# Outstanding Characteristics of TekFoil<sup>™</sup> Hi-Performance Reflective Insulation



Unaffected by ultraviolet rays

**Environmentally safe** 

Nontoxic Nonallergenic Anti-static



**Chemically inert** 

Lightweight and flexible

**Electromagnetic field barrier** 



Reflects up to 97% of radiant energy

Energy transfer kept to minimum levels

Highly light reflective



Stops air infiltration

**Better ventilation** Better temperature control



Fights moisture Resists corrosion



Does not support growth of bacteria and fungi

> **Discourages insect** and rodent nesting



**Great for retrofitting** 

Allows easy passage of plumbing and wiring

No shrinkage or tearing





Lowering energy costs couldn't be easier with TekFoil Reflective Insulation. Reflecting 97% of radiant energy (the major source of heat flow into and out of a building), TekFoil keeps heat where you need it - outside when it's hot and inside when it's not. Perfect for the "do-it-yourselfer," TekFoil is easy to install and can be used in a wide variety of applications.



# VARIETIES OF TEKFOIL



## R/B/R - Reflective/Bubble/Reflective R/BB/R - Reflective/Bubble **Bubble/Reflective**

Perfect for use with new and retrofit residential. commercial, factory and agricultural construction. Use in walls, basements, floors, ceilings, roofs, attics, crawl spaces and barns. Excellent as a vapor barrier. Ideal for insulating heating and air conditioning duct work.

## R/B/WP - Reflective/Bubble/ White Polyethylene R/BB/WP - Reflective/Bubble Bubble/ White Polyethylene

Great vapor barrier. Effective under wood, concrete, vinyl and aluminum siding. Use with expanded polystyrene under concrete to enhance insulation value. Works as sun barrier to keep barns from overheating.

# R/K - Reflective/Kraft

R/R - Fire-Retardant Reflective

Great radiant barrier Perforated available for use with existing vapor barrier.

#### C/B - Clear/Bubble

3/16" thick greenhouse insulation is UV translucent and prevents overheating during the hot summer months. As effective as insulated glass. C/B is environmentally friendly and CFC free.















R/B/R

R/BB/R

R/B/WP

R/K

R/R

TekFoil Specification Chart								
	R/B/R	R/BB/R	R/B/WP	R/BB/WP	R/K	R/R		
Thickness	3/16"	3/8"	3/16"	3/8"	0.008"	0.005"		
Weight	1.04 oz./sq. ft.	1.35 oz./sq.ft.	0.095 oz./sq.ft.	1.16 oz./sq.ft.	0.336 oz./sq.ft.	0.160 oz./sq.ft.		
Roll weight	21 lbs. (4' x 125')	36 lbs. (4' × 125')	23 lbs. (4' x 125')	42 lbs. (4' × 125')	20 lbs. (50' x 250')	14.58 lbs. (54' x 250')		
Flame spread	10 (ASTM E84)	10 (ASTM E84)	<b>70</b> (ASTM E84)	70 (ASTM E84)	5 (ASTM E84 - reflective exposed)	5 (UL 723 - reflective exposed)		
Smoke development	30 (ASTM E84)	30 (ASTM E84)	40 (ASTM E84)	35 (ASTM E84)	0 (ASTM E84 - reflective exposed)	0 (UL 723 - reflective exposed)		
Emissivity	0.03 (ASTM C1363)	0.03 (ASTM C1363)	0.03 (ASTM C1363)	0.03 (ASTM C1363)	0.03 (ASTM E408)	0.03		
Reflectivity	0.97	0.97	0.97	0.97	0.97	0.97		
Permeance	0.00 perm (ASTM E96)	0.02 perm (ASTM E96)	0.02 perm (ASTM E96)					
Crushing resistance	40 PSI	60.05 PSI	40 PSI	60.05 PSI	Not applicable	Not applicable		
Temperature range	-50°F to 200°F	-50°F to 200°F	-50°F to 200°F	-50°F to 200°F	-40°F to 240°F (ASTM D1790)	-40°F to 240°F (ASTM D1790)		
Mold resistance	No growth (ASTM C1338)	No growth						







# Keep energy costs in check with TekFoil, a cost-effective and easy-to-install insulation system.

Stop money from slipping away through poorly insulated walls and ceilings and keep it in your pocket with TekFoil Reflective Insulation. Made to reduce radiant heat transfer across open spaces, TekFoil reflects 97% of radiant heat to keep it in during the frigid winter months and out during those sweltering summer days. Manufactured from lightweight materials, TekFoil is nontoxic, nonallergenic, noncarcinogenic and chemically inert, so it is safe for people and the environment.

