NEWTEX

www.newtex.com

NPM | PERFORMANCE MATERIALS











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NEWTEX

NEWTEX PERFORMANCE MATERIALS

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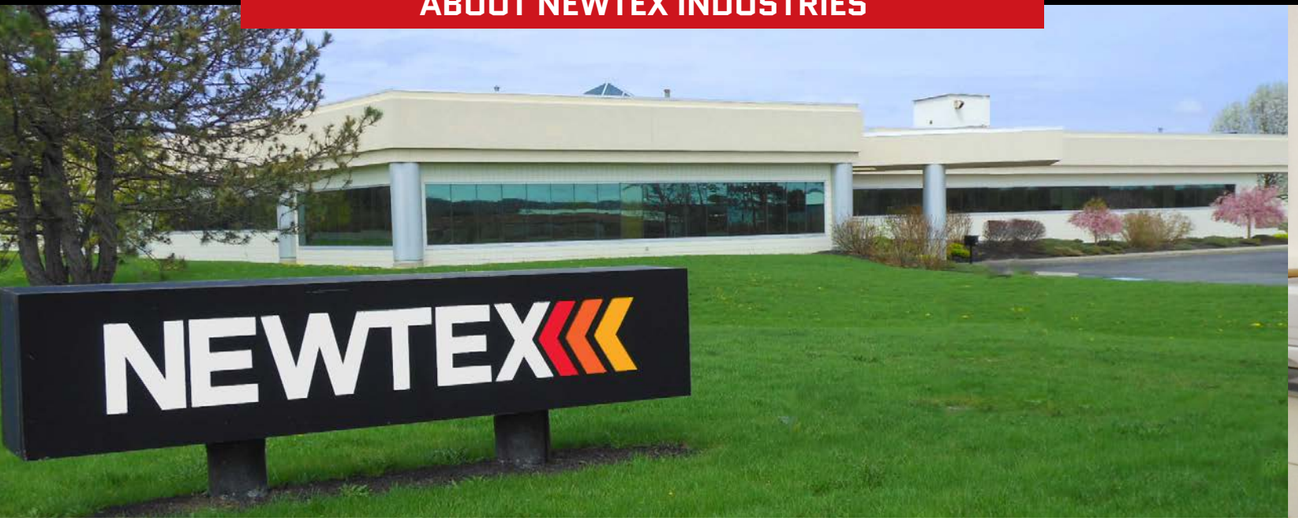

For nearly 40 years, Newtex has been a pioneer and leading global producer of high performance materials and engineered solutions for thermal management and fire protection. Headquartered outside of Rochester, New York, Newtex is an ISO 9001:2008 certified, vertically integrated manufacturer of an impressive portfolio of heat and fire resistant fabrics, tapes, personal protective apparel, and custom high temperature solutions. We are a minority owned, veteran-managed business that has proudly served the US Armed Forces and leading global industries since 1978. Newtex products are proudly made in the USA.

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OUR COMMITMENT TO QUALITY

Innovation. Performance. Protection.

We are committed to exceeding expectations with our world class manufacturing, drive for innovation, and continuous improvement of products and processes. As a result of our commitment to innovation and quality, customers in over 70 countries trust us to protect their crews and equipment from extreme environments.

We deliver innovation, performance, and protection through three business platforms: Newtex Performance Materials (NPM), Newtex Engineered Systems (NES), and Newtex Extreme Protective Apparel (NXP). This catalog is an overview of Newtex Performance Materials. Please visit www.newtex.com to learn more about our other products and services.

COATINGS AND TREATMENTS

Our capabilities include the application of a wide range of high temperature coatings and treatments. In addition to offering our own fabrics with the treatments described on the following pages, we also offer toll lamination services.

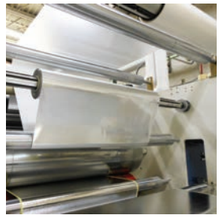
Coatings and treatments can be used to increase thermal performance, boost resistance to vapor, weathering, oil, water, chemicals, abrasion, flexural fatigue and UV radiation. They can also improve handling and ease of fabrication. We can combine coatings or apply advanced engineering and manufacturing to develop a custom solution for your application.

Important Note

If you are interested in ordering a fabric and treatment combination that you cannot find in our product catalog, please contact our Sales team to discuss your options. If you are interested in placing a sizable order, we are able to work with you to find or create a product that meets your needs.

Toll Free: (800) 836-1001 • Phone: (585) 924-9135

COATINGS AND TREATMENTS



Z-Flex® Multilayer Aluminization (MLA)

Z-Flex® MLA provides the highest achievable level of radiant reflectivity, chemical and moisture resistance, and thermal protection. The aluminization process uses the latest aerospace thin film deposition technology to apply fine, highly reflective aluminum particles to both sides of a high temperature polymer film barrier which is then chemically and mechanically bonded to a premium substrate fabric. This advanced aluminized material reflects 95% of radiant heat and will not delaminate under even the most demanding flexing conditions.

Z-Flex® Aluminum Foil Lamination (AF)

Z-Flex® Aluminum Foil Lamination offers the same radiant heat protection as Z-Flex Multilayer Aluminization (MLA) at a lower cost. Z-Flex MLA offers superior durability and flex-bond, but Z-Flex AF is typically suitable for applications where the fabric will not be subjected to repetitive stretching, twisting, or vibration.

ZetexPlus® Advanced Vermiculite

ZetexPlus® is a proprietary vermiculite coating that allows heat to dissipate evenly across the surface of a fabric, significantly boosting its temperature resistance. Our ZetexPlus formulation features larger platelets and more coverage than competitive vermiculite coatings, allowing for better dissipation of heat. The formula's organic adhesion promoter ensures a strong bond between the fabric and coating so that the coating provides more protection over a longer product life.

Z-Block™

Our Z-Block™ coating is exceptionally resistant to fire, smoke, and external weather conditions. Z-Block tolerates temperatures up to 1800°F (980°C) and is commonly used for fire and smoke curtains, fire containment covers, and other custom heat shields, blankets, and pads.

Z-Shield™ Acrylics

Z-Shield™ acrylic coatings are ideal for fabrics used in welding and hot works applications. The coating is water based and will not produce hazardous out-gassing. Newtex offers several Z-Shield coatings in a variety of colors.

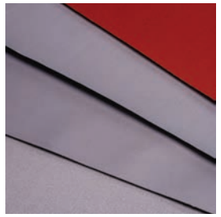
COATINGS AND TREATMENTS

Z-Shield™ Hullboard Facing (HB)

Fabrics coated with Z-Shield™ HB are designed for use as hullboard facing. Z-Shield™ HB creates a durable, paint-able surface with low flame spread and smoke generation. It meets the environmental standards set forth by the U.S. Navy, and it resists moisture and mildew. Z-Shield™ HB resists temperatures up to 1000°F (540°C).

Z-Tuff™ PTFE

Polytetrafluoroethylene (PTFE) is a non-stick coating. Teflon®* is one of the most widely recognized brands of PTFE. The coating improves a fabric's resistance to abrasion, weather, water, oil, and chemicals. PTFE can withstand temperatures up to 550°F (290°C), after which the coating will start to degrade.

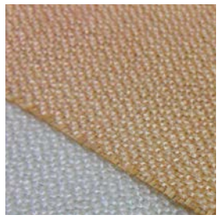


Z-Tuff™ Silicone

Our silicone coating is appropriate for fabrics that will be exposed to sparks and slag. Silicone provides superior resistance to abrasion, weather, water, chemicals, oil, and UV rays. Although silicone is not as water resistant as PTFE, it does have superior UV resistance. The silicone coating can withstand temperatures up to 500°F (260°C), after which the coating will start to degrade.

Color Dyes

Black, yellow, red, blue, green, and orange color treatments are available. Color treated fabrics are used in a variety of industries for aesthetic or identification purposes. Color treatment does not significantly change the heat rating or physical properties of a fabric.



Heat Cleaned (HC)

Heat Cleaned fabrics, sometimes known as **heat treated** or **carmelized** fabrics, are treated at high temperatures to remove broken filaments and manufacturing finishes like binders and lubricants. The process improves weave stability while reducing skin irritation and airborne fibers. Removing manufacturing finishes also creates stronger bonding points for lamination and coating and reduces the amount of smoke that the fabric will generate when exposed to extreme temperatures.

**Teflon® is a registered trademark of Dupont.*

COATINGS AND TREATMENTS

Fabrication Treatment (FAB)

Fabrication Treatment is an acrylic coating applied to one side of the fabric. The treatment is designed to improve weave stability and abrasion resistance, prevent fraying, and make the fabric easier to cut.

