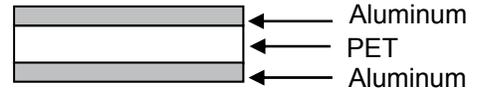


## PRODUCT BULLETIN

### Aluminum Coated (Two Sides) PET



Sheldahl® Brand Materials of Polyethylene Terephthalate (PET or polyester) films that are aluminized on both sides can be used as first surface mirrors, and are often used in multi-layer insulation (MLI) blankets in low temperature applications. These products provide low emittance and low solar absorptance.

This product may be ordered with 0.25, 0.5, 1, 2, 3, or 5 mil thick PET that conforms to the requirements of MIL-I-631 and L-P-377. The aluminum coating is nominally 1000 Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
Solar absorptance ( $\alpha$ )	$\leq 0.14$
Hemispherical emittance ( $\epsilon_H$ )	$\leq 0.035^*$
Normal emittance ( $\epsilon_N$ )	$\leq 0.035$
Typical $\alpha/\epsilon$	4 - 5
Aluminum surface resistivity	$\leq 1 \Omega/\text{square}$
Intermittent temperature range	-250° C to 150° C (-420° F to 300° F)
Continuous temperature range	-250° C to 120° C (-420° F to 250° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Typical Weight ( $\text{g}/\text{m}^2$ )	Perforation Item Number
146466	0.25 (6)	9	159353
146463	0.5 (12.5)	17	159751
146458	1.0 (25)	33	159773
146460	2.0 (51)	71	159774

Contact Multek for 5 mil PET construction requirements



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## POST PROCESSING – PERFORATION & EMBOSSING

This product may be processed after metalizing to enhance its functionality. To facilitate air passage during launch, the film may be Perforated. Standard perforation patterns are on pages 14 - 22.

Materials may also be embossed or crinkled to provide separation between the layers of MLI blankets instead of, or in addition to, using fabric spacer layers.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

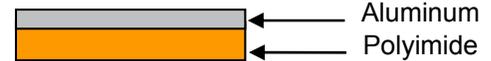
## SPECIFICATION AND ITEM NUMBERS

STANDARD NUMBERS		Thickness	PERFORATION NUMBERS	
Multek Specification	Item Number		Multek Specification	Item Number
G405270	146466	0.25 mil	G405274	159353
G405260	146463	0.5 mil	G405264	159751
G405210	146458	1.0 mil	G405214	159773
G405220	146460	2.0 mil	G405224	159774

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

The information on this product bulletin is based on data obtained by our research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data and the results obtained from the use thereof. This information is furnished upon the condition that the recipient shall conduct tests to determine the suitability of the product for his or her particular application.

## PRODUCT BULLETIN



### Aluminum Coated (One Side) Polyimide

Sheldahl® Brand Materials of polyimide films that are aluminized on one side can be used as either first or second surface mirrors, and are often used in multi-layer insulation (MLI) blankets when a wide temperature range is desired. When used as a first surface mirror, these products provide low emittance and low solar absorptance. When used as a second surface mirror, these products have moderate absorptance and moderate emittance, and the polyimide film gives them an amber or gold color.

This product may be ordered with 0.3, 0.5, 1, 2, 3, or 5 mil thick polyimide that conforms to the requirements of ASTM D-5213. The aluminum coating is nominally 1000 Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
First surface solar absorptance ( $\alpha$ )	$\leq 0.14$
First surface hemispherical emittance ( $\epsilon_H$ )	$\leq 0.035$
First surface normal emittance ( $\epsilon_N$ )	$\leq 0.035$
Typical first surface $\alpha/\epsilon$	4 - 5
Aluminum surface resistivity	$\leq 1 \Omega/\text{square}$
Intermittent temperature range	-250° C to 400° C (-420° F to 750° F)
Continuous temperature range	-250° C to 290° C (-420° F to 550° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Second Surface Mirror Properties			Typical Weight ( $\text{g}/\text{m}^2$ )	Perforation Item Number
		$\alpha$	$\epsilon_N$	$\epsilon_H$		
146454	0.5 (12.5)	$\leq 0.36$	$\geq 0.50$	$\geq 0.52$	19	177735
146446	1.0 (25)	$\leq 0.39$	$\geq 0.62$	$\geq 0.64$	36	160013
146448	2.0 (51)	$\leq 0.44$	$\geq 0.71$	$\geq 0.71$	71	159946
146450	3.0 (76)	$\leq 0.46$	$\geq 0.77$	$\geq 0.77$	109	160824
146452	5.0 (127)	$\leq 0.49$	$\geq 0.81$	$\geq 0.81$	181	174402



