



## High Temperature Fabrics and Blankets for the Insulation Industry



**GLT**  
PRODUCTS®  
Insulation Innovation

removable blankets  
pipe wrapping  
turbine blankets  
fittings & flange covers  
moisture barriers  
fire protection  
insulators  
flame retardation



# HeatShield High Temperature Fabrics

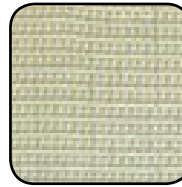
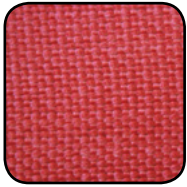
GLT Products' HeatShield High Temperature Fabrics are used in the fabrication of removable blankets, pipe wrapping, turbine blankets, fittings and flange covers, and engine exhaust pipe covers.

These specialty fabrics provide temperature protection from 300°F up to 2,300°F. GLT HeatShield fabrics are made with temperature resistant yarns and can be subjected to various treatments and coatings.



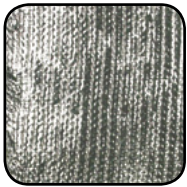
## Fiberglass Lagging Cloths

- Available in various weights: 8.5 oz./sq. yd., 18.5 oz./sq. yd. and up to 50 oz./sq. yd.
- Temperature limit : 1,000°F
- The fabrics can be dyed a red color to indicate the insulation contains no asbestos
- Used as a hot-side insulation fabric, flange and valve covers, weld curtains and stress relief blankets



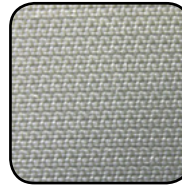
## Refractory Silica Fabric

- Remains flexible after high temperature exposure
- Provides excellent protection from molten metal splash
- Used in welding and metal cutting applications up to 1,800°F continuous temperature
- Also available as rope, sleeving, woven tape and slit tape



## Aluminized Fiberglass Cloth

- Heat-cleaned to set the weave and reduce fraying, laminated to aluminum foil to provide a vapor barrier
- Designed for continuous use at temperatures up to 300°F



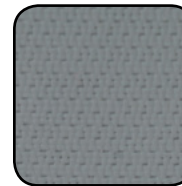
## Silicone Fiberglass Cloth

- Fiberglass base fabric that has been impregnated with a specially formulated silicone rubber compound for extended life
- Provides greater oil and water resistance than uncoated fabrics
- Low smoke and flame retardation
- Available styles: 725, 750, 774 and 775
- Silicone coating is rated 500°F on a continuous basis
- Silicone cloth is an excellent moisture barrier, making it a staple of the outdoor insulation industry



## Vermiculite Fiberglass Cloth

- High temperature resistant fabrics woven from "E" glass fibers that have been coated with vermiculite-based film
- Service temperature: 1,500°F
- Under direct flame, these fabrics are odorless and virtually smokeless



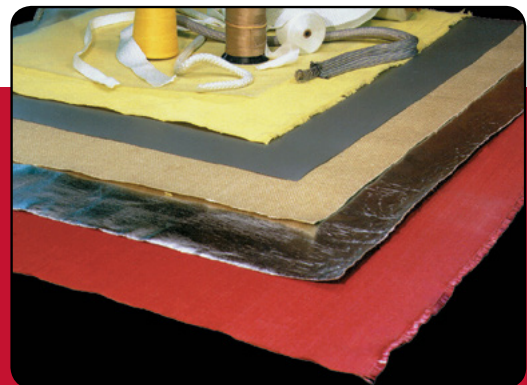
## Teflon Coated Fiberglass Cloth

- Woven fiberglass with PTFE coating
- Temperature limit : 550°F
- Available style: 650
- Excellent for use in removable blankets in corrosive environments.

## Customized High Temperature Fabrics

GLT Products offers a wide variety of fabrics to meet your specific application. These include customized blankets, material configurations and specialty coatings.

For more information, please call one of our Insulation Specialists at **800.874.1748**.



# Fiberglass and Ceramic **Blankets**



## **GLT Mat (Glass Mat)**

Provides reliable performance at temperatures up to 1,200°F.

