



CAPILLARY BUNKERS

The complete **bunker** protection system

Don't settle for just a liner - take advantage of our full-scale Bunker Technology System that's designed to protect your bunkers, keep just the right moisture level and ensure optimal drainage so you can enjoy pristine bunkers and perfect playability **all year round**



Why Capillary Bunkers?



Engineered for all climates

Capillary Bunkers are engineered for installation in diverse climates, resisting issues like rock migration, frost heaving, and clay expansion. Whether in freezing winters or arid deserts, they consistently deliver performance, supported by an unmatched guarantee in the market.



Ease of installation

Our bunker liner can be installed by your in-house team with local materials and minimal tools, or by a local contractor. Capillary Bunkers gives you the flexibility to schedule installation during your off-season to avoid closing during peak playing seasons. 24 hours after installation, the bunker is ready to be used again.



Superior drainage and moisture balance

Effective drainage in bunkers isn't just about handling large amounts of water quickly. It's about balancing drainage with moisture retention. Traditional liners can lead to sand migration and clogged systems. Capillary Bunkers maintain optimal moisture levels, ensuring consistent playing conditions throughout all seasons.



Financial benefits for every budget

The aesthetics and functionality of bunkers are crucial for attracting golfers. Capillary Bunkers are a cost-effective investment suitable for golf courses of any budget. With a straightforward installation process, any team can elevate their course, ensuring substantial value for every dollar spent.



Unparalleled 15-year performance guarantee

We are proud to offer a 15-year performance guarantee on our proprietary Capillary Material when you also install the Capillary Wash Box.

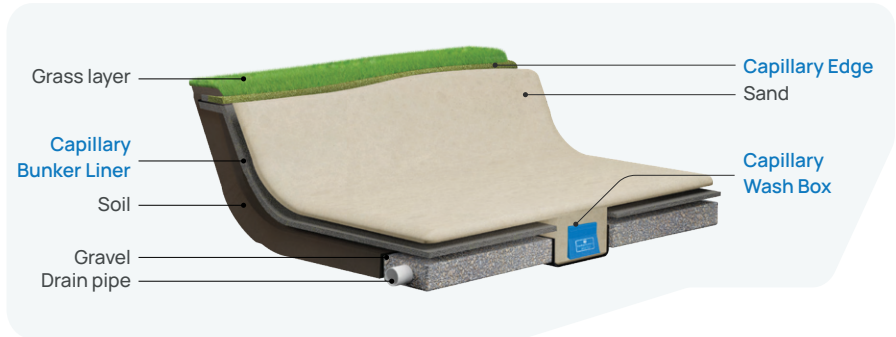


Swift ROI with lower maintenance and high performing bunkers

Reduce long-term maintenance effort and costs. Our bunkers last longer, pay for themselves within 3 years in most cases, and provide better, more consistent playing experiences.

A full-scale bunker system ensuring enduring quality for players and ease of maintenance

It harnesses the proprietary Capillary Material's exceptional capabilities to maintain optimal moisture levels and provide rapid drainage, all while ensuring unparalleled durability and strength.



Capillary Edge - Maintaining design integrity

The Capillary Edge guarantees that the bunker's shape remains true to its original design throughout its lifespan. This minimizes the need for crew intervention in edge trimming and eliminates the requirement for remodeling or reshaping bunker edges every decade.



Capillary Bunker Liner - Mastering drainage and moisture retention

Thanks to its proprietary Capillary Material, the Capillary Bunker Liner excels at swiftly draining excess water while simultaneously retaining the right amount of moisture in the sand. This ensures impeccable playing conditions in any weather and across all terrains, while also preventing the washouts and maintenance headaches typically associated with bunker upkeep.



Capillary Wash Box - Restoring sand to its optimal state

The Capillary Wash Box provides an effective solution for washing away algae, debris, silt, clay, and organic pollutants from bunker sand. This process preserves the sand's percolation rate, color, and desired playing properties while eliminating the need for frequent sand replacement.



Ease of installation and project overview

With +1500 venues installed worldwide, we have the experience to manage small- to large-scale projects all over the world. Upon receiving your order, we leverage the resources of local suppliers to ensure rapid project initiation.

