting to Any Width Available**

Silica Cloth with one side silicone rubber coating: Medium duty
1800°F / 982°C: InSilMax™ with 500°F / 260°C: FlameShield™ Silicone Rubber
Coating - High Temperature, Heat & Flame Resistant
Molten Metal SplashGuard™ / Fire Blanket / Welding Blanket / Curtains-Shields



InSilMax™ one side silicone rubber coated high temperature Silica fabric			
Part Number	Weight Linear foot / oz/yd²	Roll Width In / cm	Thickness In / mm
F-S-SR1-6336-50*	1.10 lbs / 50	36 / 91	0.063 / 1.60

The color of this fabric is oxide-red
available in 50 yard rolls

Heavy Duty 50 oz/yd² and other lighter fabrics and 2 side coated fabrics are used as high temperature curtains and shields, weld splatter and pyro resistant sleeves and jackets, weather or spray-down / wash-down resistant high temperature fabric for making protective covers, sleeves, jackets. Very good molten metal splash protection.

Coated fabrics provide excellent cold temperature performance with flexibility to -76°C for refrigeration and cryogenic applications. These materials can be easily used to make shield and covers that are assembled with mechanical fasteners. Easily punched or drilled for installation of grommets, or insertion of sheet metal screws or bolts.

**This Product is Available By-The-Yard / Metre: Discounts for full roll purchases
Custom Slitting to Any Width Available**

Two Side Coated Silicone Rubber Fiberglass Cloth:
Light Duty / Medium Duty / Heavy Duty
500°F / 260°C: FlameShield™ High Temperature, Heat & Flame Resistant
Molten Metal SplashGuard™ / Fire Blanket / Welding Blanket / Curtains-Shields



500°F / 260°C continuous rating with weld splatter / molten metal splash protection.
 (700°F / 260°C for 100 hours results in strength loss of 50%)
 2200°F / 1205°C for periods up to 15 minutes and short excursions to 3000°F / 1650°C.

FlameShield™ 2 side silicone rubber coated fibreglass high temperature fabrics: Light Duty			
Part Number	Weight oz/yd²	Roll Width In / cm	Thickness In / mm
TextureCoat™ Fabrics: Consistent coating thickness with light texture finish			
F-FG-SR2L-0960-8.5-SG	8.5	60 / 152	0.009 / 0.23
F-FG-SR2L-1460-15-SG	15	60 / 152	0.014 / 0.36
F-FG-SR2L-1560-18-SG	18	60 / 152	0.015 / 0.38
F-FG-SR2L-1560-18-OR	18	60 / 152	0.015 / 0.38

COLORS: OR = Oxide-Red / SG = Silver Grey. Other colors may available or custom fabricated.
 Available in lengths up to 150 feet / 50 Yards / 45 Metres.

FlameShield™ 2 side silicone rubber coated fibreglass high temperature fabrics: Medium Duty			
Part Number	Weight oz/yd²	Roll Width In / cm	Thickness In / mm
TextureCoat™ Fabrics: Consistent coating thickness with texture finish			
F-FG-SR2M-1760-18-OR	18	60 / 152	0.018 / 0.43
F-FG-SR2M-1760-18-SG	18	60 / 152	0.018 / 0.43
F-FG-SR2M-1960-26-SG	26	60 / 152	0.019 / 0.46

COLORS: OR = Oxide-Red / SG = Silver Grey. Other colors may available or custom fabricated.
 Available in lengths up to 150 feet / 50 Yards / 45 Metres.

F-FG-SR2M-1760-18-OR/SG is designed to meet the rigid requirements of aviation and nuclear applications. Meets UL214 / NFPA-701, NRC Guide 1.36 and MIL-I-24244. Tensile strength 325 lbs/inch warp minimum / 250 lbs/inch fill minimum (ASTM-D-5035); tear strength 60 lbs min warp and fill (ASTM-D-5587); burst strength 600 psi minimum (ASTM-D-3786); flame resistance char length 1/16" max, afterglow 1 second max, flame out 1 second max (ASTM D-6413 & FED 191/5903.2). Weight and thickness as per ASTM-D-3776 & ASTM-D-1777.

