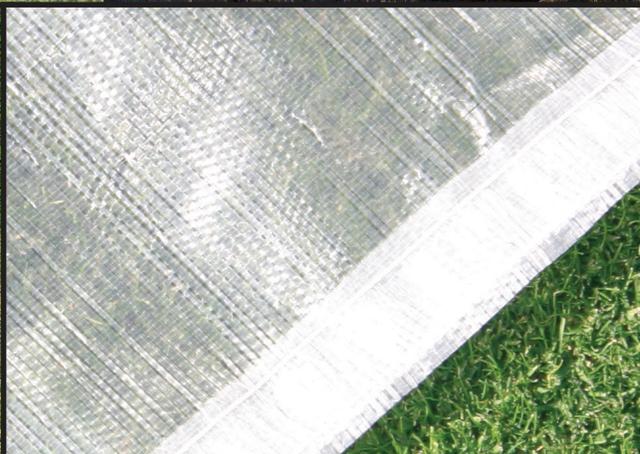


TURF SHIELD™



**THE BEST
INSURANCE
FOR YOUR TEES
AND GREENS**



ivi-golf.com

Turf Shield® is simply the easiest, most affordable protection from winter's effects you can give your critical areas. It's also a real asset for grow-in stage during new construction or renovation projects.

Woven from durable, translucent polyethylene, Turf Shield creates a thin, protective layer that acts as a small greenhouse, allowing the turf to breathe and retain its moisture while letting sunlight through.

Winter Kill

The effects of cold and freezing weather can be damaging to your prized greens and tees. Not just for predictable northern climates, the occasional freezes and frosts deep into southern areas can, and will, damage these high investment areas.

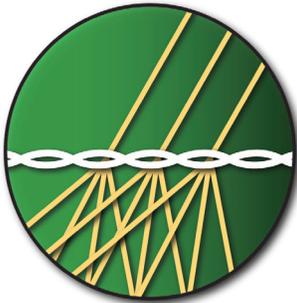
Turf Shield reduces this risk, promotes faster spring growth, and helps create deeper root structures. In addition, Turf Shield reduces spring clean-up costs and controls the dissipation of any applied chemicals and fungicides.

How It Works

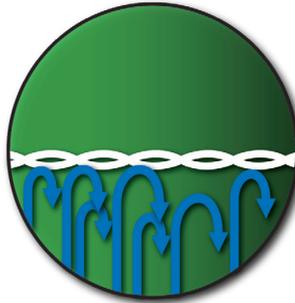
Turf Shield performance is created from the permeable weave and translucent fibers. These fibers create tiny little prisms, multiplying and reflecting light throughout the weave. With enough space between this weave, the flow of air and moisture is controlled, creating a small greenhouse effect. Turf Shield uses this principle to provide simple, low-cost insurance against the negative impacts of winter.



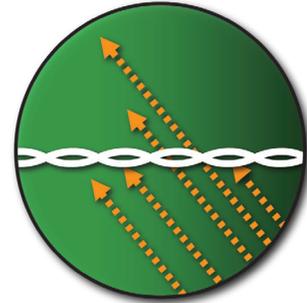
ALLOWS SUNLIGHT THROUGH



RETAINS CRITICAL MOISTURE



CONTROLS AIR FLOW



Germination & Root Structures

Beyond the factors of winter weather, Turf Shield can play an important role in newly seeded areas and high traffic zones around the course. The greenhouse effect keeps moisture in the soil and improves growth agent performance. This allows for faster seed germination and helps create deeper root structures.

Rapid Spring Growth

The greenhouse properties of Turf Shield drastically enhances growth activity when days become longer and the turf comes out of dormancy. Even after snow and ice are gone, utilizing Turf Shield covers as a short-term action significantly jump starts early spring growth.