#### How does it work?

Almost 93% of the heat flow into or out of a building is in the form of radiant heat waves. TekFoil has 97% reflectivity, which means that by using it, only 3% of this heat is getting into or out of your building. Compare this to common building materials that let 85%-90% of radiant heat pass in or out. While TekFoil blocks 97% of radiant heat transfer, installing it in building cavities also reduces heat transfer by convection, which means that air circulation is kept where you want it. When used with existing insulation, TekFoil will raise the overall R-value, making the insulation more efficient. R-value is the measurement of heat flow through a material. The higher the R-value of a material, the better insulation it provides (and the less heat flow it allows).

#### Installation is a breeze.

Put away those masks, gloves and protective clothing required for installation of other types of insulation. With TekFoil, all you need are scissors, measuring tape and a staple gun. TekFoil is available in square edge, stable tab, and quick seam to eliminate taping.

## What can TekFoil Reflective Insulation do for you?

You need insulation to keep heat in and out. Most types of insulation cannot do both, but reflective insulation can. Use TekFoil inside buildings to retain heat in colder months and to keep heat out during warmer months, reducing heating and air conditioning costs year long. In colder climates, use it in conjunction with existing insulation to make your insulation more efficient. In hotter climates, use it under steel roofs or outside walls to keep out radiant heat from the sun.

The durability and versatility of TekFoil insulation make it the preferred choice for agricultural, metal and industrial building use, where it is commonly installed on walls, roofs, ceilings (as interior finishing), attic barriers (over existing insulation), and is also great for use in vegetable and fruit storage (to retain high humidity).







This is just a sampling of the many uses for TekFoil, but we'll bet that you can come up with another great way to use our product. Keep reading for more information on the many uses of TekFoil.



# Reduce energy consumption and create an effective vapor barrier

More durable than traditional insulation, TekFoil lasts longer because it discourages rodent nesting and is moisture resistant. With a crushing resistance of at least 40 PSI, it will not tear, crack, or crush. R/B/R and R/BB/R TekFoil are perfect for insulating ceilings and walls.

# Use TekFoil over an existing installation for even greater insulation

Create a radiant barrier using R/K or R/R and raise the R-value on existing insulation. Great for use in attics and crawl spaces that are poorly insulated, as well as on rafters and trusses and in steel buildings.

An air space of 3/4" is needed between TekFoil and other surfaces for it to be most effective.









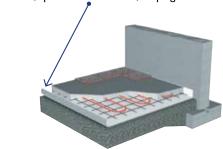
TekFoil R/B/WP is specially designed for installation under concrete floors to break the thermal bridge between the concrete slab and the ground.

## Repel moisture from concrete

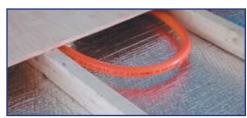
Create a vapor barrier when using TekFoil under new concrete floors. Simply pour cement on the white poly side of R/BB/WP TekFoil to keep moisture from getting through porous concrete and into your basement.

# Increase the efficiency of radiant heating

TekFoil reflects the heat from radiant coils to where you want it, up towards the room, keeping it warmer.







Use R/B/R and R/BB/R with radiant heating on top of a wood sub-floor, or under or between wood floor joists.



Use R/BB/WP when TekFoil will come into contact with concrete, either over an existing concrete floor or during new construction. The white poly side keeps concrete from degrading the TekFoil.

# **G**REENHOUSES



### Save on greenhouse energy costs

Keep heat and light from escaping your greenhouse with the use of TekFoil insulation. Save up to 50% on winter heating costs and help prevent summer overheating. Maintain a healthier environment in your greenhouse — TekFoil does not support the growth of bacteria or fungi.

#### Clear bubble insulation

C/B lets light in while gaining all the advantages that regular TekFoil has to offer.

Just as effective as insulated glass, C/B transmits evenly diffused light throughout the greenhouse.





# Where in the Greenhouse Should You Use TekFoil

**North roof:** Greatly reduce fuel consumption during the winter months by insulating the north roof.

## **Exterior walls:**

Below bench height these walls are a major source of heat loss. Reduce this heat loss by covering these areas with TekFoil.

Insulating your benches: TekFoil will have a dramatic effect on heating costs, by allowing you to deliver the heat precisely during the height of the heating season.

North wall: Save on power costs by retaining heat and light. Cover your north
wall ("cold wall") with TekFoil.

Floors: More energy loss occurs through the floor than through any other surface. Reduce your loss up to 50% by applying TekFoil.



# OTHER TEKFOIL USES











Use TekFoil to insulate your garage door.

## Uses are only limited by your imagination

#### **TekFoil Room Dividers**

Perfect for temporary or long-term warehouse or construction applications. They provide insulation, reduce noise and keep dust and dirt out of the protected area.

#### On the farm

TekFoil can come in handy for insulating barns and poultry houses, or even for creating an insulated pasture hover.

# Use it for something simple

Line a cooler or create a windshield sun guard. Keep toasty – TekFoil reflects your own body heat when used as a seat warmer or placed under a sleeping bag.