Regular Treatment (RT)

Regular Treatment is also an acrylic coating, but it is lighter than the Fabrication Treatment. It is applied to both sides of the fabric and used to improve weave set and reduce the skin irritation sometimes associated with fiberglass fabrics. Regular treatment does not impact the strength of a fabric.

Oil and Water Repel (OWR)

The Oil and Water Repel coating is a lightweight protective coating applied to fabrics to prevent wicking and improve resistance to oil and water. It also improves a fabric's abrasion resistance.

Rewettable (REW)

The rewettable coating is an inorganic clay based coating that can be wetted at the application site and then dries hard to form a barrier. The coating can tolerate temperatures up to 1000°F (540°C). It is commonly used in encapsulation, barriers, and asbestos abatement.

Wire Reinforced

Wire reinforced fabrics are made by plying stainless steel wires with fiberglass yarns. Wire reinforced fabrics have greater resistance to puncture and wear, they are stronger, and they dissipate heat more effectively. The wire keeps the weave strong, so these fabrics are ideal for high vibration environments.

STYLE GUIDE: PERFORMANCE MATERIALS

STANDARD ROLLS

- All Newtex Performance Materials are sold in 50 yard rolls with the exception of Z-Fil F-401 and Z-Fil F-610, which are sold in 200 yard rolls.
- Tapes are sold in 100' rolls with the exception of P-3900 and P-3901 which come in 50' rolls. Contact us or visit our website for more information.

FABRIC TYPES

The letters below are incorporated into Newtex's style numbers in order to communicate fabric type. For example, the "A" in product Zetex A-600 indicates that the base fabric is premium grade texturized glass.

A: Premium grade texturized glass. Made with 6 micron yarn for superior strength and abrasion resistance.

C: Commercial grade texturized glass. Made with 9 micron yarn for superior quality and performance in industrial applications.

F: Filament fiberglass. This yarn is not subject to the texturization process so it offers a better drape and smoother finish.

K: Premium Para-Aramid fabrics. Allows for high temperature resistance and superior cut and abrasion performance.

P: Polybenzimidazole fiber, commonly known as PBI®*, is a strong and flexible fiber that provides flame and thermal protection.

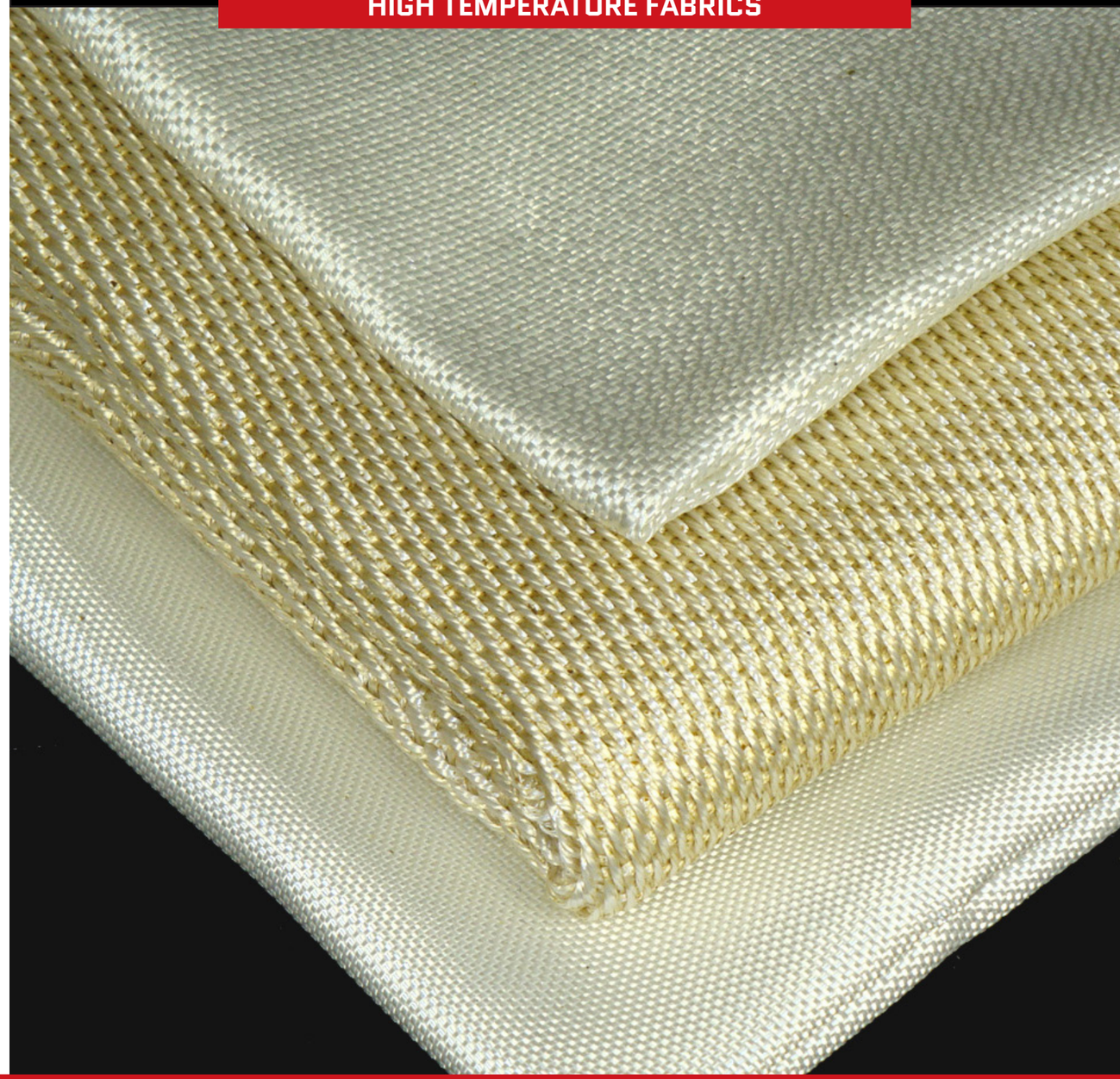
O: Oxidized Polyacrylonitrile, commonly known as OPAN, is a fire resistant fabric with notable chemical resistance.

R: Rayon. A lightweight and comfortable fabric with superior molten metal resistance.

**PBI® is a registered trademark of PBI Performance Products, Inc.*

NPM | Performance Materials

HIGH TEMPERATURE FABRICS



NEWTEX

Z-FLEX® MULTILAYER ALUMINIZATION

Z-Flex® Multilayer Aluminized (MLA) technology provides unmatched durability and flex-bond while reflecting up to 95% of radiant heat. It is specifically designed for protective apparel and heat shields used in environments that pose serious fire risk or safety hazards associated with hot works or radiant heat sources.

Z-Flex® Aluminum Foil (AF) is an economical alternative to Z-Flex® MLA™. It is a laminate that provides basic heat reflection, chemical resistance and moisture resistance at a lower cost. However, foil is not suitable for applications in which the fabric will be subject to repetitive stretching, twisting, or vibration.

Z-Flex® Silver™ is a revolutionary multilayer aluminized fabric system specifically engineered to provide superior radiant protection, insulation, and durability to front line Aircraft Rescue & Firefighting (ARFF) personnel and industrial firefighters. The fabric combines Z-Flex® Multilayer Aluminization (MLA™) with a patented 3D Mock-Knit™ technology. The Mock-Knit™ design combines the strength and insulation of a woven fabric with the comfort and drape of a knit.

Z-Flex Silver is available with two different base fabric options. Z-Flex Silver P-202 is an **NFPA 1971:2013 Certified** fabric that features a Mock-Knit PBI® base for greater temperature resistance. Z-Flex Silver K-252 features a Mock-Knit para-aramid base for additional abrasion resistance.