AVAILABLE IN WHITE AND BLACK PERMEABLE WOVEN FABRIC

Two-Part Protective System

In addition to the standard turf cover layer, Turf Shield Arctic adds an additional “air-flow” layer that supports increased separation of cover to the turf, resists snow/ice pressure, and promotes greater passive air movement. It provides greater protection when heavy snow and ice layers are present for long periods which can damage plant health.

Turf Shield Arctic relies on the same woven polyethylene layer, which sits on top of the “Air-Flow” layer. This second layer is manufactured of non-woven, high-loft polyester with a non-soluble binder as this additional level of protection and thermal control. Throughout the winter months, this additional layer will resist heavy loads of snow/ice to maintain the necessary space for the passive air flow to be insured.

Super Sized Rolls

The top layer of Turf Shield Arctic is custom-sized fabricated just like the standard Turf Shield covers. The “Air-Flow” layer is manufactured in 90” widths, to reduce seams and speed installation. The standard length is 90’ with a shipped roll size of 675 square feet.

Easy Installation

Putting Turf Shield Arctic to work is as easy as unrolling and placing the “Air Flow” layers in place, trimming to length, and butting edges together. Once in place, the standard Turf Shield cover goes on top, covering the lower layer.

The cover can then be staked or stapled into the turf. Turf Shield turf covers come with grommets every 5 feet at the perimeter, providing many years of use.

IVI-GOLF has a large variety of hardwood stakes, standard steel sod staples, anchors, and specially designed steel staple styles. This variety will help you choose the right fastener for various soil types or settings.



Turf Shield Fabrication & Fabric Specifications

Feature	Description	Feature	Description
Material	Woven Polyethylene	Seams & Edges	Reinforced, Double Sewn Seams
Color	Translucent White or Black	Securing Areas	Steel Grommets - Every 5'
Size (s)	Made to Order	Markings	ID Tags Sewn @ Corner

Property	Test Method	English Units			SI Units		
		MD	CD		MD	CD	
Mass per Unit Area	ASTM D-5261	3.1		oz/yd ²	105		g/m ²
Grab Tensile Strength	ASTM D-4632	150	115	lbs	668	512	N
Grab Tensile Elongation	ASTM D-4632	18	16	%	18	16	%
Air Permeability	ASTM D-737	33.5		ft ³ /min/ft ²	10.2		m ³ /min/m ²
UV Resistance (2000 hours)	ASTM D-4355	85		%	85		%

A woven agricultural fabric, produced from polypropylene slit-film tapes, which meet or exceed the following: *Note: Exposure of this product to certain agrochemicals may have an adverse affect on the service life of the fabric. Some agrochemicals contain in their structure active halogens (such as chlorine) and sulfur, or other byproducts which reduce the service life of woven polypropylene fabrics. Accelerated polymer degradation and/or photodegradation may occur. Please consult your agrochemical supplier for information and other available options.

Turf Shield Air Flow Layer Fabrication & Fabric Specifications

Feature	Description	Feature	Description
Material	Non-Woven Polyester	Roll Size	90" x 90'
Binder	Non-Soluble	Roll Area	675 sq. ft.
Color	Black	Packaging	Opaque Poly Bag

Property	Test Method	English Units			SI Units		
		MD	CD		MD	CD	
Color		Black					
Mass		16		oz/yd ²	.488		kg/m ²
Area		675 ft ² (90" W x 90' L)			62.71 m ² (2.29m W x 27.43m L)		
Mullen Burst Strength	ASTM D-3786	149		lbs.	662		N
Grab Tensile Strength	ASTM D-4632	59.4	51.6	lbs	264	229	N
Permeability	ASTM D-4491				14.01		m ³ /sec

Custom Sizes & Fabrication

Turf Shield covers are fabricated to order. Provided with dimensions and ID, each cover is assembled with high quality and durability in mind. Priced similar to many standard sized covers, Turf Shield covers are based on your measurements. The Turf Shield Air Flow Layer is ordered by the roll and is trimmed to fit by the customer.

Additional product information can be found by calling IVI-GOLF at 888-970-5111 or visiting us on the web at www.ivi-golf.com.