### **Construction**

GLT Mat is a mechanically bonded glass fiber insulating blanket of uniform density. It is available in ¼", ½" and 1" thicknesses, and in a range of 9-11 PCF densities.

### **Benefits**

The blanket is non-corrosive, non-combustible, non-alkaline and chemically stable. GLT Mat offers excellent sound absorption properties and resistance to vibration without powdering. It also offers excellent heat resistance, flexibility and low thermal conductivity.

### **Applications**

- GLT Mat is an efficient low-cost replacement for asbestos mats, millboard refractory paper and other similar products.
- GLT Mat is being used to solve increasingly complex applications in oil refineries, steam and gas turbines, exhaust systems on diesel tugs, tankers, Coast Guard and Navy vessels, and pleasure yachts. It is used to relieve stress at welding points and on valve flange covers.
- GLT Mat acts as an insulator over automotive thermactor switches, for floor pans over catalytic converters and in luggage compartments.
- These blankets reduce labor costs during removal for inspection and service, and cut re-insulation costs associated with poor fitting rigid block in nuclear power plants.



## **Ceramic Fiber Blanket**

Offers superior performance at temperatures up to 2,600°F.

### **Construction**

The high purity, high tensile strength blankets are needed for extra handling strength. They are offered in thicknesses from ¼" to 2", 24" or 48" widths and 4, 6 and 8 PCF densities.

### **Benefits**

Offers high temperature stability, low thermal conductivity and heat storage, excellent thermal shock resistance, sound absorption and superior corrosion resistance. It contains no binders to burn out. The ceramic fiber blanket can be easily cut with a sharp knife and is highly flexible for ease of wrapping small items.

### **Applications**

- Refractory ceramic fiber blankets and bulk products are designed to provide insulation for high temperature applications in the mechanical and specialty insulation markets.
- Bulk fibers are used as packing materials in the fire protection and mechanical insulation markets.
- The fibers are "lubricated" for ease of handling and to enhance their use as a high temperature insulator.
- Ceramic fiber is also available as rope, cloth, tubing and tape.



# Insulating Foils and Knitted Wire Mesh



## Insulating Foils

Aluminum and stainless steel insulating foils are used in combination with insulating blankets for shielding, radiant barriers, liners, sealing, to reduce condensation or heat transfer, and as a vapor retarder. They are lightweight, non-toxic, moisture resistant, do not shrink, and require no maintenance.

### Aluminum Foil 1000 Series

The 1000 Series dissipates heat over the total area of the piece of metal. The alloys contain a minimum of 99% aluminum, which allows for excellent heat dispersion. This series is formable and easy to work with.

- Alloys: 1100, 1145 and 1235
- Standard Thicknesses: .002" and .003"
- Thicknesses Available on Request: .0025", .004" and .005"
- Standard Widths: 24", 36" and 48"

### Stainless Steel Foil 300 Series

Type 304 stainless Steel has high strength, low weight and good corrosion resistance. Used for manufacturing of equipment, heat exchangers, piping, and other processing equipment that comes into contact with fresh water.

Type 321 Stainless Steel has a higher resistance level than type 304 in saltwater and gaseous environmental conditions where elements other than heat are present.

- Alloys: 304 and 321
- Standard Thicknesses of 304: .002" and .003"
- Standard Thickness of 321: .002"
- Standard Widths: 24", 36" and 40"

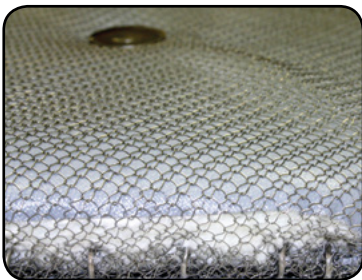


## Knitted Wire Mesh

Knitted wire mesh is used in combination with aluminum foil to fabricate high temperature blankets.

Knitted wire mesh is an ideal material for removable and reusable blankets, covers and jackets. Manufactured from alloys chosen for specific operating environments, knitted wire mesh is effective in temperature extremes and corrosive environments. Due to its construction, knitted wire mesh is flexible and durable, offering similar thermal properties as more expensive alternatives.