Common Applications

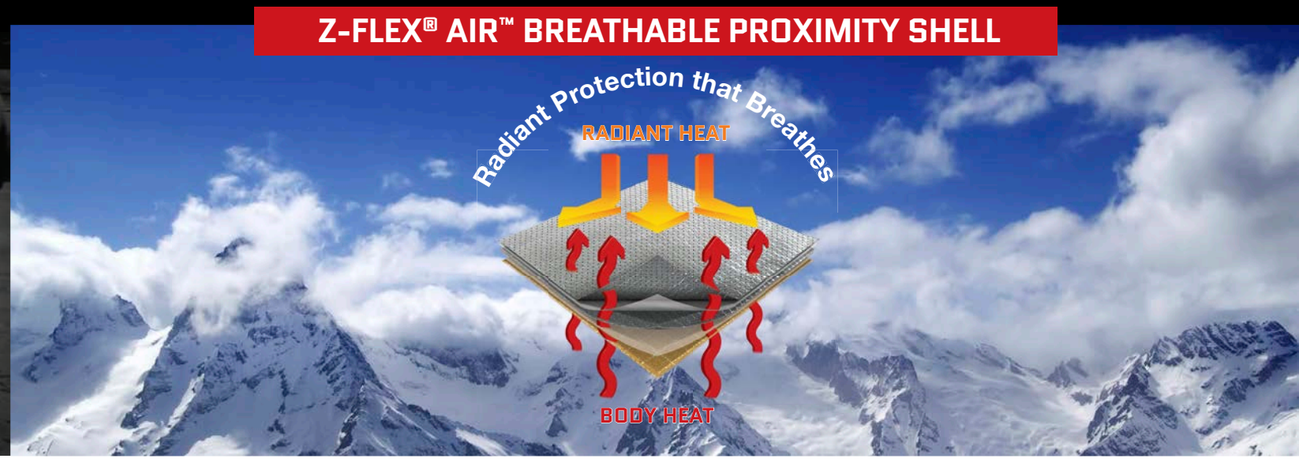
Blankets, Exhaust Wraps, Heat Shielding, Insulation Facing, Gasketing & Sealing, Fire Protection, Personal Protective Equipment & Apparel (PPE)

Relevant Industries

Automotive & Transportation, Foundries, Glass & Casting Operations, Military, Defense & Homeland Security, Petrochemical & Refinery, Power Generation, Shipbuilding & Marine

** PBI® is a registered trademark of PBI Performance Products, Inc.*

Z-FLEX® AIR™ BREATHABLE PROXIMITY SHELL



Proximity gear is intended to protect from radiant heat, however, in hot ambient environments, traditional aluminized proximity gear is linked to increased risk of heat stress. Z-Flex® Air™, the first ever breathable aluminized fabric, is designed to keep you cool, comfortable, productive, and protected from hot ambient environments. We use a proprietary process to optimize the placement, pattern, and dimensions of micro-perforations to create a breathable barrier that offers 1.6x the Total Heat Loss (THL) and all of the same radiant heat protection as standard Z-Flex® Multi-Layer Aluminized fabrics. Z-Flex® Silver™ Air™ P-202 is NFPA 1971:2013 component certified.

Benefits of Z-Flex® Air™

- Breathability: Body heat and sweat escapes through the proprietary micro-perforated outer shell.
- Radiant Heat Protection: Z-Flex® Air offers exactly the same radiant heat protection you have come to expect from standard Z-Flex® fabrics.
- Increased Abrasion Resistance: The micro-perforation process creates a textured layer that helps protect the aluminized surface from abrasion.
- Improved Bonding: The micro-perforation process creates a mechanical bond that works with the adhesive's chemical bond to further reduce the risk of de-lamination.

Z-Flex® MLA, Z-Flex® Silver, & Z-Flex® Air:

Max. Direct Contact:	350°F (175°C)
Ambient Temperature Rating:	700-1200°F (400-650°C)*
Total Flame Rating:	2000°F (1095°C)
Radiant Temperature Rating:	3000°F (1650°C)

Z-Flex® AF:

Max. Direct Contact:	1000°F (540°C)
Ambient Temperature Rating:	1000°F (540°C)
Total Flame Rating:	Not Intended for Total Flame
Radiant Temperature Rating:	3000°F (1650°C)

**The ambient temperature rating varies depending on the base fabric beneath the aluminization.*

STANDARD Z-FLEX® ALUMINIZED PRODUCTS

Z-Flex® Multilayer Aluminized Filament Fiberglass

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100176	Z-Flex F-407	15.0	509	15	0.38	58	147
1100171	Z-Flex F-628	8.0	271	8	0.20	58	147
1100174	Z-Flex F-781	11.0	373	13	0.33	58	147
1100178	Z-Flex F-824	27.0	915	24	0.61	40	102

Z-Flex® Multilayer Aluminized Texturized Fiberglass

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100122	Z-Flex A-302	13.0	441	23	0.58	58	147
1100124	Z-Flex A-601	21.0	712	31	0.81	58	147
1100127	Z-Flex A-801	27.0	915	48	1.22	40	102
1100293	Z-Flex A-802	27.0	915	40	1.02	58	147

Z-Flex® Multilayer Aluminized Silica

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100199	Z-Flex F-605 Silica	22.0	746	28	0.71	40	102
1100302	Z-Flex F-1105 Silica	34.0	1153	46	1.17	40	102

Z-Flex® Multilayer Aluminized Rayon

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100304	Z-Flex R-480 Herringbone	15.0	509	30	0.76	40	102
1100310	Z-Flex R-540 Herringbone	17.0	576	36	0.91	40	102

Z-Flex® Multilayer Aluminized Aramid

Item Number	Style	Weight		Thickness		Available Widths	
		oz/yd²	g/m²	mils	mm	inches	cm
1100185	Z-Flex K-270	10.0	339	21	0.53	58	147
1100184 / 1100258	Z-Flex K-570 Core Spun	19.0	644	57	1.45	40 / 58	102 / 147
1100307 / 1100291	Z-Flex K-700 Core Spun	22.0	746	60	1.52	40 / 58	102 / 147
1100213	Z-Flex K-750 Core Spun	23.0	780	64	1.63	40	102

Z-Flex materials are sold in 50 yard rolls (45.72 m).
Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.

STANDARD Z-FLEX® ALUMINIZED PRODUCTS

Z-Flex® Multilayer Aluminized OPAN

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100305	Z-Flex O-250 Twill	9.4	319	18	0.46	58	147
1100214	Z-Flex O-310 OPAN/Aramid	10.0	339	24	0.61	58	147
1100314	Z-Flex O-422 OPAN/Aramid	14.3	485	45	1.14	58	147
1100312	Z-Flex O-500 OPAN/Aramid	16.0	542	42	1.07	40	102
1100313	Z-Flex O-505 OPAN/Aramid	16.0	542	42	1.07	40	102

Z-Flex® Aluminum Foil

Item Number	Style	Thickness of Foil		Weight		Thickness		Width	
		mils	mm	oz/yd²	g/m²	mils	mm	inches	cm
1100123	Z-Flex AF A-600 (MIL-Spec)**	1.0	0.025	20.5	695	35	0.89	60	152
2150090	Z-Flex AF F-628	0.7	0.018	8.0	271	8	0.20	60	152
1100154	Z-Flex AF A-801	1.0	0.025	27.0	915	60	1.52	40	102
1100166	Z-Flex AF A-1201	3.0	0.076	40.0	1356	75	1.90	60	152

Z-Flex® Silver™

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100265	Z-Flex P-202 PBI/ Aramid*	7.4	251	24	0.61	58	147
1100289	Z-Flex K-252 Para-Aramid*	10.0	339	31	0.79	58	147

Z-Flex® Air Breathable Aluminization

Item Number	Style	Weight		Thickness		Available Widths	
		oz/yd²	g/m²	mils	mm	inches	cm
1100325	Z-Flex Silver Air P-202*	7.4	250	24	0.61	58	147
1100328	Z-Flex Silver Air K-252	10.0	339	31	0.79	58	147
1100314	Z-Flex Air O-422	14.5	492	43	1.09	58	147

** Z-Flex Silver P-202, Z-Flex Silver K-252, and Z-Flex Silver Air P-202 are NFPA 1971:2013 component certified.*
*** Z-Flex AF A-600 meets the requirements of Military Specification MIL-C-20079H.*

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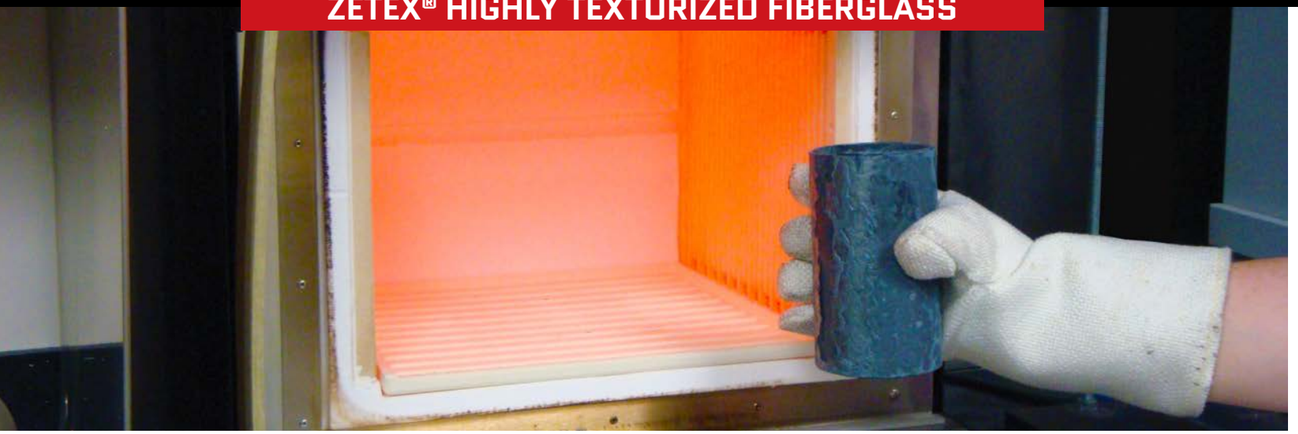
ZETEX® HIGHLY TEXTURIZED FIBERGLASS



Zetex® fabrics are woven from highly texturized continuous filament yarn that has been treated with a proprietary texturization process. Zetex is a superior insulator and used widely in applications requiring thermal and acoustic insulation or protection from heat and fire.

