

A NEW SOLUTION TO AN AGE-OLD PROBLEM



SOCCER

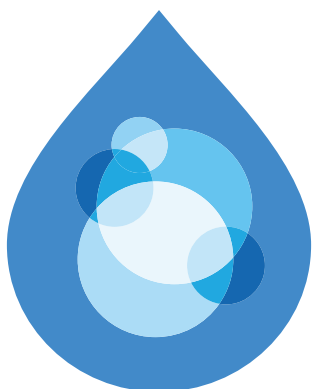
LACROSSE

FOOTBALL

PLAYGROUNDS

RUGBY

FIELD HOCKEY



SOTERIATMMAX

THE SELF-COOLING PAD

THE NEW AND IMPROVED EXPANDED POLYPROPYLENE PAD

SOTERIA MAX™

The SoteriaMax™ pad is named for the Greek goddess of safety and deliverance from harm. The pad's name pays homage to its fundamental mission – to protect athletes on the field with groundbreaking engineering.

Soteria reimagines field performance and changes player expectations. Soteria improves impact attenuation, feel underfoot, field temperatures, drainage, and even the installation process.



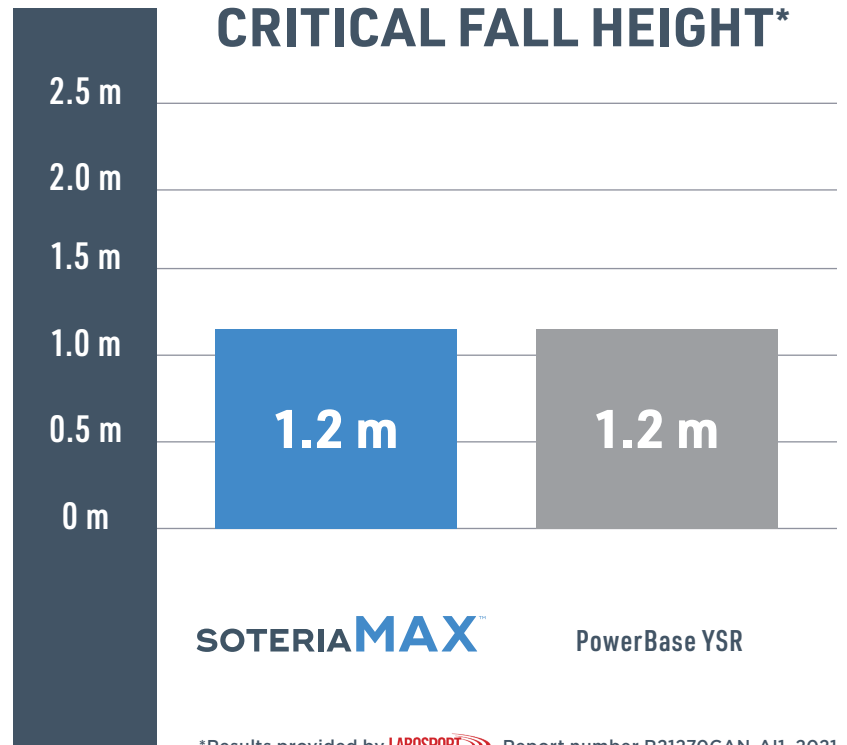
PROVEN PROTECTION

HIC (SIMULATED HEAD IMPACTS)



Soteria's expanded polypropylene materials provide exceptional Critical Fall Height (CFH) ratings. The Head Injury Criterion (HIC) test is a conservative test that estimates the highest drop at which a 'critical' injury could be sustained.