Typical applications include marine, petrochemical and power utility industries.



knitted wire mesh is used in combination with aluminum foil to fabricate high temperature blankets (above).

## Construction

- Supplied as a flat tubular cloth, rolled up to provide a continuous flat tube
- Wire sizes: .008" and .011"
- Roll sizes of 6" to 42" wide (30" and 42" width in-stock), either flat or crimped (corrugated)
- Knitted wire mesh can be supplied in all metals. Most commonly used:
  - 304 Stainless Steel – For most applications up to 1200° F
  - 430 Stainless Steel – More economical in applications up to 1000° F
  - Inconel 600 – In applications up to 2300° F

# Insulation Accessories

GLT Products carries a vast inventory of accessories that are used to secure the insulation in place during the blanket fabrication process.



## Lacing Anchors and Accessories

- Lacing anchors hold insulation in place. During fabrication, an anchor is pushed through the front of the blanket so that the hooked head is snug against it.
- Lacing anchors are available in several sizes, wire gauges, and in round and rectangular bases.
- Lacing accessories include 2-Hole Lacing Washers, 2-Hole Lacing Tops and Lacing Rings. Available in low carbon steel and Type 304 stainless steel.



## Quilting and Cupped Head Pins

- These fabricated parts are made up of a weld pin and staked-on retaining washer.
- Quilting pins are available in stainless steel.
- Available in 12 and 14 gauge.
- Mild steel Quilting Pins are referenced as Cupped Head Pins and are only available in 12 gauge.



## Washers

- Washers are available as self-locking, round, rectangular and square. Available in mild steel and stainless steel.
- 2-Hole Washers are used in the construction of removable/reusable insulation covers.
- Available in a variety of sizes and gauges (10 ga., 12 ga., and 14 ga.)



## "Hog" C-Rings and Accessories

- C-Rings, also known as "Hog" Rings, offer a reliable and low cost fastening system. Available in a variety of wire gauges, sizes and configurations.
- Available in stainless and galvanized steel.
- Applied with pneumatic tools or hand pliers.



## Sewing Threads

- Sewing Threads are specifically designed to replace various synthetic and asbestos materials. Sewing threads are coated with lubricants to improve handling characteristics.
- Available in Kevlar®, stainless steel, Nomex® and Teflon®
- Teflon® coated sewing threads will not burn or support combustion in normal atmospheres and are suitable for temperatures from -400° F to +600° F. They are unaffected by fungi and impervious to alkalis.



## Velcro

- Hook & Loop fasteners are most commonly used to secure insulation covers in place.
- Hook & Loop fasteners come in a variety of sizes and colors (black, white and gray) and can be used for most fastening applications.

## Other

- GLT Products carries a variety of tapes, tubing, ropes, cloths, papers and accessory products designed to secure insulation in place during blanket fabrication.

# GLT Products - High Temperature Fabrics and Solutions

**GLT Products manufactures, fabricates and distributes over 2000 commercial and industrial insulation products for applications around the world.**

High temperature insulation applications require a customized product designed to withstand the most grueling working environments. GLT Products, a leader in specialized insulation products, offers everything you need from the high temperature fabrics and blankets to the accessory products to complete your installation.

## One Source Shop

GLT Products is your one source distributor and manufacturer of insulation products required for your projects – from thermal, mechanical and acoustical insulation systems to accessories and supplies.

## Same Day Shipping

GLT Products delivers outstanding customer service, technical support and customized solutions with same day shipping for in-stock items.

## Competitive Pricing

By handling such a large inventory of materials, we are competitively priced – call for a price quote today.

## Global Distribution

GLT Products maintains a expansive distribution network to ensure that your products arrive on time and always at the lowest price possible. With distribution centers across the United States and Canada, we can meet your critical deadlines.

**GLT Products – Let our team be your team providing you with innovative insulation solutions.**



For more information on GLT Products, please visit us online at [www.gltproducts.com](http://www.gltproducts.com) or call toll-free at **1-800-874-1748**.



## HEADQUARTERS:

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