

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 WRAP

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



**Cut Cleanly
Scissors**

Material

Aluminum Laminated Fiberglass

Grade

TWN

Wall Thickness

.025"

Drawing Number

TF001TW-WD

Put-Ups

Nominal Size	Part #	Sheet Width	Wall Thickness ± 0.008"	Bulk Spool	Shop Spool	Available Colors	Lbs/100'
1/2"	TWN0.50SV	1 13/16"	0.025"	200'	100'	Silver	2.60
3/4"	TWN0.75SV	2 1/2"	0.025"	200'	100'	Silver	4.00
1"	TWN1.00SV	3 3/8"	0.025"	200'	100'	Silver	5.10
1 1/4"	TWN1.25SV	4 1/4"	0.025"	200'	100'	Silver	5.70
1 1/2"	TWN1.50SV	5"	0.025"	200'	100'	Silver	6.50
1 3/4"	TWN1.75SV	5 13/16"	0.025"	100'	50'	Silver	7.40
2"	TWN2.00SV	6 11/16"	0.025"	100'	50'	Silver	8.40
2 1/4"	TWN2.25SV	7 3/8"	0.025"	100'	50'	Silver	9.50

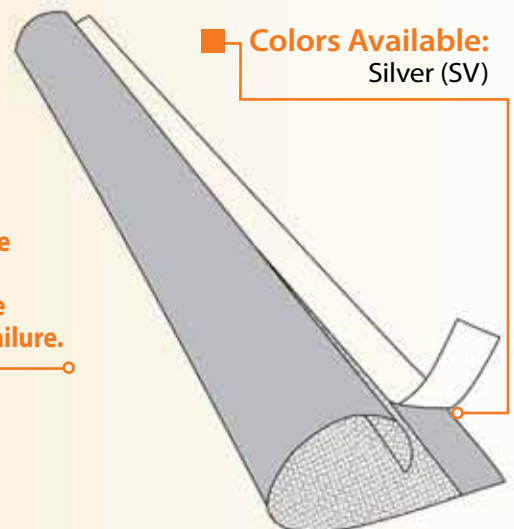
Reflective Aluminized Surface Bonded To Insulating Fiberglass

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 WRAP (TWN). When component disassembly isn't an option, TWN is the solution. Designed to fit securely around existing assemblies and hard to reach components, the flat material is joined along the edge with a strip of permanent, high temperature adhesive. The aggressive bonding agent will securely adhere anywhere along the width of the material, affording maximum protection and allowing a snug fit around odd-shaped connectors and terminations.

■ **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.



www.techflex.com

800.323.5140 • 973.300.9242 • fax: 973.300.9409
104 Demarest Road • Sparta, NJ 07871

**HALOGEN
FREE**



THERMASHIELD WRAP



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



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