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## POST PROCESSING – PERFORATION & EMBOSSING

This product may be processed after metalizing to enhance its functionality. The film may be Perforated to facilitate air passage during launch. Standard perforation patterns are on pages 14 - 22.

Materials may also be embossed to provide separation between the layers of an MLI blanket instead of, or in addition to, using fabric spacer layers.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

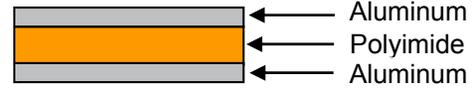
## SPECIFICATION AND ITEM NUMBERS

STANDARD NUMBERS		Thickness	PERFORATION NUMBERS	
Multek Specification	Item Number		Multek Specification	Item Number
G405160	146454	0.5 mil	G405164	177735
G405110	146446	1.0 mil	G405114	160013
G405120	146448	2.0 mil	G405124	159946
G405130	146450	3.0 mil	G405134	160824
G405150	146452	5.0 mil	G405154	174402

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

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## PRODUCT BULLETIN



### Aluminum Coated (Two Sides) Polyimide

Sheldahl® Brand Materials of polyimide films that are aluminized on both sides can be used as first surface mirrors, and are often used in multi-layer insulation (MLI) blankets when a wide temperature range is desired. These products provide low emittance and low solar absorptance.

This product may be ordered with 0.3, 0.5, 1, 2, 3, or 5 mil thick polyimide that conforms to the requirements of ASTM D-5213. The aluminum coating is nominally 1000 Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
Solar absorptance ( $\alpha$ )	$\leq 0.14$
Hemispherical emittance ( $\epsilon_H$ )	$\leq 0.035$
Normal emittance ( $\epsilon_N$ )	$\leq 0.035$
Typical $\alpha/\epsilon$	4 - 5
Aluminum surface resistivity	$\leq 1 \Omega/\text{square}$
Intermittent temperature range	-250° C to 400° C (-420° F to 750° F)
Continuous temperature range	-250° C to 290° C (-420° F to 550° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Typical Weight ( $\text{g}/\text{m}^2$ )	Perforation Item Number
146424	0.5 (12)	19	160028
146417	1.0 (25)	36	159281
146419	2.0 (51)	71	161411
146421	3.0 (76)	109	161344
146423	5.0 (127)	181	TBD



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## POST PROCESSING – PERFORATION & EMBOSING

This product may be processed after metalizing to enhance its functionality. The film may be Perforated to facilitate air passage during launch. Standard perforation patterns are on pages 14 - 22.

Materials may also be embossed to provide separation between the layers of MLI blankets instead of, or in addition to, using fabric spacer layers.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

## SPECIFICATION AND ITEM NUMBERS

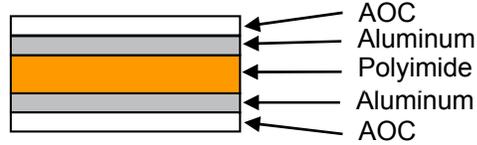
Standard Numbers		Thickness	PERFORATION Numbers	
Multek Specification	Item Number		Multek Specification	Item Number
G402460	146424*	0.5 mil	G402464	160028
G402410	146417*	1.0 mil	G402414	159281
G402420	146419*	2.0 mil	G402424	161411
G402430	146421*	3.0 mil	G402434	161344
G402450	146423*	5.0 mil	G402454	TBD

*\*If coverlay is required contact Multek.*

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

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## PRODUCT BULLETIN



### Aluminum Coated (Two Sides) Polyimide with an Acrylic Overcoat

Sheldahl® Brand Materials of polyimide films that are aluminized on both sides and protected by AOC can be used as first surface mirrors, and are often used in multi-layer insulation (MLI) blankets when a wide temperature range is desired. These products provide low emittance and low solar absorptance. The acrylic overcoat (AOC) provides additional resistance to humidity and salt fog, as may be found around most launch sites.