We offer Zetex® fabrics in many styles with a variety of coating and treatment options. Premium Grade Zetex Fabrics are woven from 6 micron yarn and offer superior strength and abrasion resistance while Commercial Grade Zetex Fabrics are woven from 9 micron yarn and are considered a cost effective alternative to Premium Zetex. Zetex is made from inorganic materials and will not produce hazardous out-gassing.

Bal Dixit, the founder of Newtex Industries, invented Zetex® in 1978. It was the first safe and commercially viable alternative to asbestos for high temperature applications.

Common Applications

Gloves & Mitts, Blankets, Covers, Heat Shielding, Insulation, Jacketing, Maintenance, Welding

Relevant Industries

Automotive, Construction, Foundries, Glass & Casting Operations, Military, Defense & Homeland Security, Petrochemical & Refinery, Power Generation, Shipbuilding & Marine, Welding & Fire Protection

Continuous Operating Temperature Rating:
1000°F (540°C)

Intermittent Temperature Rating:
1300°F (700°C)

STANDARD ZETEX® PRODUCTS

Premium Grade (A) Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100001	Zetex A-300	8.5	288	20	0.51	60	152
1100004	Zetex A-400	12.8	434	32	0.81	60	152
1100006 / 1100008	Zetex A-600	17.7	600	33	0.84	40 / 60	102 / 152
1100010 / 1100011	Zetex A-800	24.0	814	55	1.40	40 / 60	102 / 152
1100329	Zetex A-901	28.0	949	50	1.27	60	152
1100015 / 1100229	Zetex A-1000	28.0	949	65	1.65	40 / 60	102 /152
1100016	Zetex A-1101	32.0	1085	65	1.65	60	152
1100018 / 1100019	Zetex A-1200	35.0	1187	80	2.03	40 / 60	102 / 152
1100020	Zetex A-1201	35.0	1187	80	2.03	60	152
1100224	Zetex A-1210	42.0	1424	78	1.98	60	152
1100021 / 1100022	Zetex A-2200	57.0	1933	123	3.12	40 / 60	102 / 152
1100023	Zetex A-3400	100.0	3391	250	6.35	60	152

Commercial Grade (C) Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100031	Zetex C-600	17.7	600	35	0.89	60	152
1100037 / 1100039	Zetex C-800	24.0	814	50	1.27	40 / 60	102 / 152
1100041 / 1100042	Zetex C-1000	30.0	1017	60	1.52	40 / 60	102 / 152
1100043	Zetex C-1200	35.0	1187	75	1.90	40	102
1100047	Zetex C-1350	40.0	1356	80	2.03	40	102

**Zetex materials are sold in 50 yard rolls (45.72 m).*
***Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Color Treated Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100259	Zetex A-400 Red	13.0	441	28	0.71	60	152
1100203	Zetex A-600 Red	17.7	600	33	0.84	60	152
1100250	Zetex A-600 Blue	17.7	600	33	0.84	60	152
1100079	Zetex A-800 Orange	24.0	814	55	1.40	40	102
1100269	Zetex A-1000 Orange	29.0	983	55	1.40	40	102
1100115 / 1100192	Zetex C-800 Orange	23.0	780	48	1.22	40 / 60	102 / 152

Heat Cleaned Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100002	Zetex A-300 HC (MIL-Spec)*	8.5	288	20	0.51	60	152
1100005	Zetex A-400 HC (MIL-Spec)*	12.8	434	32	0.81	60	152
1100007 / 1100009	Zetex A-600 HC (MIL-Spec)*	17.7	600	33	0.84	40 / 60	102 / 152
1100330	Zetex A-901 HC	28.0	949	50	1.27	60	152
1100024	Zetex A-3400 HC	100.0	3391	250	6.35	60	152
1100032	Zetex C-600 HC	17.7	600	35	0.89	60	152
1100038 / 1100040	Zetex C-800 HC	24.0	814	50	1.27	40 / 60	102 / 152
1100044	Zetex C-1200 HC	35.0	1187	75	1.90	40	102

Fabrication Treated Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100089	Zetex A-1101 FAB	35.0	1187	58	1.47	60	152

Zetex A-300 HC, Zetex A-400 HC and Zetex A-600 HC meet the requirements of Military Specification MIL-C-20079H.

COATED & TREATED ZETEX® FABRICS

Regular Treatment Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100074	Zetex A-600 RT	17.7	600	33	0.84	40	102
1100078 / 1100080	Zetex A-800 RT	24.0	814	55	1.40	40 / 60	102 / 152
1100086	Zetex A-1000 RT	28.0	949	57	1.45	40	102
1100088	Zetex A-1101 RT	32.0	1085	59	1.50	60	152
1100093 / 1100094	Zetex A-1200 RT	33.0	1119	66	1.68	40 / 60	102 / 152
1100097	Zetex A-1201 RT	35.0	1187	80	2.03	60	152
1100132	Zetex A-1220 RT (wire)	35.0	1187	75	1.90	60	152
1100098 / 1100099	Zetex A-2200 RT	58.0	1967	115	2.92	40 / 60	102 / 152
1100244	Zetex C-1350 RT	40.0	1356	72	1.83	40	102

Oil and Water Resistant Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100068	Zetex A-300 OWR	9.0	305	20	0.51	60	152
1100075	Zetex A-600 OWR	18.0	610	30	0.76	60	152

Rewettable Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100072	Zetex A-400 REW (MIL-Spec)*	22.0	746	33.4	0.85	60	152

Wire Reinforced Zetex® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100049	Zetex A-820 with Wire (MIL-Spec)**	24.0	814	45	1.14	60	152
1100326	Zetex A-920 with Wire	26.0	882	45	1.14	60	152
1100054	Zetex A-1220 with Wire	34.0	1153	75	1.90	60	152
1100241	Zetex A-1230 with Wire	40.0	1356	73	1.85	60	152

** Zetex A-400 REW meets the requirements of Military Specification MIL-C-20079H.*
*** Zetex A-820 with Wire meets the requirements of Military Specification HH-P-31F.*
**** Zetex materials are sold in 50 yard rolls (45.72 m).*
***** Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

NEWTEX

ZETEXPLUS® VERMICULITE TREATED GLASS

ZetexPlus® fabrics are woven from highly texturized continuous filament yarns and treated with a proprietary vermiculite-based coating. The proprietary coating allows heat to dissipate evenly across the surface of the fabric, significantly boosting its temperature rating and abrasion resistance.

Newtex's proprietary vermiculite coating outperforms competitive products. Our coating has larger platelets and a greater percentage of solids than competitive coatings, meaning that ZetexPlus® has better coverage and more effectively disperses heat. Our coating also features an organic adhesion promoter that improves the bond between the platelets and the fabric. The adhesion promoter reduces flaking and wear for a longer product life, and it improves the fabric's resistance to moisture.