CRITICAL FALL HEIGHT*



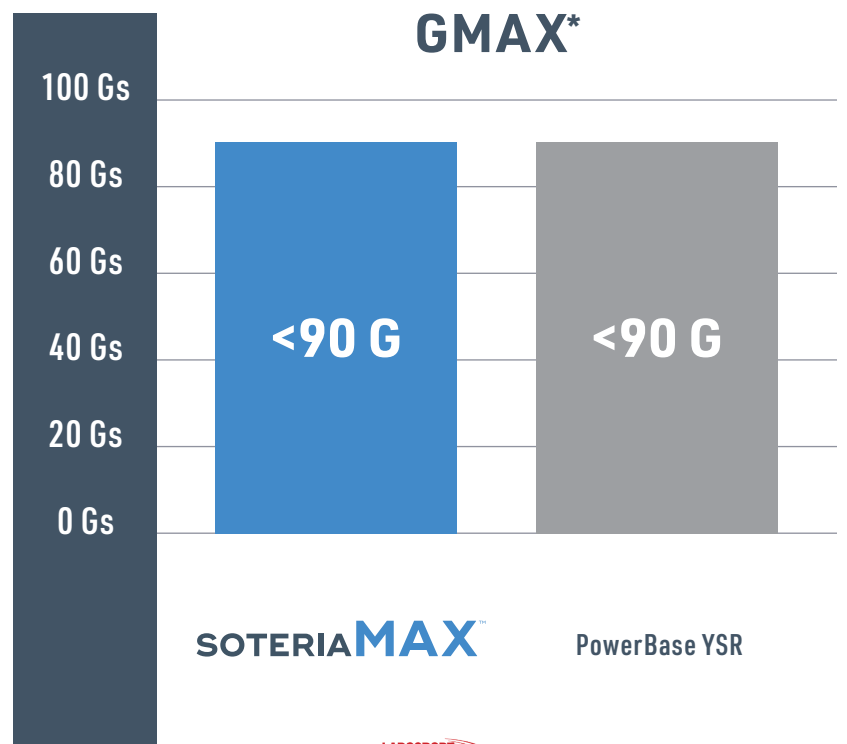
*Results provided by LABOSPORT. Report number R21270CAN-A11. 2021

GMAX (SHOCK ATTENUATION)



Soteria also improves another measure of shock attenuation - Gmax. This standard has been used for decades to evaluate the amount of force returned to an athlete by the playing surface.

GMAX*



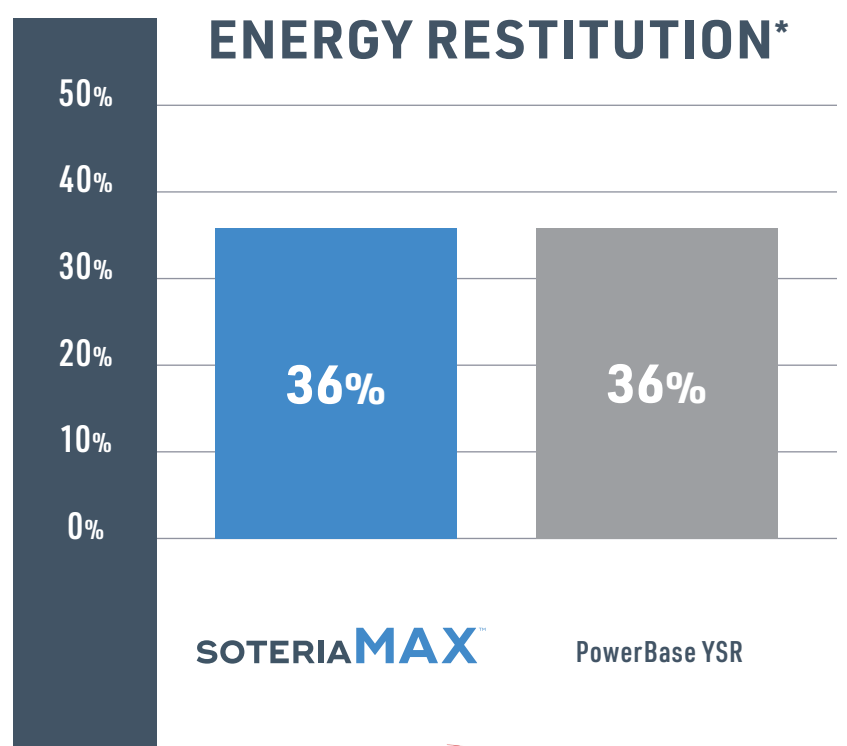
*Results provided by LABOSPORT. Report number R21270CAN-AG1. 2021

ENERGY RESTITUTION (FIRMNESS UNDER FOOT)



Because Soteria improves shock absorption, the system can incorporate natural infill materials which provide a firmer and more earthy feel than elastomeric infill particles. This in turn ensures optimal energy restitution - or the amount of energy that is returned to the athlete when running on the surface.

