

THE SIMPLE
SEAMLESS CHOICE
FOR BUNKER
PROTECTION

flexxcape.com

# SIMPLE & SEAMLESS BUNKER PROTECTION

Introduced in 2017, Flexxcape takes the seamless bunker liner concept to the next level. As an ultra-premium option, Flexxcape is designed to outperform bunker hardscapes while offering an extremely simple, hassle-free installation method that anyone can perform.

# PRODUCT DEVELOPMENT

As the manufacturer and marketer of the popular Sandtrapper product line, we took our expertise in geophysical controls and applied them to the seamless bunker liner concept. We focused on maintaining simple handling and installation requirements. We focused on washout control, contamination elimination, and consistent playability. We focused on maintenance durability.

Flexxcape is a non-degradable, synthetic material manufactured with precision specifications and capable of standing up to the most rigorous environmental conditions. It withstands freeze/thaw cycles, mechanical raking, and ultraviolet exposure.

# PERMANENT & FLEXIBLE MATERIAL

Flexxcape is manufactured from an industrial PVC in a patented extrusion process that chemically bonds strands together. During the process, small loops are created which increases surface area and adhesion.

The proprietary PVC formulation is incredibly durable while maintaining conformity even in a frozen state. Flexxcape will not crack or break-up under repetitive freeze/thaw cycles.

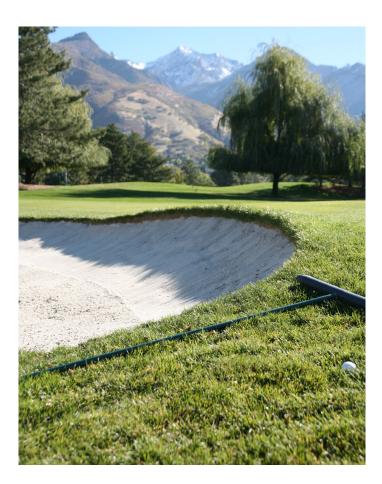
### **SEAMLESS DESIGN**

The Flexxcape solution to the seamless concept is the chemical bonding of the material together with the Flexxcape Bonding Agent. During the rapid curing process, the Bonding Agent literally melts the PVC and re-orients the chemical bonds for a permanent connection. This results in the bond being stronger than the material itself.

# **WASHOUT PREVENTION**

The three-dimensional matrix of Flexxcape is the key to outstanding washout prevention. The undulating, irregular loops allows for maximum cohesion to sand particles, allowing Flexxcape to deliver unrivaled prevention against washouts. Unlike other solutions which have a smoother surface and rely on water percolation to fight water turbulence, Flexxcape moves water through its profile while also holding sand particles.





# SAFE & CONSISTENT PLAYABILITY

As a flexible material, Flexxcape avoids physical damage to a golfer's equipment or person should they strike deep into the bunker sand. When sand depths aren't maintained to proper spec, there is never any potential harm.

The height profile of Flexxcape allows for sand moisture to be maintained, resulting in a firm playing surface. Drip irrigation or other methods are not required to keep sand moisture and firmness.

From bunker to bunker, Flexxcape delivers consistent performance. No risk of tearing or damage. No risk of break-up.

### **INSTALLATION SIMPLICITY**

The installation simplicity of Flexxcape allows it to be far more cost-effective and creates no interruptions to a renovation schedule. Similar to our popular Sandtrapper product line, installing Flexxcape is an intuitive process that does not require any specialized tools, equipment or specialized installers.

The product dimensions and packaging format make it easy to move around the course. Two workers can install a typical bunker in under one hour, regardless of wet weather or many other environmental conditions.

# **NO MATERIALS TESTING REQUIRED**

Unlike bunker hardscape options, Flexxcape does not require testing of gravel, mix, moisture content, or vendor processes. These types of advanced requirements further complicate a project and renovation schedule. Flexxcape avoids all of these issues and remains the best permanent option.

### PRODUCT CHARACTERISTICS

Flexxcape is manufactured with precision specifications and packaged for convenience. The patented manufacturing process results in a material that can be counted on day in and day out.