Continuous Operating Temperature Rating:

1500°F (815°C)

Intermittent Temperature Rating:

2000°F (1095°C)

Common Applications

Heat shielding, Insulation, Jacketing, Maintenance, Personal Protective Equipment & Apparel (PPE), Fire Protection

Relevant Industries

Architectural, Foundries, Glass & Casting Operations, Petrochemical & Refinery, Power Generation, Shipbuilding & Marine, Welding

STANDARD ZETEXPLUS® PRODUCTS

Premium Grade (A) ZetexPlus® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100070	ZetexPlus A-300	9.0	305	23	0.58	60	152
1100073	ZetexPlus A-400	13.0	441	28	0.71	60	152
1100076 / 1100077	ZetexPlus A-600	18.0	610	30	0.76	40 / 60	102 / 152
1100253 / 1100081	ZetexPlus A-800	24.0	814	43	1.09	40 / 60	102 / 152
1100296	ZetexPlus A-802	25.0	848	36	0.91	60	152
1100083	ZetexPlus A-900	24.0	814	50	1.27	60	152
1100087	ZetexPlus A-1000	30.0	1017	55	1.40	40	102
1100090	ZetexPlus A-1101	33.0	1119	62	1.57	60	152
1100095 / 1100096	ZetexPlus A-1200	33.0	1119	61	1.55	40 / 60	102 / 152
1100282	ZetexPlus A-1201	37.0	1255	75	1.90	60	152
1100226	ZetexPlus A-1210	40.0	1356	68	1.73	60	152
1100271	ZetexPlus A-1350	43.0	1458	80	2.03	40	102
1100100 / 1100101	ZetexPlus A-2200	60.0	2034	96	2.44	40 / 60	102 / 152

Color Treated ZetexPlus® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100082	ZetexPlus A-800 Black	24.0	814	48	1.22	60	152
1100227	ZetexPlus A-1210 Black	44.0	1492	73	1.85	60	152

Fabrication Treated ZetexPlus® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100091	ZetexPlus A-1101 FAB	35.0	1187	58	1.47	60	152

Wire Reinforced ZetexPlus® Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100128	ZetexPlus A-820 (wire)	26.0	882	53	1.35	60	152
1100133	ZetexPlus A-1220 (wire)	36.0	1221	70	1.78	60	152
1100242	ZetexPlus A-1230 (wire)	41.0	1390	70	1.78	60	152
1100243	ZetexPlus A-1230 Black (wire)	41.0	1390	70	1.78	60	152

**ZetexPlus materials are sold in 50 yard rolls (45.72 m).*
***Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Z-BLOCK™ FIRE & SMOKE RESISTANT FABRICS

Z-BLOCK™ FIRE & SMOKE RESISTANT FABRICS

Z-Block™ fabrics are high temperature polymer coated materials treated with a proprietary formulation of fire retardants. Z-Block offers exceptional resistance to fire, smoke, and the outdoor elements. The Z-Block coating is available on a range of base fabrics, including texturized fiberglass, filament fiberglass, and wire reinforced fiberglass. Both the coating and base fabrics are formulated with inorganic materials and will not produce hazardous outgassing.

Z-Block fabrics are available with an optional **silicone overcoat (SOC)**. The coating creates a smoother finish that protects the fabric from abrasion, improves water tightness, and increases weather and UV resistance.

Each piece of yarn used to weave **wire reinforced** Z-Block fabrics has been reinforced with two stainless steel wires. Wire reinforced fabrics offer superior strength and abrasion and puncture resistance. Wire reinforced Z-Block is ideal for fabricating turbine blankets and other jacketing that will be subject to vibration, abrasion, or repetitive movement.

Peak Temperature Rating: 1800°F (980°C)

Testing

- ASTM D6413: Vertical Flame Resistance
- ASTM E-84: Surface Flame Spread & Smoke Density
- BSS 7239: Toxicity of Products of Combustion
- FAR 25, Appendix F, Part III & IV: Flame Penetration Resistance & Smoke Density

Common Applications

Fire Containment Covers (FCC's), Fire Containment Bags for Personal Electronic Devices (PED's), Static or Automatic Fire & Smoke Curtains, Fire Shields for Buildings & Heavy Equipment, Cold Side Jacketing for Vessels and Tanks, Custom Multi-Layer Pads and Blankets

Relevant Industries

Air Transport, Shipping, Automotive & Transportation, Warehouse & Storage Facilities, Power Generation

Z-Block™

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100268	Z-Block F-407	15.0	509	17	0.43	60	152
1100309	Z-Block F-407 SOC	15	509	17	0.43	60	152
1100204	Z-Block F-824	29.0	983	38	0.97	52	132
1100327	Z-Block A-920 (wire)	34.0	1153	52	1.32	60	152
1100303	Z-Block A-2200 (1 Side)	62.0	2102	125	3.17	60	152
1100193	Z-Block A-3400 (1 Side)	105.0	3560	250	6.35	60	152

**Z-Block materials are sold in 50 yard rolls (45.72 m). **Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Z-TUFF™ PTFE & SILICONE JACKETING FABRICS

Our **PTFE** and **silicone** coated products are commonly used as the outer layer in fabricated systems that protect insulated pipes and equipment from the environment. These fabrics are also frequently used in products that protect workers and facilities from heat and fire. They offer superior resistance to chemicals, abrasion, moisture,and heat. The PTFE coating provides added toughness and chemical resistance while the silicone coating provides better UV, water, and abrasion resistance.

Peak Temperature Ratings:

PTFE: 600°F (315°C), Silicone: 500°F (260°C)

Note: *The peak temperature ratings specified are the temperatures at which the fabric's coating will start to degrade. The glass base fabric can tolerate temperatures up to 1000°F (540°C). The silicone coating is also available in red by special request with minimum order requirements.*

Common Applications

Outer layer of covers or blankets that may be exposed to strong weather, moisture, or abrasive materials, Insulation & Lagging

Relevant Industries

Architectural & Construction, Automotive & Transportation, Petrochemical & Refinery, Power Generation, Welding & Fire Protection

PTFE and Silicone Coated Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100145	Z-Tuff F-500 Silver Silicone	15.0	509	18	0.46	60	152
1100146	Z-Tuff F-575 Silver Silicone	17.0	576	18	0.46	60	152
1100151	Z-Tuff F-1085 Red Silicone	29.0	983	38	0.97	60	152
1100152	Z-Tuff F-1085 Silver Silicone	29.0	983	38	0.97	60	152
1100149	Z-Tuff F-614 PTFE	14.0	475	12	0.30	60	152
1100150	Z-Tuff F-617 PTFE	18.0	610	15	0.38	60	152
1100249	Z-Tuff A-820 (Wire) Silver Silicone (1 side)	33.0	1119	55	1.40	60	152

**Z-Tuff materials are sold in 50 yard rolls (45.72 m). **Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

PARA-ARAMID

Para-aramid fabrics, which include the brand names Kevlar® and Twaron®, are recognized for their temperature and abrasion resistance. We offer 100% spun Para-Aramid and core spun (CS) Para-Aramid & fiberglass fabrics.

Our core spun yarns are made by covering a fiberglass core yarn with a para-aramid sheath to combine the abrasion resistance of para-aramid with the heat resistance of fiberglass. Core spun fabrics are ideal for environments where extreme heat and sharp objects, like glass, are both factors.

Peak Temperature Rating:

750°F (400°C)

Common Applications

Garments, Personal Protective Equipment and Apparel, Welding Blankets & Pads

Relevant Industries

Welding, Fabrication, Foundries, Metal Working

Para-Aramid Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1150185	K-270 Spun Twill Aramid	8.0	271	23	0.58	60	152
1100183	K-570 Core Spun Aramid	18.0	610	67	1.70	40	102
1100290	K-700 Core Spun Aramid	20.5	695	67	1.70	60	152

**Kevlar® is a registered trademark of Dupont. Twaron® is a registered trademark of Teijin Aramid BV .*
***Para-aramid materials are sold in 50 yard rolls (45.72 m).*
****Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Z-SHIELD™ WELDING FABRICS

Z-Shield™ acrylic welding fabrics are designed for environments where sparks, molten metal splatter, and hot works operations pose a fire hazard. Z-Shield is available in Silver, Black, Gold, Salmon, or Hullboard (HB) Facing. Each coating offers unique strengths. Z-Shield is composed of non-organic materials and will not produce hazardous out-gassing.

Z-Shield™ Silver: The Z-Shield acrylic coating offers good abrasion resistance while the silver pigment has reflective properties that boost the fabric's radiant temperature resistance. Z-Shield Silver fabrics are only coated on one side. The silver side of the fabric should face the heat source.

Z-Shield™ Gold or Black: Z-Shield Black and Gold both feature a texturized fiberglass base and acrylic coating. The texturized base fabric creates a heavy and sturdy fabric, and the acrylic coating improves abrasion resistance and allows for a reduction in airborne fibers.

Z-Shield™ Salmon: Because of its filament fiber base, Z-Shield Salmon is quite flexible, easy to drape and handle, and highly reusable. The acrylic coating gives it good abrasion resistance and helps reduce airborne fibers.