ENERGY RESTITUTION*



*Results provided by LABOSPORT. Report number R21270CAN-BF1. 2021

PROVEN PROTECTION

<90G
GMAX

GUARANTEED LOWER GMAX RATINGS

OPTIMAL ENERGY RESTITUTION

36%

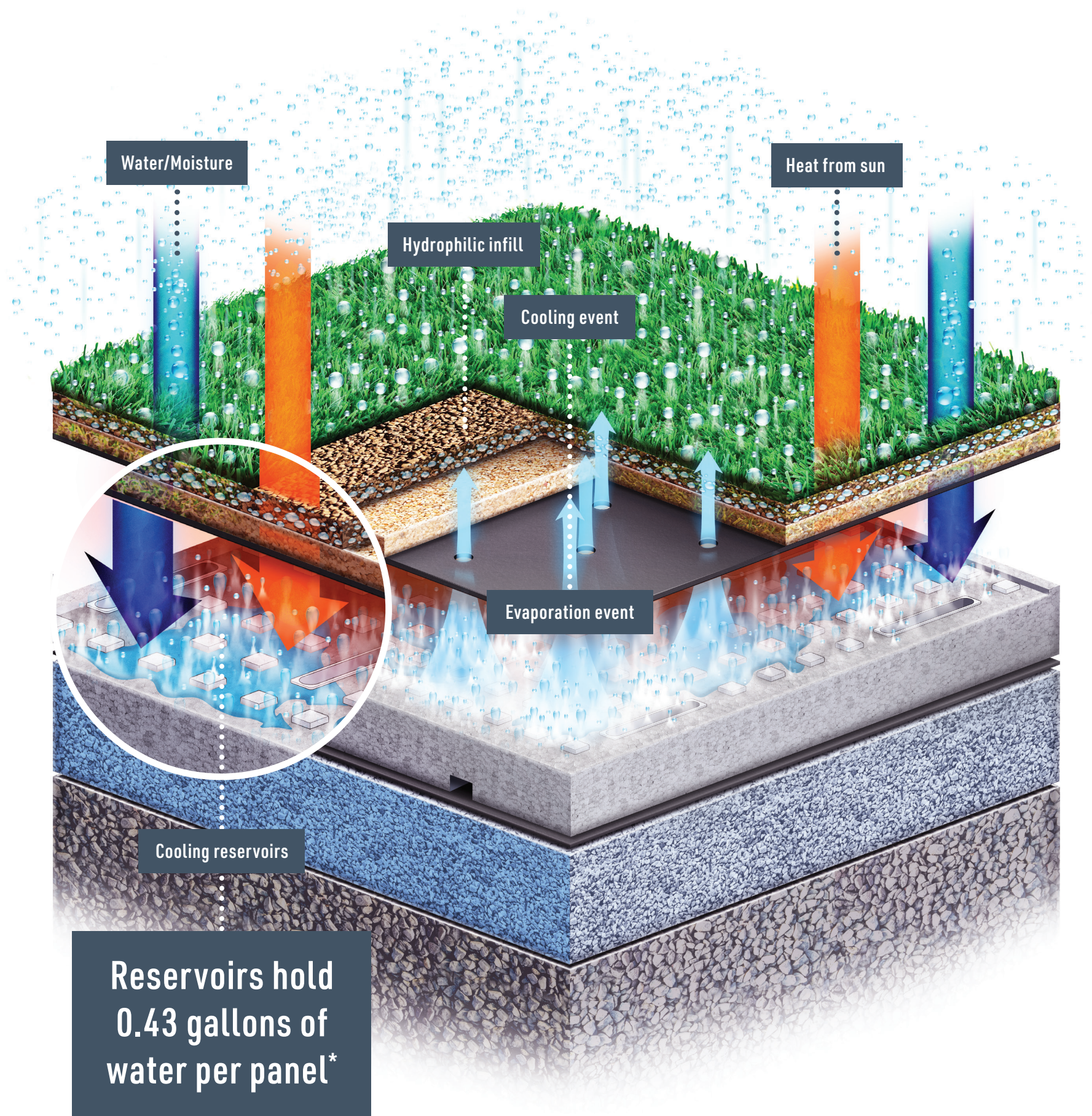


EVAPORATIVE COOLING

SoteriaMax™ is intentionally designed to work with cooling infill systems.

Soteria's built-in cooling reservoirs retain optimal water reserves to evaporate up through the turf and augment the work of natural infills. When combined with hydrophilic infill options - which absorb and slowly release moisture - the full synthetic turf system design works in concert to reduce field temperatures.

SOTERIA IS THE SELF-COOLING PAD.



*Surface volume calculations. 2021.

