

PRODUCT DATA SHEET Removable Insulation Blankets

EnergyArmour Removable Blankets are constructed for heat conservation in the 100F-1600F continuous temperature range (higher temperature designs are available – please call). EnergyArmour Blankets are built to standard designs for flanged pairs, flanged valves, blind flanges, flanged tees, and flanged elbows. Custom fabrication is available for all your specialty removable blanket needs.

Removable blankets are constructed of three components: The envelope, the insulation filler, and the securement accessories.

ENVELOPE

The envelope is the insulation container. This component provides mechanical strength and weather protection for the insulation filler as well as the point of attachment for the securement accessories. Envelope material selection must consider factors such as temperature, weather & chemical resistance, and durability.

Silicone Impregnated Fiberglass Fabric - Maximum Sustained Temperature: 500F – 17.5 oz/SY

Widely accepted as the most versatile and cost-effective removable insulation fabric. It provides chemical, water, and oil resistance. The color is grey. This material conforms with or meets the following requirements: Mil-C-20079 G with G filament Fiber, Mil-I-24244, UL-91 Flame Out 1 Second, UL-723 Flame Spread 0, Smoke Development Index 10, ASTM E84, UBC 42-1 & NFPA 255. This product is used in Triangle standard blankets.

Teflon® Impregnated/Coated Fiberglass Fabric - Maximum Sustained Temperature: 600F

The special PTFE/Teflon resins give these fabrics superior chemical and stain resistance. May be used at higher sustained temperatures than all other coated fabrics. Virtually inert to all industrial or commercial chemicals, making it easier for users to standardize on one fabric; thus, eliminating the need to specify several different fabrics to cover different demands. This product meets the following requirements: MIL-I-24244, NRC Guide 1.36, ASTM D-5034, ASTM D-6413, ASTM G-154.

Vermiculite Coated Fiberglass Fabric - Maximum Sustained Temperature: 1000F

Woven, non-flammable, asbestos-free, Vermiculite coated fiberglass fabric suitable for indoor environments or as the liner for applications up to 1000F. This product is many times used as the inner shell of an envelope for applications over where silicone and Teflon cloth temperature limits are exceeded. This product meets the following requirements: Coast Guard Approval #164.009, MIL-C-20079H Type 1 Class 9, ASTM D-579, ASTM D-6413, ANSI/FM 4950.

High Temperature Silica Fabric - Maximum Sustained Temperature: 1800F

Made of 94% continuous filament amorphous silica material. The intended use for these products is in all high temperature applications where the need for thermal insulation and/or protection is required. This material is not intended for locations subject to weather or chemicals. The color is brown. This product meets the following requirements: ASTM D-579, ANSI/FM 4950

304 Stainless Steel Knitted Mesh - Maximum Sustained Temperature: 1600F.

This product provides an encasement for insulation when fabrics are not appropriate because of high temperatures and sometimes in conjunction with fabrics when mechanical abuse is a concern.



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INSULATION FILLER

The insulation filler provides the thermal characteristic for the blanket assembly.

UtiliCore® (HP5 Fiberglas Mat) - Maximum Temperature: 1100°F

The most widely used insulation filler for removable blankets. This product provides excellent thermal resistance, substantial density (5#/cf), a high upper limit and outstanding value. A 1" thickness of this material is used in Triangle standard blankets. Conforms to ASTM C-553, Coast Guard Approval #169.109, NRC Guide 1.36.

Glass Fiber Mat - Maximum Temperature: 1200°F

Glass Mat (needle mat) is composed of 100% select-grade type "E" glass fibers needled together into mat form. It is incombustible, asbestos-free and has no resinous or inorganic binders. Glass Mat can be utilized for operating temperatures to 1200°F and will not compact or shake apart. Conforms to MIL-I-16411, MIL-I-24244, ASTM E-84, MIL-C-20079G, Coast Guard Approval #169.109.

Ceramic Fiber Blanket - Maximum Temperature: 2200°F

Ceramic Fiber is manufactured from high-quality alumina silica fibers needled into blanket form. This material is incombustible, asbestos-free, and has no inorganic or resinous binders. Meets MIL-I-23128, grade A & B.

SECUREMENT ACCESSORIES:

These products are used to construct the envelope, secure the insulation inside the envelope and for completed assembly installation.

Assembly Methods			
	Kevlar® Thread		Lacing Anchors/Speed Washers
	Hog rings		Lacing Hooks/Two-Hole Washers
	Hook and Loop		-
	Quilting Pins/Speed Washers		(2) Two-Hole Washers/18ga wire
Belting with 304 Stainless Steel D-Rings			
	Teflon Belting		Silicone Belting
Rope			
	Kevlar Rope		Teflon Rope
Identification Tags			
	Stainless Steel		Aluminum