FlameShield™ 2 side silicone rubber coated fiberglass fabrics High temperature: Heavy Duty			
Part Number	Weight oz/yd²	Roll Width In / cm	Thickness In / mm
TextureCoat™ Fabrics: Consistant coating thickness with texture finish			
F-FG-SR2H-3260-32-SG	32	60 / 152	0.032 / 0.81
F-FG-SR2H-3260-32-OR	32	60 / 152	0.032 / 0.81
ContourCoat™ Fabrics: Contour coating providing full protection while reducing total weight Excellent Molten Metal Splash Protection but better anti-fray compared to SR1 fabrics (previous page)			
F-FG-SR2H-6040-45-OR *	45	40 / 101	0.060 / 1.52
F-FG-SR2H-6060-45-OR *	45	60 / 152	0.060 / 1.52
F-FG-SR2H-7040-65-OR *	65	40 / 101	0.070 / 1.77
F-FG-SR2H-7060-65-OR *	65	60 / 152	0.070 / 1.77
F-FG-SR2H-12540-92-OR *	96	40 / 101	0.125 / 3.175

COLORS: OR = Oxide-Red / SG = Silver Grey. Other colors may available or custom fabricated.
 Available in lengths up to 150 feet / 50 Yards / 45 Metres. *Available in 25 yard rolls; other colors also available.

These fabrics are used to fabricate sleeves and other shapes to protect hoses, cables and equipment from extreme industrial environments. Can be used to drape over moulds and forms during liquid metal pouring operations to slow the cooling rate of the ingot. Other lighter fabrics are used as high temperature curtains and shields, weld splatter and pyro resistant sleeves and jackets, weather or spray-down / wash-down resistant high temperature fabric for making protective covers, sleeves, jackets, expansion joints. All of these fabrics provide excellent cold temperature performance with flexibility to -76°C for refrigeration and cryogenic applications. Flame Resistance: All fabrics provide 1 second maximum Flame Out and Afterglow; test method FED 191/5903.2.

**These fabrics are available By-The-Yard / Metre: Discounts for full roll purchases
 Custom Slitting To Any Width is Available**

Heat Reflecting Silicone Rubber Sealed Fiberglass Fabric 500°F / 260°C: Dual-Coat™ Aluminum Film One Side / Silicone Rubber One Side High Temperature & Radiant Heat Reflecting with Vapor Barrier



- Heat reflecting side is aluminum film. Suitable for applications involving movement or flexing, such as for high temperature bellows construction.
- Protection from intense radiant heat up to 3000°F.
- Reflects more than 95% of the radiant heat that contacts its surface.
- Silicone Rubber side provides excellent vapor barrier and protection from lubricating oils, wash down, contamination, etc.

Additional Technical Data

Tensile Strength:	Warp: 200 lbs/inch 35.72 kg/cm	Fill: 200 lbs/inch 35.72 kg/cm
Tear Strength:	Warp: 20 lbs 9.07 kg	Fill: 20 lbs 9.07 kg
Burst Strength:	450 psi / 31.5 kg/cm ²	
Flame Resistance:	Char length 1" max / Afterglow 20 seconds max / Flame Out 10 seconds max	

Dual-Coat™ Radiant Heat Reflective Protection Fabric Aluminum Film One Side / Silicone Rubber One Side			
Part Number	Weight oz/yd² / g/m²	Thickness in / mm	Roll width in / mm
F-FG-ALM-SR-1750-17	17 / 578	.017 / .432	50 / 1270
F-FG-ALM-SR-1736-17	17 / 578	.017 / .432	36 / 914

- Full rolls are 50 yards / 150 feet / 45.7 metres long.
- This Product is Available By-The-Yard.
- Discounts for full roll purchases.
- Available as a tape - custom slitting to any width is available.
- Replacement for 3M SRGA2218 / SRGA0208.