EVAPORATIVE COOLING

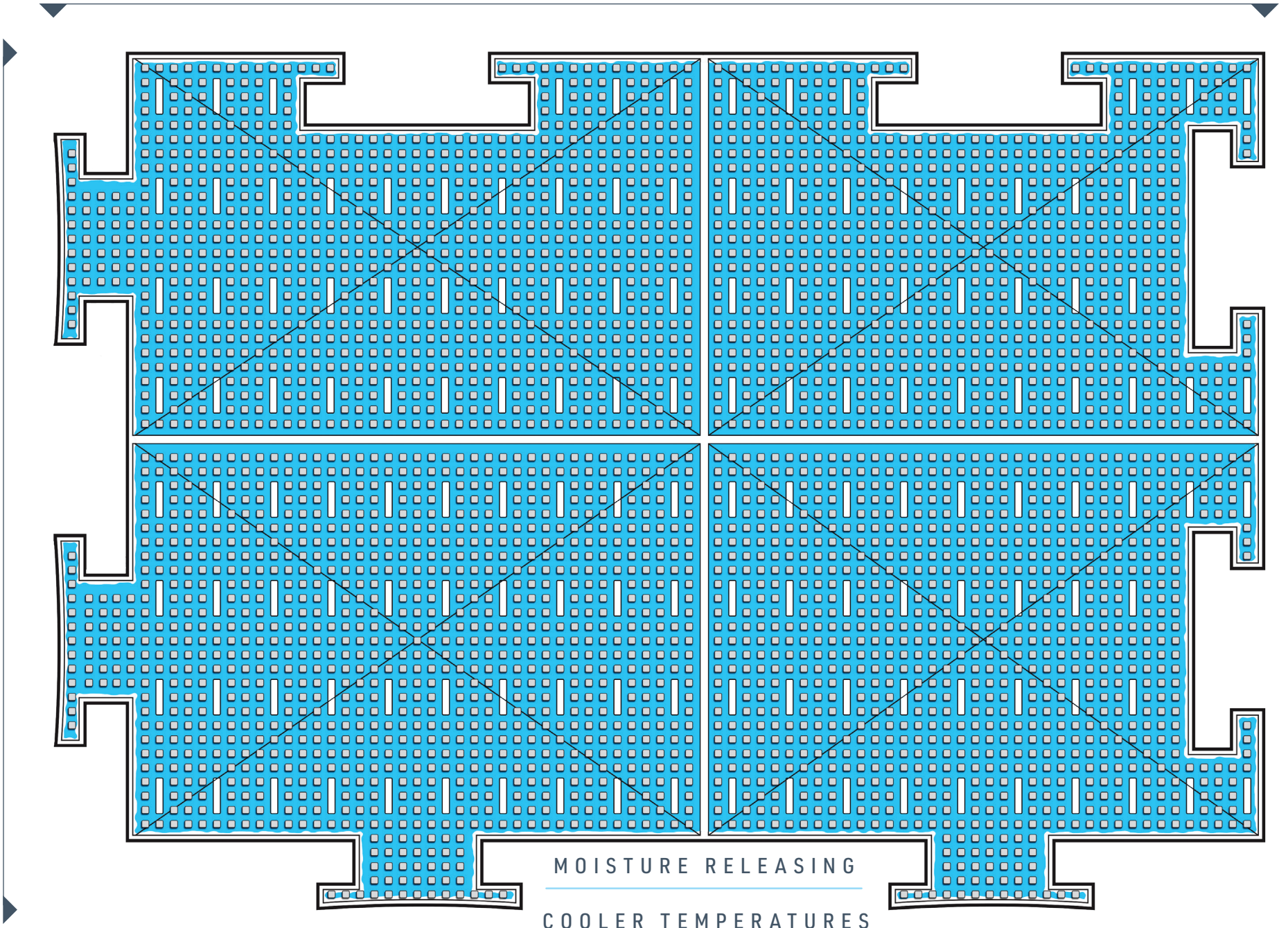
RESERVOIRS HOLD

0.43
gallons

OF WATER PER PANEL*

*Surface volume calculations. 2021.