Our bunker liner is easy to install and can be done either by us, a contractor or your in-house crew. You can install sand and edge within 24 hours.

Here is what a project with us looks like: 1 – 2 – 3

1 Preparative ground work

We provide instructions or help you with preparing the ground by emptying the bunker, preparing edges and verifying drainage.



2 Transportation and installation of layers

The **Capillary Material** is delivered directly to your location in a ready-mix state from local plants. It is ready to be installed right out of the truck and can be done by any crew.



3 Installation of sand and functionality test

We then test the functionality. You can install bunker sand 24 hours after installation and the bunker is ready to be used.



Technology overview

The most advanced bunker liner system, specifically engineered to create bunkers that never fail players or the maintenance team

Product Specs



Delivery

Product is delivered from a local supplier in a concrete truck



Installation

Less than 90 minutes per 1,350 ft² (125 m²)



Drainage

More than 100 inches (2,500 mm) per hour



Edges

Superior strength for all edge options, including optional stacked-sod edges



Area per truckload

1,350 ft² (125 m²)



Thickness

2 inches (50 mm)



Void structure

+20% void structure prevents sand migration and ice damage



Total cost of ownership over 25 years

Initial installation, maintenance, sand cost and liner & sand replacement

Cost metric	CapillaryFlow	Fabric/ geo. tex. liner	Glued aggregate / rubber liner	Synthetic Liners	No/sod liner
Initial installation					
Ground preparations (incl. drainage)	\$103,050	\$111,050	\$106,050	\$121,050	\$50,000
Liner cost (incl. Installation & material)	\$119,920	\$95,400	\$103,600	\$188,700	\$0-27,800
Sand fill at initial renovation incl. labor	\$81,667	\$81,667	\$81,667	\$81,667	\$81,667
Sand costs 25 years					
Sand performance lifetime	+25 years	8,5 Years	10 Years	10 Years	6 Years
Sand replacement costs	\$0,00	\$218,137	\$185,417	\$185,417	\$293,403
Additional sand refill and cost	\$83,333	\$208,333	\$208,333	\$208,333	\$277,778
Labor \$ spent on sand washing or sand refill	\$30,000	\$90,000	\$90,000	\$90,000	\$90,000
Liner replacement and maintenance savings 25 years					
Liner/bunker lifespan	+25 Years	8,5 Years	10 Years	10 Years	-
Liner replacement/renovation cost	\$0	\$497,375	\$546,324	\$722,625	\$402,396
Decrease in maintenance over 25 years	-\$1,500,000	-\$755,957	-\$935,528	-\$735,226	-\$501,042
Net cost over 25 years	ROI of 5.1 years and savings of - \$1,082,030. Liner and sand not replaced in 25 years	No ROI before replacement - Net cost of \$594,954	No ROI before replacement - Net cost of \$346,913	No ROI before replacement - Net cost of \$862,526	No ROI before replacement - Net cost of \$884,409



The result?

A bunker system that promises **+25 years** of pristine conditions with no sand replacement and minimal upkeep.

ROI

5.1 years

Expected sand and liner lifespan

+25 years

Maintenance savings per year

\$60,000

*Based on renovating 80 bunkers of total 50,000 sq. ft., with sand price of \$80 per short ton and labor price \$30 per hour. Liner prices based on USGA data. Contact your CapillaryFlow representative to learn more.

Designed to decrease maintenance significantly

The superior drainage and durability of the Capillary Material frees up your crew from tedious bunker maintenance for decades

●●●● = POSITIVE
 ●●● = NEUTRAL
 ● = NEGATIVE

Cost metric	CapillaryFlow	Fabric/ geo. tex. liner	Glued aggregate / rubber liner	SyntheticLiners	No/sod liner
Low raking frequency	●●●●	●●●	●●●●	●●●●	●●●
Sand displacement	●●●●●	●●●	●●●●	●●●	●●●
Sand lifespan	●●●●●	●●●	●●●	●●●	●
Liner damage risk	●●●●●	●	●●●●	●●●	Not applicable
Drainage system lifespan	●●●●●	●●●	●●●	●●●	●
Wash-out resistance	●●●●●	●●●	●●●●	●●●	●
Long-term liner durability	●●●●●	●●●	●●●●	●●●	Not applicable
Ability to wash sand	●●●●●	●	●●	●●	●
Reduction of maintenance hours	●●●●●	●●●	●●●●	●●●	●●
Product guarantee value	●●●●●	●	●●●	●●	Not applicable
Lifespan of bunker	●●●●●	●●●	●●●	●●●	●



TESTIMONIALS AND REFERENCES

Don't just take our word for it!