Z-Shield™ HullBoard (HB) Facing: Designed for use with Naval ship hullboard or as lagging to provide acoustic & thermal insulation and fireproofing, Z-Shield HB creates a durable, paint-able surface with low flame spread and smoke generation. It also meets the environmental standards set forth by the US Navy.

Peak Temperature Rating:

1000°F (540°C)

Testing:

In response to NFPA 51B, the Z-Shield™ fabrics have been tested to meet ANSI/FM 4950. These tests are intended to evaluate materials being used in hot works operations.

Common Applications

Blankets, Covers, Maintenance, Insulation and Lagging, Fire Protection

Relevant Industries

Architectural & Construction, Foundries, Glass & Casting Operations, Military, Defense & Homeland Security, Petrochemical & Refinery, Power Generation, Shipbuilding & Marine, Welding

STANDARD Z-SHIELD™ PRODUCTS

Z-Shield™ Filament Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100143 / 1100144	Z-Shield F-407 Salmon	14.0	475	17	0.43	38 / 60	97 / 152
1100211	Z-Shield F-407 Black	14.0	475	17	0.43	60	152
1100219	Z-Shield F-475 Salmon	14.0	475	17	0.43	38	97

Premium Grade (A) Z-Shield™ Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100306	Z-Shield A-900 Silver, FAB	31.0	1051	60	1.52	60	152
1100092	Z-Shield A-1101 Silver (1 side)	32.0	1085	65	1.65	60	152
1100134	Z-Shield A-1220 Silver with Wire (1 side)	39.0	1322	72	1.83	60	152

Commercial (C) Z-Shield™ Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100205 / 1100206	Z-Shield C-800 Black	30.0	1017	48	1.22	40 / 60	102 / 152
1100200 / 1100201	Z-Shield C-800 Gold	30.0	1017	48	1.22	40	102 / 152

Z-Shield™ Hullboard Facing Fabrics

Z-Shield F-407 HB meets the requirements of Military Specification MIL-C-20079H.

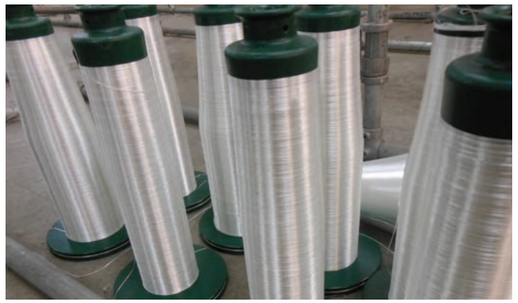
Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100138	Z-Shield F-407 HB	13.5	458	19	0.48	24	61
1100139	Z-Shield F-407 HB	13.5	458	19	0.48	30	76
1100140	Z-Shield F-407 HB	13.5	458	19	0.48	36	91
1100235	Z-Shield F-407 HB	13.5	458	19	0.48	40	102
1100141	Z-Shield F-407 HB	13.5	458	19	0.48	48	122
1100164	Z-Shield F-407 HB (Perforated)	13.5	458	19	0.48	24	61
1100142	Z-Shield F-407 HB (Perforated)	13.5	458	19	0.48	48	122

**Z-Shield materials are sold in 50 yard rolls (45.72 m).*
***Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Z-FIL™ FILAMENT GLASS FABRICS

Z-Fil™ fabrics are made with continuous filament yarns and commonly coated with silicone, PTFE, or other elastomers to enhance performance. Z-Fil is also commonly used as an economical facing or stress relieving material.

Peak Temperature Rating: 1000°F (540°C)



Common Applications

Welding Blankets, Curtains, Stress Relief, Insulation & Lagging, Process Equipment

Relevant Industries

Architectural & Construction, Foundries, Glass & Casting Operations, Petrochemical & Refinery, Power Generation, Welding & Fire Protection

Z-Fil™ Filament Glass Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100188 / 1100063	Z-Fil F-401*	2.8	95	4	0.10	38 / 50	97 / 127
1100209 / 1100210 / 1100064	Z-Fil F-407	12.7	431	17	0.43	38.5 / 50 / 60	98 / 127 / 152
1100175	Z-Fil F-407 OWR	13.5	458	19	0.48	60	152
1100065	Z-Fil F-610*	2.4	81	4	0.10	38	97
1100236	Z-Fil F-628	6.0	203	7	0.18	60	152
1100172	Z-Fil F-781**	8.65	293	12	0.30	63	160
1100066	Z-Fil F-824	25.0	848	26	0.66	40	102

**Z-Fil F-401 and F-610 are sold in 200 yard rolls (182.88 m). All other materials are sold in 50 yard rolls (45.72 m).*
***Z-Fil F-781 meets the requirements of Military Specification MIL-C-20079H.*
****Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

Z-SIL™ SILICA FABRICS

Z-Sil™ silica fabrics are woven from yarns that are greater than 96% silica, for superior protection from extreme heat and fire. The fabric offers great burn-through protection and is ideal for stress relieving, stainless steel welding, and equipment protection. Z-Sil is treated with an abrasion resistant (AR) coating for added strength. The coating is inorganic and will not produce toxic out-gassing.

Common Applications

Welding Blankets, Curtains, Stress Relief

Relevant Industries

Architectural & Construction, Foundries, Glass & Casting Operations, Petrochemical & Refinery, Power Generation, Welding & Fire Protection

Peak Temperature Rating:
2300°F (1260°C)

Z-Sil™ Silica Glass Fabrics

Item Number	Style	Weight		Thickness		Width	
		oz/yd²	g/m²	mils	mm	inches	cm
1100148	Z-Sil F-605 AR (MIL-Spec)*	18.0	610	28	0.71	36	91
1100153	Z-Sil F-1105 AR (MIL-Spec)*	35.0	1187	51	1.30	36	91

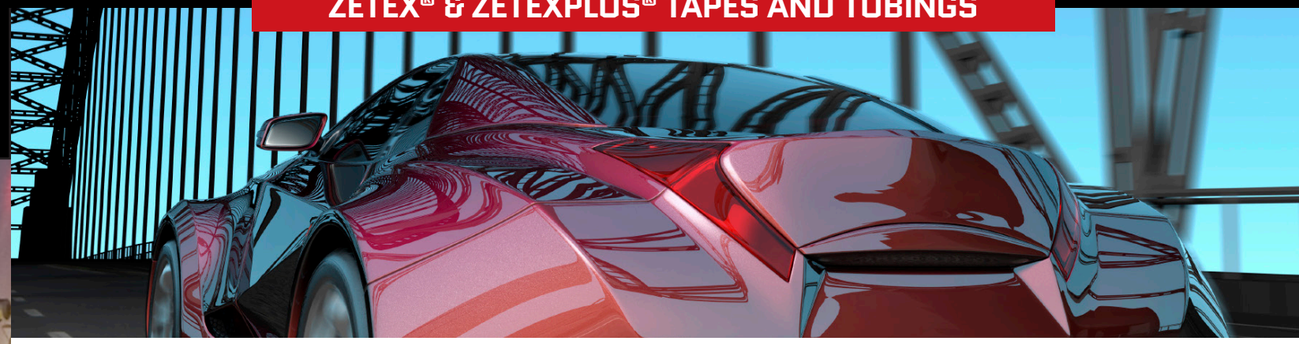
** Z-Sil F-605 and Z-Sil F-1105 meet the requirements of Military Specification MIL-C-24576A.*
*** Z-Sil fabrics are sold in 50 yard rolls (45.72 m).*
**** Weights and thicknesses listed above are nominal. Contact tech@newtex.com for actual values.*

NPM | Performance Materials

TAPES, ROPES, YARNS & THREADS

NEWTEX

ZETEX® & ZETEXPLUS® TAPES AND TUBINGS



Zetex and ZetexPlus Tapes and Tubings are woven from highly texturized 6 and 9 micron filament glass yarns. Tapes can be easily wrapped around water and steam pipes, hydraulic lines, and auto exhaust, while tubings feature a hollow center designed for use as thermal insulation, to protect hydraulic & electrical lines, cable, or wiring. We utilize an overspray process to preserve texturization and weave. The overspray is made from inorganic materials, so it will not produce hazardous out gassing.

Bolt Hole Tapes are specialty tapes without warp yarns in the center for ease of bolt insertion, commonly used in applications like flange gasketing. Bolt hole tapes are not a stocked item, but they are available in large quantities by special order.

Width: Zetex and ZetexPlus Tapes are generally available in 1.0”-6.0” widths at 0.5” increments. Tubings are available with a 1/8” or 1/16” wall and inner diameters ranging from 0.25” to 4.0”.