ONE SOTERIA MAX PANEL

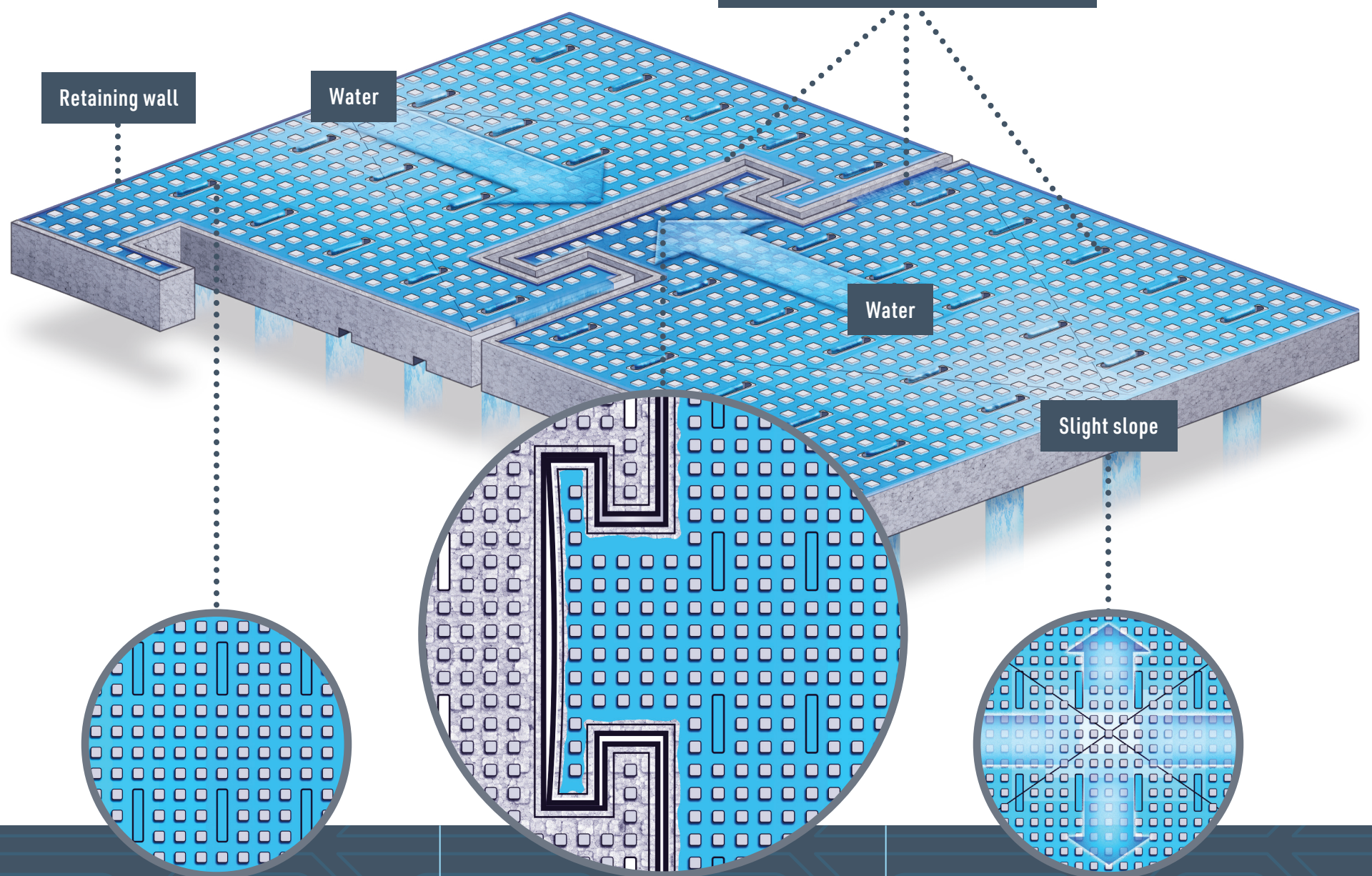
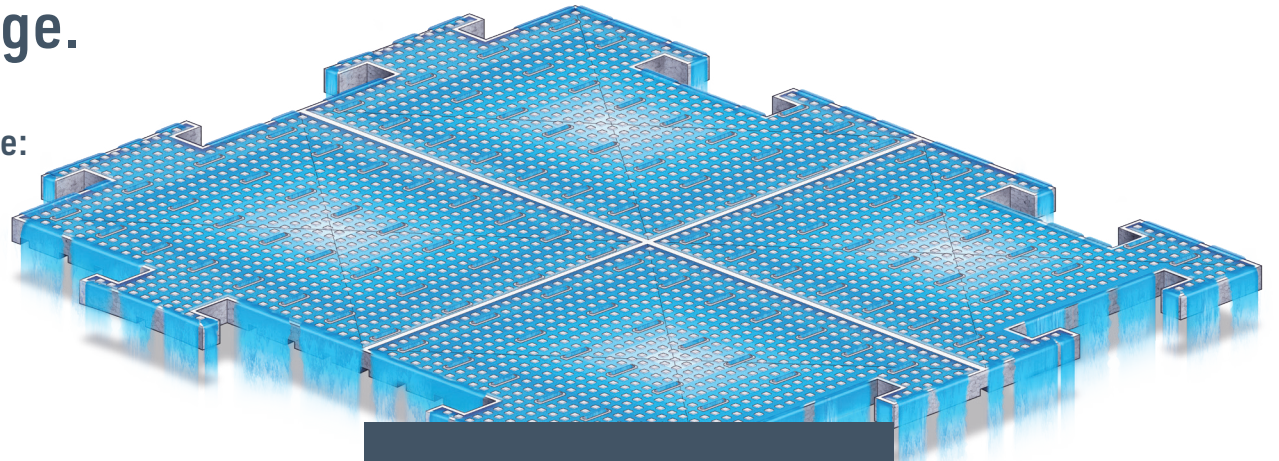


