

This is a shortened version to provide a quick understanding on installation. Please refer to the complete Flexscape Installation Guidelines before beginning your project.

## 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 Flexscape installation.

## PRODUCT HANDLING

Each roll of Flexscape weighs approximately 155 lbs. and can be moved around the facility in a utility vehicle and placed into bunker with two people.

## PLACEMENT

Flexscape 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.

## 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.

The Flexscape 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 the curing process, the cement literally melts the PVC and re-orientes 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.

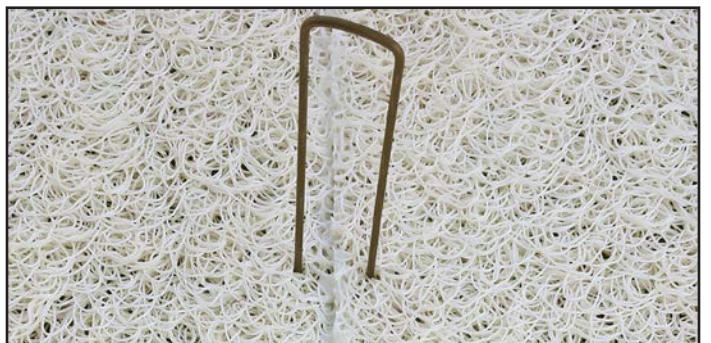
## SECURING FLEXXCAPE

The weight of Flexscape 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 Flexscape on the perimeter, this can be done with standard sod staples.

## MAINTENANCE

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





**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 and consistent playability. We focused on maintenance durability.

Flexscape 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**

Flexscape is manufactured from an industrial PVC in a patented extrusion process that chemically bonds strands together. During the process, small loops are created which increase surface area and adhesion. The proprietary PVC formulation is incredibly durable while maintaining conformity even in a frozen state. Flexscape will not crack or break-up under repetitive freeze/thaw cycles.

Flexscape 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.

**PHYSICAL PROPERTIES**

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 ft <sup>2</sup>	14.63 m <sup>2</sup>
Weight	.768 lbs ft <sup>2</sup>	3.75 kg/m <sup>2</sup>
Roll Weight	121 lbs	54.88 kg
Rolls per Pallet	15	
Area per Pallet	2,362.5 ft <sup>2</sup>	219.48 m <sup>2</sup>
Pallet Weight	1,832.5 lbs	831.2 kg
Pallets per Truckload	20	
Area per Truckload	47,250 ft <sup>2</sup>	4389.6 m <sup>2</sup>

**MECHANICAL PROPERTIES**

Grab Tensile Strength (ASTM D-4632)	120.5 x 90.6 lbs
Grab Elongation (ASTM D-4632)	99.7 x 89.3 %
Trapezoidal Tear (ASTM D-4533)	64.6 x 53.5 lbs
CBR Puncture (ASTM D-6241)	165.3 lbs
Flow Rate (ASTM D-4491)	549.8 gpm/ft <sup>2</sup>
Permittivity (ASTM D-4491)	7.35 sec-1
Permeability (ASTM D-4491)	6.059 cm/sec
Transmissivity (ASTM D-4716)	1.92E-03 m <sup>2</sup> /sec