Length: Most tapes are sold in 100’ rolls (30.48 m) with the exception of P-3900 and P-3901, which come in 50’ (15.24 m) rolls. Tubings come in spools that range from 50’ (15.24 m) to 500’ (152.40 m) in length, depending on the tubing’s width. Contact us or visit our website for more detailed information.

Common Applications

Exhaust Wrap, Pipe Insulation, Packing, Sealing, and Gasketing

Common Industries

Architectural & Construction, Automotive & Transportation, Foundries, Glass & Casting Operations, Military, Defense & Homeland Security, Petrochemical & Refinery, Power Generation, and Shipbuilding & Marine

Peak Temperature Ratings:

Zetex Tapes and Tubings: 1000°F (540°C)
ZetexPlus Tapes and Tubings: 2000°F (1095°C)

Tape Grades

A: Tightly woven, premium weave constructions made with 6 micron yarns.

P: Tightly woven, premium weave constructions made with 9 micron yarns.

C: Standard weave constructions made with 9 micron yarns. A good fit for most industrial insulation applications.

ZETEX® & ZETEXPLUS® TAPES AND TUBINGS

The treatment and style combinations listed in the table below are our standard products; however, we are able to produce custom tapes and tubings for orders of at least 5,000 feet. Please contact us if you would like more information on custom products. All tapes come standard in 100 foot (30.48 m) rolls unless otherwise specified. Please visit www.newtex.com for a complete listing of available tapes and tubings.

Zetex® Premium & Commercial Grade Tapes

Style	Grade	Standard Color, Coating, & Treatment Options	Thickness		Available Width										
			mils	mm	0.5" 1.3 cm	0.75" 1.9 cm	1.0" 2.5 cm	1.25" 3.2 cm	1.5" 3.8 cm	2.0" 5.1 cm	2.5" 6.4 cm	3.0" 7.6 cm	3.5" 8.9 cm	4.0" 10.2 cm	6.0" 15.2 cm
A-550	Premium	ZetexPlus	30	0.76			■			■		■		■	■
A-1050	Premium	ZetexPlus, Heat Cleaned	62	1.57								■		■	
A-2500 *	Premium	Heat Cleaned	125	3.18			■	■	■	■	■	■		■	■
P-1050	Premium	ZetexPlus, Black Dye	62	1.57			■		■	■	■	■		■	■
P-2150	Premium	ZetexPlus	125	3.18		■	■	■	■	■	■	■		■	■
P-3900 **	Premium	ZetexPlus	250	6.35		■	■	■	■	■	■	■		■	■
C-1000	Commercial	N/A	65	1.65	■	■	■	■	■	■	■	■		■	■
C-2000	Commercial	Heat Cleaned, Black Dye	100	2.54	■	■	■		■	■	■				

Zetex® Bolthole Tapes

Style	Grade	Standard Color, Coating, & Treatment Options	Thickness		Available Width										
			mils	mm	0.5" 1.3 cm	0.75" 1.9 cm	1.0" 2.5 cm	1.25" 3.2 cm	1.5" 3.8 cm	2.0" 5.1 cm	2.5" 6.4 cm	3.0" 7.6 cm	3.5" 8.9 cm	4.0" 10.2 cm	6.0" 15.2 cm
P-1051	Premium	ZetexPlus	60	1.52			■		■	■	■	■	■		
P-2151	Premium	ZetexPlus	125	3.18			■		■	■	■	■	■	■	
P-3901 **	Premium	ZetexPlus	225	5.72			■		■	■	■	■	■		
C-1001	Commerical	N/A	50	1.27			■		■	■					
C-2001	Commerical	N/A	100	2.54			■		■	■	■	■	■	■	■

**Zetex A-2500 Heat Cleaned tape meets the requirements of Military Specification MIL-C-20079H*
*** P-3900 and P-3901 are sold in 50 foot rolls.*

Zetex® & ZetexPlus® Tubings

Style	Grade	Coating Options	Wall Thickness		Available Inner Diameters (I.D.)	
			inches	cm	inches	cm
P-8000	Premium	ZetexPlus	1/8	0.32	0.25, 0.375, 0.5, 1.0, 1.25, 1.5, 2.0, 3.0, 4.0	0.6, 1.0, 1.3, 2.5, 3.2, 3.8, 5.1, 7.6, 10.2
P-1600	Premium	ZetexPlus	1/16	0.16	0.5, 0.75, 1.0, 1.5	1.3, 1.9, 2.5, 3.8

Z-FLEX® ALUMINUM FOIL TAPES

Z-Flex® Multilayer Aluminized (MLA) Tapes are designed for insulation and lagging applications that require heat reflectivity. They are woven from highly texturized DE glass and aluminized with Z-Flex multilayer aluminized technology, a process that enables superior durability, flex-bond, and 95% radiant heat reflectivity with no organic flame contribution. Most of our Z-Flex MLA fabrics, detailed on pages 14 & 15, can be slit into tapes that meet your specifications.

Z-Flex® AF Aluminum Foil Tapes are an economical alternative to Z-Flex multilayer aluminized tapes. Foil is not as durable or flexible as Z-Flex MLA, but it offers comparable radiant heat protection at a significantly lower cost. Though foil tape is suitable for most applications, Z-Flex MLA tape may be necessary for applications where tape will be subject to stretching, twisting, vibration, or other repetitive movement.

Common Applications

Gasketing, Sealing, Encapsulation, and Lagging

Relevant Industries

Automotive & Transportation, Foundry & Casting Operations

Temp. Rating of Base Fabric: 1000°F (540°C)

Radiant Temperature Rating: 3000°F (1650°C)

Z-Flex® AF Aluminum Foil & Multilayer Aluminized Tapes

Style	Aluminization Type	Options	Thickness		Available Widths	
			mils	mm	inches	cm
A-302	Multilayer Aluminization	N/A	23	0.58	2.1, 2.9, 3.7	5.2, 7.4, 9.4
AF A-600	Aluminum Foil (1 mil foil)	Pressure Sensitive Adhesive	35	0.89	1.5, 2.0, 3.0	3.8, 5.1, 7.6

NEWTEX

HIGH TEMPERATURE ROPES & BRAIDS

Our Zetex® Twisted and Braided ropes are used in sealing and packing applications involving hot air, steam, water, fluids or gases. They are commonly used to seal around oven and furnace doors.
An excellent replacement for asbestos, these products are conformable and durable, resistant to most acids and alkalis, and won't shrink, stretch, or unravel.
We offer a range of styles, diameters, and densities.
We can also develop custom solutions.

Twisted Rope is a conformable product used for sealing boilers and oven & furnace doors, including those with uneven surfaces.

Braided Rope is stronger, denser, smoother, and more stable than twisted rope. It is used in packing applications that require greater resistance to compression and mechanical wear.

Peak Temperature Ratings:
Zetex Ropes: 1000°F (540°C)
ZetexPlus Ropes: 1500°F (815°C)

Twisted Zetex® Rope

Item Number	Style	Diameter		Spool Length	
		inches	cm	feet	meters
1300014	Zetex 0.125" Twist	0.125	0.32	2500	762.0
1300015	Zetex 0.25" Twist	0.25	0.64	1250	381.0
1300016	Zetex 0.375" Twist	0.375	0.95	1000	304.8
1300017	Zetex 0.50" Twist	0.50	1.27	500	152.4
1300018	Zetex 0.625" Twist	0.625	1.59	300	91.4
1300019	Zetex 0.75" Twist	0.75	1.91	150	45.7
1300020	Zetex 0.875" Twist	0.875	2.22	150	45.7
1300021	Zetex 1.00" Twist	1.00	2.54	100	30.5
1300022	Zetex 1.125" Twist	1.125	2.86	100	30.5
1300023	Zetex 1.25" Twist	1.25	3.18	50	15.2

STANDARD ROPES & BRAIDS

Twisted ZetexPlus® Rope

Item Number	Style	Diameter		Spool Length	
		inches	cm	feet	meters
1300033	ZetexPlus 0.25" Twist	0.25	0.64	1250	381.0
1300034	ZetexPlus 0.75" Twist	0.75	1.91	150	45.7
1300035	ZetexPlus 1.00" Twist	1.00	2.54	100	30.5