HIGH FLOW DRAINAGE

The SoteriaMax™ pad's breakthrough design creates effective drainage.

Three unique features maximize drainage:

- Lipped Vents
- Shark Tail Connections
- Slope



LIPPED VENTS

These allow the pad to retain water and create a cooling reservoir. When the water exceeds the height of the lip, it spills over into the enlarged vents. Each vent is five times the size of the competition's pinhole.

SHARK TAIL CONNECTIONS

Shark Tail Connections incorporate a convex curve where the pads interlock. This augments drainage capacity while preventing any buckling of adjacent pads.

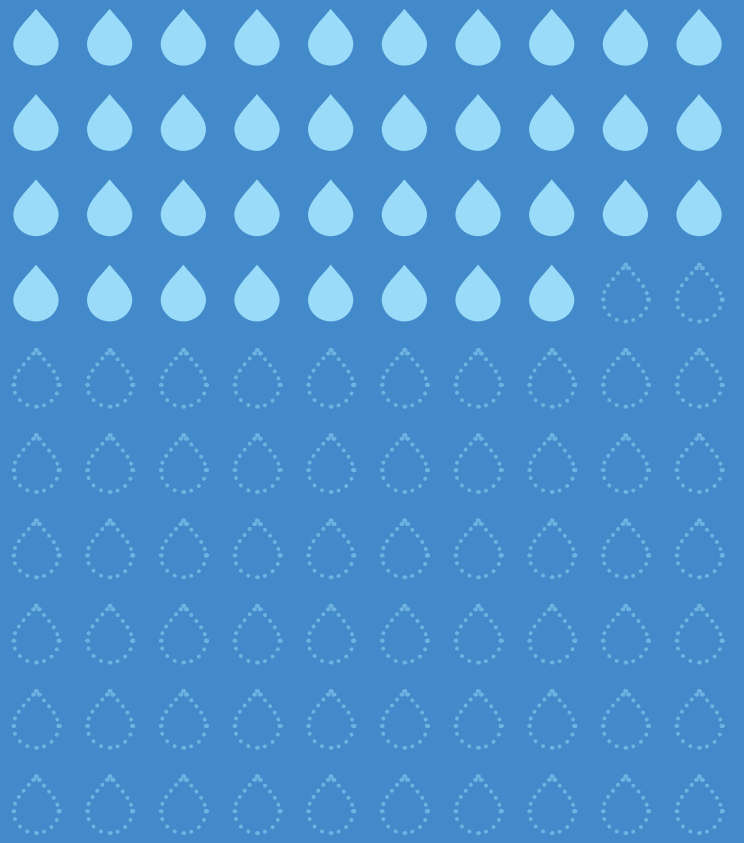
SOTERIA MAX'S SLIGHT SLOPE

The slope is imperceptible under foot and guides water to the vents, edges, and Shark Tail Connections.