Here are what some of our **1500+ customers** say about us and our bunker system



Alejandro Reyes

Head superintendent | 2018 Ryder Cup
Golf National, France

"We have selected Capillary Bunkers based on the outstanding performance and strength of the material. After several tests and on-site evaluations, it is the best product for our bunker renovation project and will help produce a world class golf venue."



Phil Smith

Golf course architect | Flying Horse Club
Colorado Springs, Colorado

"I have had great experiences with Capillary Bunkers, so it was an easy decision to choose the product for this project. I have found that Capillary Bunkers delivers very good results in terms of sand quality, and the ease of installation just closes the deal as far as I'm concerned. I really can't say enough about it."



Shawn Emerson

Director of agronomy | Desert Mountain Golf Club
Scottsdale, Arizona

"After installing Capillary Bunkers, we save over 2,000 man hours per year. We used to till our bunkers five times per week and now we only do it once a week, and instead of raking all bunkers, our staff can go out and spot rake for a few hours. After heavy rain storms, we spend 5 rather than 50 hours on repairing bunkers."

TESTIMONIALS AND REFERENCES



Rey Gomez

Golf Course Superintendent | Horseshoe Bay Resort
Texas Hill Country

"I am also very impressed by how well Capillary Bunkers drain after a large rain event. It has a vacuum effect and drains very quickly. Our team morale has improved knowing that they won't have to shovel or push sand around after a large rain event. Most importantly, our members enjoy the consistency of the bunkers as they notice a difference in the playability and consistency of sand depths."



Dan Grogan

Golf Course Superintendent | The Sagamore Club
Noblesville, Indiana

"We are delighted with our bunkers. Before we installed the Capillary Bunkers liner, if we had an inch of rain, half of our bunkers would need to be pumped out. Maybe a third of them would be back in play the first day after the rain. Now, we are fully back up and running by lunchtime on the first day."

Trusted by some of the world's best golf courses

We are proud to have constructed some of the world's top 100 golf courses, from the [Ryder Cup](#) to [PGA venues](#)



Testimonials and
case studies



Installation and
maintenance guides

ABOUT US

We enhance performance and optimize playing conditions for sports grounds

We are a technology company whose patented innovations are enabling golf courses, sports grounds, and other leisure spaces like city parks to build long-lasting and low maintenance greens, bunkers and grounds.

Controlling the water, carbon dioxide and oxygen levels for various soil profiles in these spaces is a major challenge. Our proprietary CapillaryFlow technology offers a simple solution that ensures optimal moisture levels and good drainage regardless of the weather conditions.

Capillary Material is the common factor across most of our solutions including Capillary Bunkers, Capillary Hydroponics, and Capillary Geothermal. It is a patented and engineered polymer-based cement that is the only building material that can move water both up and down to precisely regulate the moisture content of any adjacent material, such as sand or soil.

Our solutions have been installed in more than 1500 venues in 44 countries across the world

HQ

Gothenburg,
Sweden

US OFFICE

Wellington,
Florida

Number of installed venues

1500+

Number of current partners

70+

Number of countries installed in:

46



Read more!

ABOUT US

Our products and solutions

Golf

- Bunker liners
- Hydroponic greens, tees and fairways with geothermal heating and cooling
- Capillary Edge
- Capillary Wash Box
- Cart paths



Equestrian

- Grass arenas with geothermal heating and cooling
- Sand arenas with Capillary Wash Box
- Turnouts



Football/Soccer

- Hydroponic fields and pitches with geothermal heating and cooling



Baseball

- Infields and outfields with geothermal heating and cooling



Cities

- Hydroponic grass with geothermal heating and cooling





Our promise

Less maintenance
Consistent playability
High performing bunkers

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