This product may be ordered with 0.3, 0.5, 1, 2, 3, or 5 mil thick polyimide that conforms to the requirements of ASTM D-5213. The aluminum coating is nominally 1000Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
Absorptance ( $\alpha$ )	$\leq 0.14$
Hemispherical emittance ( $\epsilon_H$ )	$\leq 0.05$
Normal emittance ( $\epsilon_N$ )	$\leq 0.05$
Typical $\alpha/\epsilon$	4.0
Aluminum surface resistivity	$\leq 1 \Omega/\text{square}$ (before AOC application)
Intermittent temperature range	-250° C to 205° C (-420° F to 400° F)
Continuous temperature range	-250° C to 205° C (-420° F to 400° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Typical Density ( $\text{g}/\text{m}^2$ )	Perforation Item Number
TBD	0.5 (12.5)	22	TBD
TBD	1.0 (25)	39	TBD
TBD	2.0 (51)	74	TBD
146559	3.0 (76)	112	173154
TBD	5.0 (127)	184	TBD



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## POST PROCESSING - PERFORATION

This product may be processed after metalizing to enhance its functionality. To facilitate air passage during launch, the film may be Perforated. Standard perforation patterns are on pages 14 - 22.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

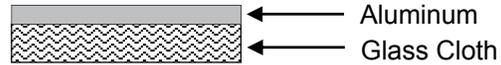
The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

## SPECIFICATION AND ITEM NUMBERS

STANDARD NUMBERS		Thickness	PERFORATION NUMBERS	
Multek Specification	Item Number		Multek Specification	Item number
G411460	TBD	0.5 mil	G411464	TBD
G411410	TBD	1.0 mil	G411414	TBD
G411420	TBD	2.0 mil	G411424	TBD
G411430	146559	3.0 mil	G411434	173154
G411450	TBD	5.0 mil	G411454	TBD

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

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## PRODUCT BULLETIN

### Aluminum Coated Glass Cloth

Sheldahl® Brand Materials construction of aluminum coated glass cloths are used for outer MLI blanket layers when tear resistance and low solar absorptance with diffuse reflections are desired.

Standard offerings include two types of glass cloth; Beta Cloth and 1080 glass cloth. Beta cloth has been used for several decades for outer blanket layers because it is resistant to atomic oxygen erosion in low earth orbit. It is employed extensively on the Space Shuttle and the International Space Station. The Beta Cloth we aluminize is Silicon free. The 1080 glass cloth is thinner, narrower, and has been used primarily for launch vehicle applications.

### PRODUCT CHARACTERISTICS

Parameter (independent of film)	Specified Value	
	Beta Cloth	1080
Cloth type	Beta Cloth	1080
Intermittent temperature range	-151° C to 315° C (-240° F to 600° F)	-185° C to 260° C (-300° F to 500° F)
Continuous temperature range	-151° C to 260° C (-240° F to 500° F)	-185° C to 200° C (-300° F to 400° F)
Fabric side solar absorptance ( $\alpha$ )	$\leq 0.45$	$\leq 0.85$
Fabric side hemispherical emittance ( $\epsilon$ )	$\geq 0.80$	$\geq 0.80$
Aluminum side absorptance ( $\alpha$ )	$\leq 0.22$	
Aluminum side hemispherical emittance ( $\epsilon_H$ )	$\leq 0.30$	
Weight (g/m <sup>2</sup> )	274 Typical	$\leq 170$
Thickness	0.008±0.001 in.	
Tensile strength (lb./in. of width)	$\geq 90$ Warp $\geq 80$ Fill	$\geq 40$ Warp $\geq 39$ Fill
Tear strength (lb.)	$\geq 4.0$ Warp $\geq 4.0$ Fill	
Width (in.)	51 (1.30 m)	36 (0.91 m)
Standard Item number	146626	146585
Multek Specification number	G423800	G414500



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## **WARRANTY INFORMATION**

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## **SHELF LIFE**

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

## **NON-METALLIZED BETA CLOTH**

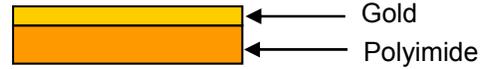
In addition to the products described above, Sheldahl® Brand Materials include two types of uncoated Beta Cloth. Our product number 147252 (F020000) is 250F Beta Cloth which contains Silicon. Product 158646 (F022300) is Silicon free 500F Beta Cloth. Please contact us for more technical information on these fabrics.