OVERALL, SOTERIA MOVES **38%** MORE WATER PER HOUR THAN THE COMPETITION'S EXPANDED POLYPROPYLENE PAD.*

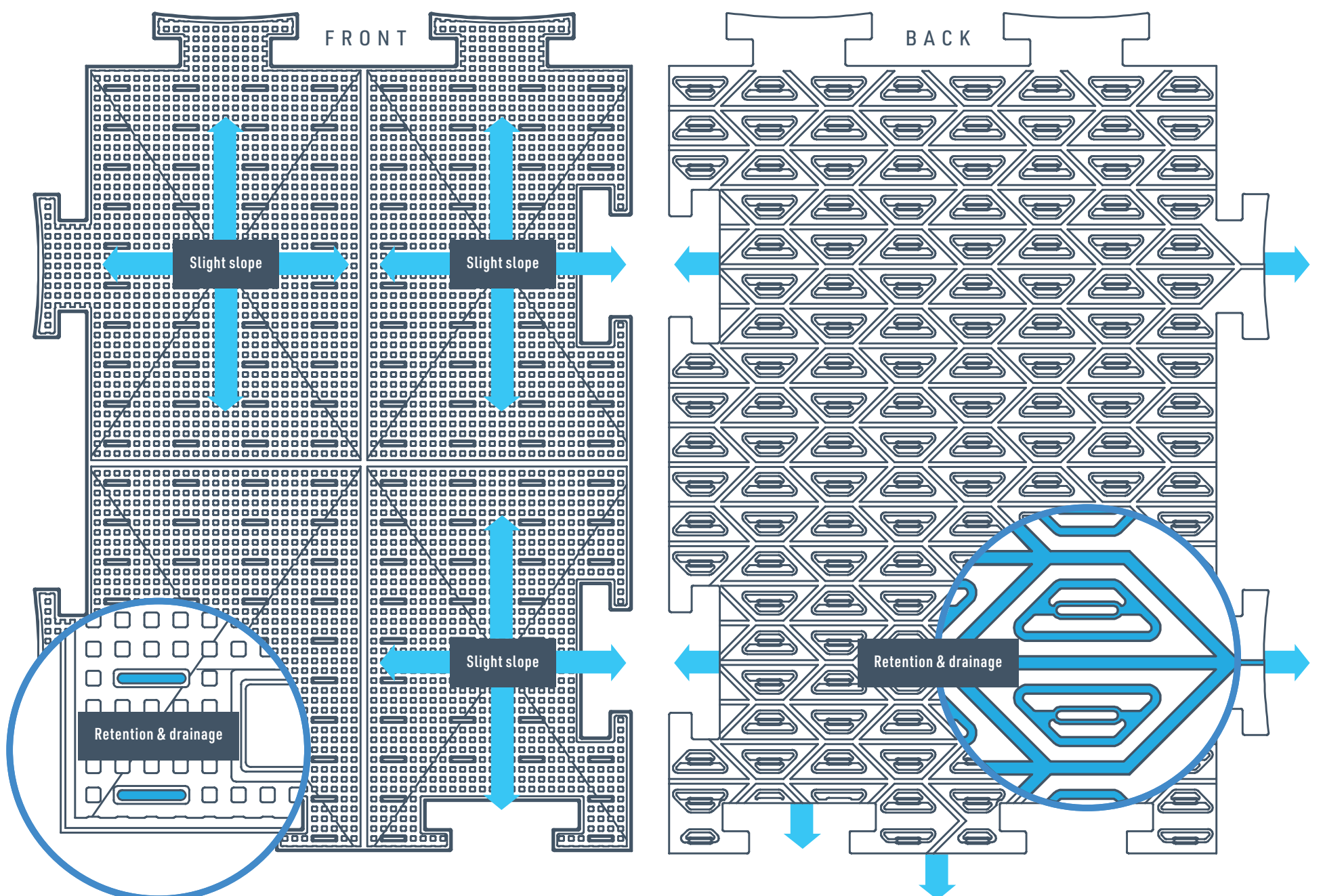
HIGH FLOW DRAINAGE

38% MORE WATER PER HOUR*



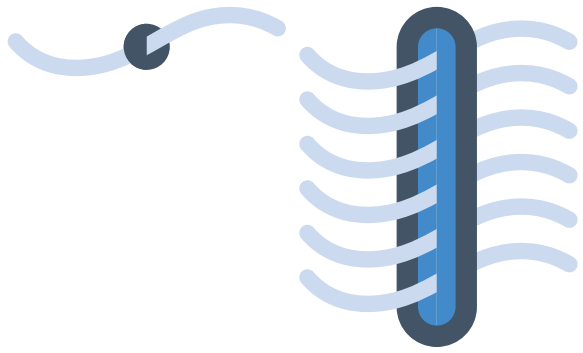
*Results provided by LABOSPORT >>>. Report number R20141CAN-A1. 2021