Material	Flexible PVC	
Color	Natural	
Thickness	3/8 inch	9.5 mm
Roll Width	42 inches	1.067 m
Roll Length	45 feet	13.72 m
Roll Area	157.5 ft²	14.63 m²
Weight	.768 lbs ft²	3.75 kg/m²
Roll Weight	121 lbs	54.88 kg
Rolls per Pallet	15	
Area per Pallet	2,362.5 ft²	219.48 m²
Pallet Weight	1,832.5 lbs	831.2 kg
Pallets per Truckload	24	
Area per Truckload	56,700 sq. ft.	5,267.6 m²
Grab Tensile Strength (ASTM D-4632)	120.5 x 90.6 lbs	54.66 x 41.1 kg
Grab Elongation (ASTM D-4632)	99.7 x 89.3 %	
Trapezoidal Tear (ASTM D-4533)	64.6 x 53.5 lbs	29.3 x 24.5 kg
CBR Puncture (ASTM D-6241)	165.3 lbs	75 kg
Flow Rate (ASTM D-4491)	549.8 gpm/ft²	
Permittivity (ASTM D-4491)	7.35 sec-1	
Permeability (ASTM D-4491)	6.059 cm/sec	
Transmissivity (ASTM D-4716)	1.92E-03 m²/sec	





# **SERVICE & LOGISTICS**

Obtaining Flexxcape and getting your renovation project up and running is fast and easy. Manufacturing schedules and on-hand inventory allows project planners a smooth, troublefree acquisition process.

# PRODUCT ASSURANCE - A SIMPLE 12-YEAR WARRANTY

The Flexxcape 12-Year Warranty is simply the best in the golf industry. It gives the facility common-sense protection, with no complexity or caveats. As we've done with our Sandtrapper product for over twenty years, we stand by the quality and performance promises, period.

### **INVESTING IN BUNKERS**

Low maintenance bunkers don't have to be elusive. In fact, a proper renovation with the right products can provide a rapid ROI and a beautiful result.

Twenty years ago, we launched Sandtrapper in what was an industry void of a Bunker Management category. We've seen all manner of solutions. In the end, it is about providing products that work and doing so at the right price-point. When it matters, it is about reliability in product, service, and logistics — from a trusted industry partner.

### WHO IS IVI-GOLF?

IVI-GOLF (a division of Indian Valley Industries, Inc.) has commonly been synonymous with Sandtrapper. We continually apply the same synergies of product, service and support to the Golf Division as we've used company-wide since 1940.

Indian Valley is a vertically integrated supplier to a wide range of industries, including environmental protection products and supplies to the heavy construction industry.













### **PREPARATION**

The bunker to be lined should have the base and slopes of the surface firm and compact. All drainage should be checked, repaired, or installed prior to Flexxcape installation.

#### PRODUCT HANDLING

Each roll of Flexxcape weighs approximately 121 lbs. and can moved around the facility in a utility vehicle and placed into bunker with two people.

#### **PLACEMENT**

Flexxcape can be rolled out into strips covering the bottom of the bunker. Each segment can be easily cut from the roll using a standard utility knife. Be careful to closely pre-fit segments prior to cutting from roll to minimize waste.

Flexxcape can be installed in any manner of weather. During cold months, it is advisable to store indoors for smoother unrolling and placement.

### **BONDING SEGMENTS**

Segments are closely aligned with edges butted together. A standard staple gun with 3/8 inch staple temporarily locks the edges together prior to chemical bonding. Optionally, segments can overlap, if desired.

The Flexxcape Bonding Agent is applied using a common squeeze bottle with narrow application tip. The cement should be applied directly onto the butted edges. The cement has a rapid curing process, approximately 10-15 minutes for initial set and 12 hours for final bond. During colder weather, the cure will take slightly longer.

During the curing process, the cement literally melts the PVC and reorients the chemical bonds for a permanent connection. This results in the bond being stronger than the material itself.

### TRIMMING EDGES

Once the edges are bonded, the excess material at the bunker edge can be trimmed. Trimming can be performed easily with a standard utility knife. The sharper the blades, the smoother the finished cut will be.

### **SECURING FLEXXCAPE**

The weight of Flexxcape will keep it in place. The flexible nature of the product will allow it to conform to any irregularities in the bunker base, including drainage lines/gravel. There is no need to staple the product.

Should one wish to secure Flexxcape on the perimeter, this can be done with standard sod staples.

### **MAINTENANCE**

Flexxcape requires no maintenance. The PVC formulation is incredibly durable while maintaining conformity even in a frozen state. Flexxcape will not crack or break-up under repetitive freeze/thaw cycles.

NOTE: The complete Installation Guidelines are available on-line or through our sales representatives. Please read completely before starting the project.



flexxcape.com 888-970-5111