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

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## PRODUCT BULLETIN

### Gold Coated (One Side) Polyimide



Sheldahl® Brand Materials construction of polyimide films that are gold coated on one side are typically used as first surface mirrors in multi-layer insulation (MLI) blankets when a wide temperature range is desired. These products provide extremely low emittance and moderate solar absorptance.

This product may be ordered with 0.3, 0.5, 1, 2, 3, or 5 mil thick polyimide that conforms to the requirements of ASTM D-5213. The gold coating is nominally 900 Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
First surface solar absorptance ( $\alpha$ )	$\leq 0.30$
First surface hemispherical emittance ( $\epsilon_H$ )	$\leq 0.03$
First surface normal emittance ( $\epsilon_N$ )	$\leq 0.03$
Typical first surface $\alpha/\epsilon$	10
Gold surface resistivity	$\leq 1 \Omega/\text{square}$
Intermittent temperature range	-250° C to 400° C (-420° F to 750° F)
Continuous temperature range	-250° C to 290° C (-420° F to 550° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Typical Weight ( $\text{g}/\text{m}^2$ )	Perforation Item Number
146442	0.5 (12.5)	19	TBD
146437	1.0 (25)	36	159884
146439	2.0 (51)	71	TBD
146440	3.0 (76)	109	TBD
146441	5.0 (127)	181	TBD



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## POST PROCESSING – PERFORATION & EMBOSSING

This product may be processed after metalizing to enhance its functionality. The film may be Perforated to facilitate air passage during launch. Standard perforation patterns are on pages 14 - 22.

Materials may also be embossed to provide separation between the layers of an MLI blanket instead of, or in addition to, using fabric spacer layers.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

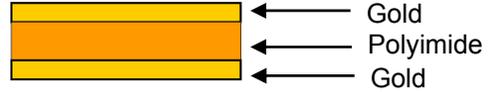
## SPECIFICATION AND ITEM NUMBERS

STANDARD NUMBERS		Thickness	PERFORATION NUMBERS	
Multek Specification	Item Number		Multek Specification	Item Number
G404960	146442	0.5 mil	G404964	TBD
G404910	146437	1.0 mil	G404914	159884
G404920	146439	2.0 mil	G404924	TBD
G404930	146440	3.0 mil	G404934	TBD
G404950	146441	5.0 mil	G404954	TBD

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

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## PRODUCT BULLETIN



### Gold Coated (Two Sides) Polyimide

Sheldahl® Brand Materials construction of polyimide films that are gold coated on both sides can be used as first surface mirrors, and are often used in multi-layer insulation (MLI) blankets when a wide temperature range is desired. These products provide the lowest possible emittance and moderate solar absorptance.

This product may be ordered with 0.3, 0.5, 1, 2, 3, or 5 mil thick polyimide that conforms to the requirements of ASTM D-5213. The gold coating is nominally 900 Å thick, and the most common width is 48 inches (1.22 m).

### PRODUCT CHARACTERISTICS

Parameter (independent of film thickness)	Specified Value
First surface solar absorptance ( $\alpha$ )	$\leq 0.30$
First surface hemispherical emittance ( $\epsilon_H$ )	$\leq 0.03$
First surface normal emittance ( $\epsilon_N$ )	$\leq 0.03$
Typical first surface $\alpha/\epsilon$	15
Gold surface resistivity	$\leq 1 \Omega/\text{square}$
Intermittent temperature range	-250° C to 400° C (-420° F to 750° F)
Continuous temperature range	-250° C to 290° C (-420° F to 550° F)

Standard Item Number	Thickness mil ( $\mu\text{m}$ )	Typical Weight ( $\text{g}/\text{m}^2$ )	PERFORATION Item Number
146407	0.5 (12.5)	19	TBD
147286	1.0 (25)	36	TBD
158239	2.0 (51)	71	TBD
146406	3.0 (76)	109	TBD
166185	5.0 (127)	181	166186



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## POST PROCESSING – PERFORATION & EMBOSSING

This product may be processed after metalizing to enhance its functionality. The film may be Perforated to facilitate air passage during launch. Standard perforation patterns are on pages 14 - 22.