Braided Zetex® Rope

Item Number	Style	Diameter		Spool Length	
		inches	cm	feet	meters
1300001	Zetex .25" Braid	0.25	0.64	1000	304.8
1300002	Zetex .375" Braid	0.375	0.95	500	152.4
1300003	Zetex .50" Braid	0.5	1.27	500	152.4
1300004	Zetex .625 Braid	0.625	1.59	200	61.0
1300005	Zetex .75" Braid	0.75	1.91	200	61.0
1300006	Zetex .875" Braid	0.875	2.22	100	30.5
1300007	Zetex 1.0" Braid	1.0	2.54	100	30.5
1300008	Zetex 1.25" Braid	1.25	3.18	50	15.2
1300009	Zetex 1.50" Braid	1.5	3.81	50	15.2
1300010	Zetex 1.75" Braid	1.75	4.45	25	7.6
1300011	Zetex 2.0" Braid	2.0	5.08	25	7.6
1300012	Zetex 2.50" Braid	2.5	6.35	10	3.0
1300013	Zetex 3.0" Braid	3.0	7.62	10	3.0

Braided ZetexPlus® Rope

Item Number	Style	Diameter		Spool Length	
		inches	cm	feet	meters
1300026	ZetexPlus .25" Braid	0.25	0.64	1000	304.8
1300027	ZetexPlus .375" Braid	0.375	0.95	500	152.4
1300028	ZetexPlus .50" Braid	0.50	1.27	500	152.4
1300029	ZetexPlus .75" Braid	0.75	1.91	200	61.0
1300030	ZetexPlus 1.00" Braid	1.00	2.54	100	30.5
1300031	ZetexPlus 3.00" Braid	3.00	7.62	10	3.0

NEWTEX

HIGH TEMPERATURE YARNS & THREADS

Sewing threads are designed for use in fabricating personal protective equipment (PPE), removable insulation, and other fabricated industrial products. Our threads are made from PTFE coated fiberglass or aramid, providing durability and resistance to extreme temperatures.

Texturized yarns are made from DE (6 micron) and G (9 micron) glass and are used for manufacturing high temperature woven fabrics. We offer yarns in a broad range of weights and diameters. We can also treat them with an overspray to add strength and reduce broken filaments.

Sewing Threads:

Item Number	Style	Thread Size
1400001	PTFE Coated Fiberglass Thread	E-18
1400002	PTFE Coated Fiberglass Thread	E-24
1400003, 1400004	Aramid Thread, Natural	30/5, 30/3
1400005	Aramid Thread, Black	30/3

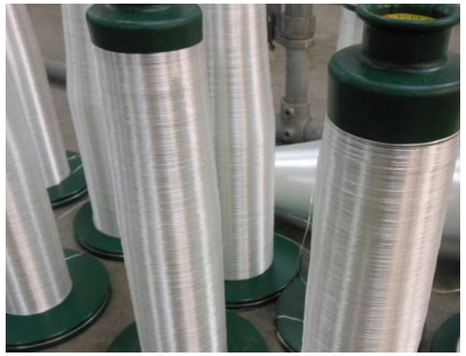
Texturized Yarns:

Style	Yarn Size
ETDE Yarn	1.75, 3.5, 4.5, 6.0, 9.0, 11.6, 18.0, 25.0
ETDE Yarn with Overspray	1.75, 2.25, 3.5, 4.5, 6.0, 9.0, 11.6
ETG Yarn	3.5, 6.0, 9.0, 11.6, 18.0, 25.0
ETG Yarn with Overspray	1.75, 2.25, 2.75, 3.5, 4.5, 5.0, 6.0, 9.0, 11.6

**Teflon is a registered trademark of Dupont*

Relevant Industries

Personal Protective Equipment & Apparel, Custom Heat Shield Fabrication, and Specialty Weaving



SUMMARY OF TERMS

Terms:

- Net 30 days from date of invoice. All orders are subject to Newtex credit approval.
- Visa, MasterCard, and American Express are accepted.

Pricing:

- Prices are subject to change without notice.
- Please contact us for pricing.

Minimum Orders:

- We require a minimum order of $250.
- If you are interested in placing an order that does not meet the $250 requirement, we are happy to direct you to a distributor who is able to fill small orders.
- Performance Materials are sold in full rolls only. With the exception of Z-Fil F-401 and Z-Fil F-610, all Performance Materials are sold in 50 yard rolls.

Custom Products:

- We have the capability to offer custom solutions for your unique thermal management and fire protection needs. Please contact us for assistance.
- Custom products are non-returnable.
- Custom orders are subject to a non-refundable deposit before we can begin fabrication.
- Minimum order quantities and set up charges may apply.

Variability in Package Size:

- Product package sizes are nominal and may vary slightly. Customer will be charged for actual yardage shipped.

Delivery:

- The lead time for custom products is generally 4-6 weeks. Please confirm your delivery time-frame with our Customer Solutions Team.
- We may be able to accommodate rush delivery for an additional charge.

Freight:

- Unless the customer makes other arrangements with Newtex at the time that the order is placed, Newtex will prepay the freight and add the cost to the invoice. The same terms apply for drop shipments to authorized distributors.

Repair and Returns:

- We guarantee that our products are free of defects in workmanship only. Newtex reserves the right to determine whether any product is defective, and we will repair or replace when appropriate.
- We will accept returns on standard stock products in good condition within 60 days. Please call us to request a Returned Materials Authorization (RMA) number prior to shipping a return.
- Returned goods are subject to a 20% restocking fee plus the cost of return freight.

Contact Us

Toll Free: 1-800-836-1001 • Phone: 585-924-9135 • Fax: 585-924-4645
www.newtex.com

GLOSSARY OF KEY TERMS

AMBIENT HEAT
The average temperature of the air in an environment.

BALANCED WEAVE
The threads or yarns used to weave the fabric are all the same size, and the number of picks per inch is equal to the number of ends per inch. A fabric with a balanced weave is equally strong in both directions.

CONDUCTIVE HEAT
The transfer of heat from a hot area to a cold area.

CONVECTIVE HEAT
The transfer of heat through the mass movement of particles in liquids and gases.

CORE SPUN YARN
A primary fiber is enveloped with a secondary sheath fiber to create a yarn encompassing properties of both fibers.

FILAMENT
Very fine continuous fibers assembled to form yarn.

HERRINGBONE
A type of twill weave, Herringbone consists of a balanced diagonal pattern that zags back and forth to form V shapes across the fabric.

MICRON
A unit of measurement equal to one millionth of a meter. It is used to measure the diameter of the filaments in yarn. Yarn made from a greater number of filaments is stronger, therefore a 6 micron filament yarn is stronger than a 9 micron yarn of the same size.

OPERATING TEMPERATURE*
The temperature a fabric is designed to withstand when it is exposed to an extreme environment on an intermittent basis.

PEAK TEMPERATURE*
The maximum temperature a fabric can withstand. Extended exposure to the peak temperature will likely damage the fabric.

**Our temperature ratings are general guidelines. The temperature resistance of a fabric is heavily dependent on the environment and application in which it is being used. Please contact us to discuss the specifics of your high temperature application.*

GLOSSARY OF KEY TERMS

PLAIN WEAVE (1 X 1 P)
The most basic weave structure, the plain weave consists of running the weft over and under each warp yarn, alternating top and bottom on each row. Plain weave produces the fabric with the most dimensional stability.

RADIANT HEAT
The transfer of heat through wave energy.

SATIN HARNESS WEAVE (HS)
A weave structure in which 4 or more picks are combined and woven over and under an end, not alternating every row like a plain weave. Because it has fewer tucks, more light reflects off of a satin harness weave, giving it a silky appearance. Standard satin weaves include 5 Harness Satin Weave (5 HS), 8 Harness Satin Weave (8 HS), and 12 Harness Satin Weave (12 HS). The number indicates the quantity of picks that are combined and woven in the same over and under pattern. Newtex also produces a few 4 Harness Satin Weave fabrics, a weave structure sometimes known as crowsfoot or broken twill.

SPUN YARN
Staple length fibers are bound together, typically by twisting, to form yarn. Spun yarn can be made from one type of fiber or from a combination of fibers. It is a comparatively low strength yarn because the fibers are not adhered to one another.

TEXTURIZED YARN
Puffs of air are blown through filament yarns causing broken filaments to become entangled. The entangled filaments hold together, forming a stronger yarn. They also create air pockets, allowing for superior insulation.

TWILL WEAVE
A weave with a diagonal pattern. Twill weave tends to be more flexible than other weave structures because the yarns are less constrained. For the same reason, twill weave is easy to drape.

WARP
The lengthwise yarns or threads of a woven fabric. Each thread or yarn in the warp is called an end.

WEFT/FILL
The yarns or threads that run from selvage to selvage across the width of the fabric. The weft yarns are woven over and under the lengthwise warp yarns. Each thread or yarn in the weft is called a pick.

NEWTEX

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