

ThermaShield

Reflective Aluminized Surface Bonded to Insulating Fiberglass in 4 Styles

TUBE

CONVOLUTED

ThermaShield creates a thermal buffer between your wires, hoses and cables and the high temperature environments surrounding them.

ThermaShield is engineered by laminating an aluminized metallic heat shield to a layer of strong, tightly braided fiberglass insulation. This system provides superior protection from radiant heat by reflecting it away from sensitive electronics, wiring and hoses.

The four styles of ThermaShield; Tube, Convoluted, Wrap and Flat provide a full range of solutions for virtually any application. The Wrap and Flat products use a very aggressive, high temperature adhesive that eliminates the need for high-temp mylar tape or other adhesive.

ThermaShield products will endure temperatures up to 1,200°F without delaminating, turning brittle or suffering adhesive failure.

They are ideal in any situation where protection from radiant heat is a primary concern.

ThermaShield helps keep high performance engines running efficiently.



THERMA SHIELD TUBE

Nominal Size	Part #	Wall Thickness ±0.006"	Standard Spool Put-Ups		Available Colors	Lbs/100'
			Bulk Spool	Shop Spool		
1/2"	TTN0.50SV	.025"	250'	100'	Silver (SV)	2.55
5/8"	TTN0.63SV	.025"	250'	100'	Silver (SV)	3.00
3/4"	TTN0.75SV	.025"	250'	100'	Silver (SV)	3.45
7/8"	TTN0.88SV	.025"	250'	100'	Silver (SV)	4.10
1"	TTN1.00SV	.025"	250'	100'	Silver (SV)	4.50
1 1/4"	TTN1.25SV	.025"	250'	100'	Silver (SV)	5.40
1 1/2"	TTN1.50SV	.025"	250'	100'	Silver (SV)	6.20
1 3/4"	TTN1.75SV	.025"	100'	50'	Silver (SV)	7.40
2"	TTN2.00SV	.025"	100'	50'	Silver (SV)	8.70
2 1/2"	TTN2.50SV	.025"	100'	50'	Silver (SV)	10.10
3"	TTN3.00SV	.025"	100'	50'	Silver (SV)	19.00

THERMA SHIELD

ThermaShield

WRAP

FLAT

THERMA SHIELD CONVOLUTED

Nominal Size	Part #	Wall Thickness ±0.005"	4' Pcs. Put-Ups				Available Colors	Lbs/ 10Pcs.
			Bulk Box	Box 8x8	Box 6x6	Box 4x4		
1/2"	TCN0.50SV	.045"	250	70	40	25	Silver (SV)	1.2
5/8"	TCN0.63SV	.045"	150	60	35	20	Silver (SV)	1.5
3/4"	TCN0.75SV	.045"	125	50	30	15	Silver (SV)	1.8
1"	TCN1.00SV	.045"	88	30	20	9	Silver (SV)	2.1
1 1/4"	TCN1.25SV	.045"	63	20	10	6	Silver (SV)	2.3

- Cuts Easily with Scissors
- Reflects Radiant Heat
- Insulates Delicate Wires & Components
- Resists Gasoline and Engine Chemicals

THERMA SHIELD WRAP

Nominal Size	Part #	Sheet Width	Wall Thickness ±0.008"	Standard Spool Put-Ups		Available Colors	Lbs/ 100'
				Bulk Spool	Shop Spool		
1/2"	TWN0.50SV	1 13/16"	.025"	200'	100'	Silver (SV)	2.60
3/4"	TWN0.75SV	2 1/2"	.025"	200'	100'	Silver (SV)	4.00
1"	TWN1.00SV	3 3/8"	.025"	200'	100'	Silver (SV)	5.10
1 1/4"	TWN1.25SV	4 1/4"	.025"	200'	100'	Silver (SV)	5.70
1 1/2"	TWN1.50SV	5"	.025"	200'	100'	Silver (SV)	6.50
1 3/4"	TWN1.75SV	5 13/16"	.025"	100'	50'	Silver (SV)	7.40
2"	TWN2.00SV	6 11/16"	.025"	100'	50'	Silver (SV)	8.40
2 1/4"	TWN2.25SV	7 3/8"	.025"	100'	50'	Silver (SV)	9.50



ThermaShield Flat conforms and adheres to irregular shapes.

THERMA SHIELD FLAT

Nominal Size	Part #	Wall Thickness ±0.006"	Standard Spool Put-Ups		Available Colors	Lbs/ 100'
			Bulk Spool	Shop Spool		
1"	TSN1.00SV	.025"	250'	100'	Silver (SV)	1.60
1 1/2"	TSN1.50SV	.025"	250'	100'	Silver (SV)	2.00
2"	TSN2.00SV	.025"	250'	100'	Silver (SV)	2.75
3"	TSN3.00SV	.025"	250'	100'	Silver (SV)	4.30
4"	TSN4.00SV	.025"	250'	100'	Silver (SV)	5.60
5"	TSN5.00SV	.025"	200'	100'	Silver (SV)	7.60
6"	TSN6.00SV	.025"	100'	50'	Silver (SV)	9.20
6 7/8"	TSN6.88SV	.025"	100'	50'	Silver (SV)	10.90



Techflex ThermaShield and a competitor's similar product were placed in the same electrical test oven for one hour at 626°F (330°C). Note the burning and delamination of the fiberglass interior of the Brand "X" product. Even the metallic shroud suffered a degree of burning and brittleness that did not occur on the ThermaShield sample.