Materials may also be embossed to provide separation between the layers of MLI blankets instead of, or in addition to, using fabric spacer layers.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

## SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

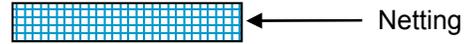
## SPECIFICATION AND ITEM NUMBERS

STANDARD NUMBERS		Thickness	PERFORATION NUMBERS	
Multek Specification	Item Number		Multek Specification	Item Number
G401860	146407	0.5 mil	G401864	TBD
G401810	147286	1.0 mil	G401814	TBD
G401820	158239	2.0 mil	G401824	TBD
G401830	146406	3.0 mil	G401834	TBD
G401850	166185	5.0 mil	G401854	166186

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## PRODUCT BULLETIN



### Polyester Netting

Dacron® polyester netting is typically used as a spacer material to minimize conductive heat transfer between multilayer insulation (MLI) blanket layers. The netting material is chosen for its low outgassing characteristics and is specially cleaned to assure that it is residue free.

We offer two types of netting; B2A and B4A. The B2A netting is a denser weave and is somewhat easier to handle. The B4A netting is used in applications where minimizing the blanket weight is critical. Both types of netting are supplied in rolls that are 54 inches wide.

### PRODUCT CHARACTERISTICS

Parameter	Specified Value	
	B2A	B4A
Netting type	B2A	B4A
Weight (oz./sq. yd.)	≤0.44	≤0.21
Intermittent temperature range	-250° C to 150° C (-420° F to 300° F)	
Continuous temperature range	-250° C to 120° C (-420° F to 250° F)	
Thickness (in.)	0.007±0.001	0.0065±0.001
Burst strength (psi)	≥15	≥10
Construction (mesh/sq. in.)	190	43
Item number	147298	147096
Previous part number	F022500	F020400



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## ALTERNATE LAYER SEPARATION TECHNIQUES

Using polyester netting is the most common way of separating the metallized film layers in MLI blankets. Two other options are available if polyester netting is not used.

### Nomex®

If the internal blanket temperature is too high for polyester, a Nomex® scrim can be used. The Nomex® netting or scrim is thicker than the polyester netting and weighs more than four times as much as B4A netting.

### Embossing

Another approach to separating the blanket layers is to emboss the film. To achieve a small amount of separation between layers, a square tile pattern can be embossed into the film. The material is embossed to a depth of about 75 microns with a series of cross and down web lines every 3 mm (0.125 in.).

Our ShelTherm™ pattern embosses a series of dimples as deep as two to three millimeters. This pattern is more commonly used on PET films than on polyimide films.

## WARRANTY INFORMATION

Multek warrants that our thermal control materials will meet all acceptance testing criteria for one year from the date of shipment (except Germanium, see product bulletin) if the materials have been stored indoors at standard conditions in their original packaging.

### SHELF LIFE

This product shall meet specified values for a minimum of 12 months after the date of shipment provided that the material is stored in its original unopened container at normal interior temperatures (10° C to 27° C/50° F to 80° F).

The shelf life of the material should be much longer than the warranty period. We recommend retesting any material that is more than one year old (or more than one year since most recent testing) prior to use. This will verify that the material has not been accidentally damaged. Multek offers retest services for a nominal fee.

Multek manufactures a broad range of vacuum deposited films, laminates and tapes. Ask for additional product bulletins describing other Sheldahl® Brand Materials.

The information on this product bulletin is based on data obtained by our research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data and the results obtained from the use thereof. This information is furnished upon the condition that the recipient shall conduct tests to determine the suitability of the product for his or her particular application.