THERMASHIELD FLAT

- Economical And Easy To Install
- Cuts Easily With Scissors
- Reflects Radiant Heat
- Insulates Delicate Wires And Components
- Resists Gasoline And Engine Chemicals

Put-Ups

Nominal Size	Part #	Wall Thickness ±0.006"	Bulk Spool	Shop Spool	Available Colors	Lbs/100'
1"	TSN1.00SV	0.025"	250'	100'	Silver (SV)	1.60
1 1/2"	TSN1.50SV	0.025"	250'	100'	Silver (SV)	2.00
2"	TSN2.00SV	0.025"	250'	100'	Silver (SV)	2.75
3"	TSN3.00SV	0.025"	250'	100'	Silver (SV)	4.30
4"	TSN4.00SV	0.025"	250'	100'	Silver (SV)	5.60
5"	TSN5.00SV	0.025"	200'	100'	Silver (SV)	7.60
6"	TSN6.00SV	0.025"	100'	50'	Silver (SV)	9.20
6 7/8"	TSN6.88SV	0.025"	100'	50'	Silver (SV)	10.90



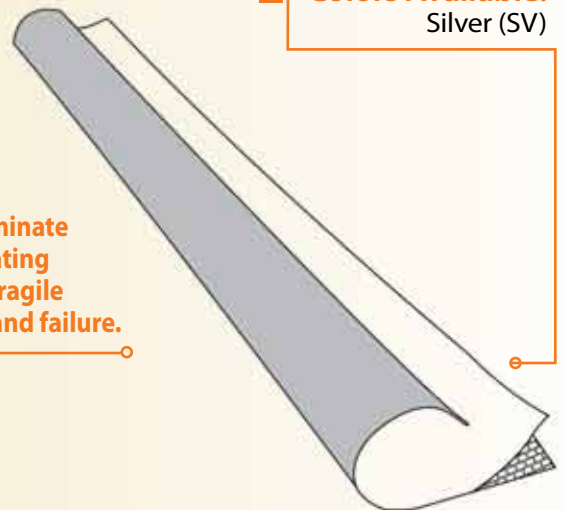
**Cut Cleanly
Scissors**

Reflective Aluminized Surface Bonded To Insulating Fiberglass

THERMASHIELD creates a buffer between your wires, hoses and cables and the high temperature environments they are required to perform in. ThermaShield is engineered by laminating an aluminum heat shield to a layer of strong fiberglass insulation. This system provides superior protection from radiant heat by reflecting it away from sensitive electronics, wiring and hoses.

THERMASHIELD FLAT (TSN) protects surfaces exposed to extreme heat with TSN. An aluminum laminated fiberglass sheet with a full coating of permanent, high temperature adhesive, applies directly to any clean surface. Ideal solution for protecting delicate electronic component boxes mounted close to engines or other heat sources. When applied, the aluminum laminate reflects heat away and the insulating fiberglass backing protects the fragile contents from thermal damage and failure.

■ **Colors Available:**
Silver (SV)



When applied, the aluminum laminate reflects heat away and the insulating fiberglass backing protects the fragile contents from thermal damage and failure.

Material

Aluminum Laminated Fiberglass

Grade

TSN

Wall Thickness

.025"

Drawing Number

TF001TS-WD



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**HALOGEN
FREE**



THERMASHIELD FLAT

Abrasion Resistance
Very High

Abrasion Test Machine
Taber 5150

Abrasion Test Wheel
Calibrase H-18

Abrasion Test Load
500g

Room Temperature
70°F

Humidity
57%

Foil Layer Worn Through
1,000 Test Cycle

Fiberglass Layer Worn Through - Material Destroyed
1,300 Test Cycles

Pre-Test Weight
10,804.3 mg

Post-Test Weight
9,918.5 mg

Test End Loss Of Mass
Point Of Destruction
885.8 mg



Rating _____
Non Combustible / Will not Burn



Chemical Resistance

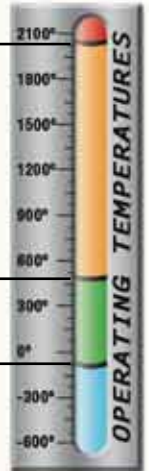
1=No Effect 4=More Affected
2=Little Effect 5=Severely Affected
3=Affected

Aromatic Solvents	_____	1
Aliphatic Solvents	_____	1
Chlorinated Solvents	_____	1
Weak Bases	_____	1
Salts	_____	1
Strong Bases	_____	1
Salt Water 0-S-1926	_____	1
Hydraulic Fluid MIL-H-5606	_____	1
Lube Oil MIL-L-7808	_____	1
De-Icing Fluid MIL-A-8243	_____	1
Strong Acids	_____	2
Strong Oxidants	_____	2
Esters/Keytones	_____	1
UV Light	_____	1
Petroleum	_____	1
Fungus ASTM G-21	_____	1
Halogen Free	_____	Yes
RoHS	_____	Yes
SVHC	_____	

Melt Point
ASTM D-2117
2,048°F (1,120°C)

Maximum Continuous
Mil-I-23053
491°F (255°C)

Minimum Continuous
-76°F (-60°C)



PHYSICAL PROPERTIES

Monofilament Diameter _____ **NA**
ASTM D-204

Flammability Rating **Non Combustible**

Recommended Cutting _____ **Scissor**

Colors _____ **1**

Wall Thickness _____ **.025**