VERTICAL AND HORIZONTAL EFFECTIVE DRAINAGE



SMOOTH INSTALLATION

300%
MORE VERTICAL
AIRFLOW*



PowerBase YSR

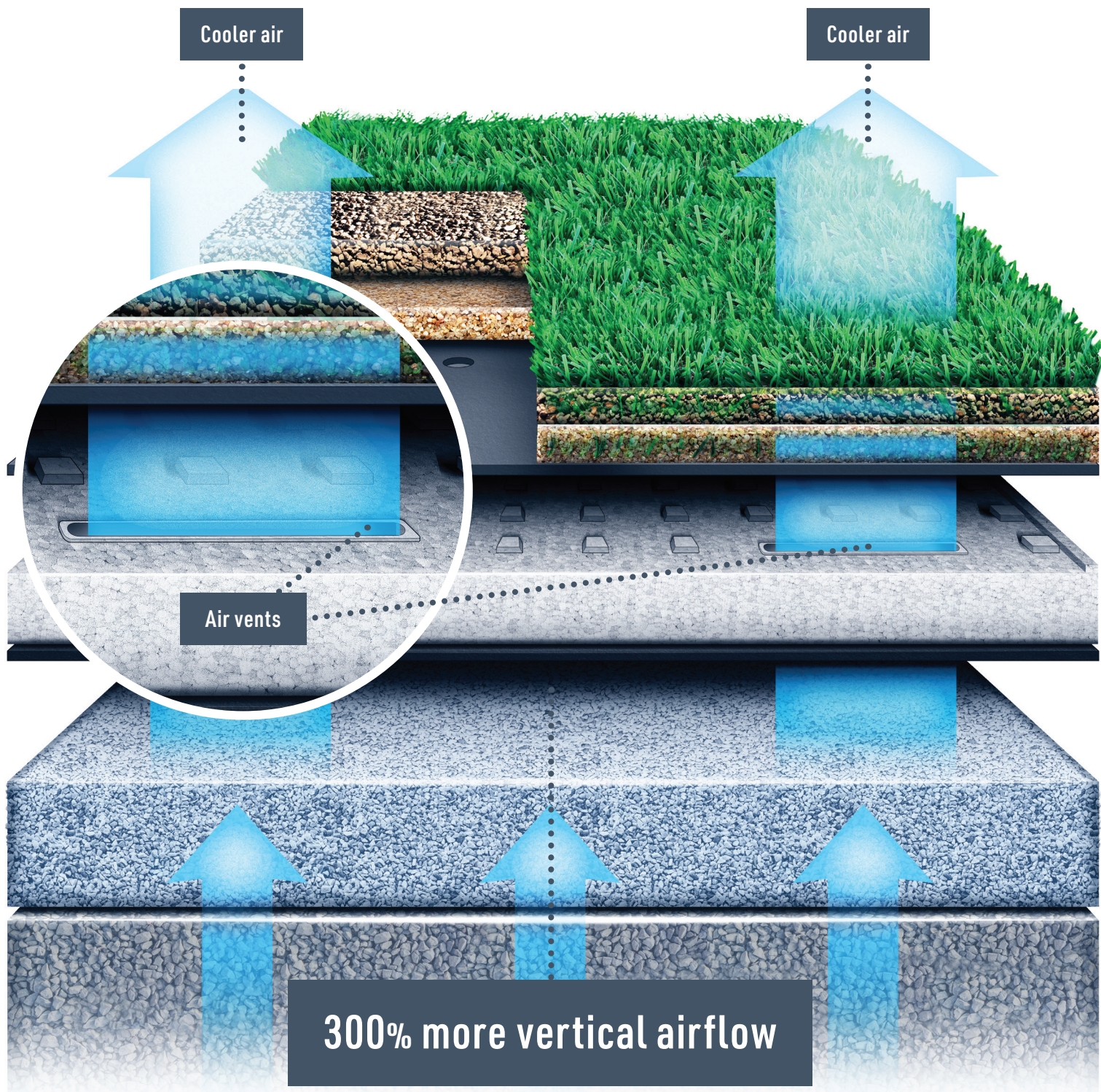
SOTERIAMAX™

SoteriaMax's air vents allow greater airflow through the pad. This innovation is critical to improving the field installation process.

Other expanded polypropylene pads work as insulators, causing major installation problems industry-wide. With other EPP pads, a robust insulation layer blocks temperature exchange between the cool stone base and the synthetic turf. When the turf is heated by the sun and the heat has nowhere to escape, the turf can expand and contract, moving lines and popping seams in the process. This in turn drives up costs for installers and end-users alike.

Soteria Max's design incorporates large air vents in lieu of pinholes. This allows at least 300% more vertical airflow than others' pinhole drainage method, mitigating the insulation properties of expanded polypropylene.

*Surface volume calculations. 2021.



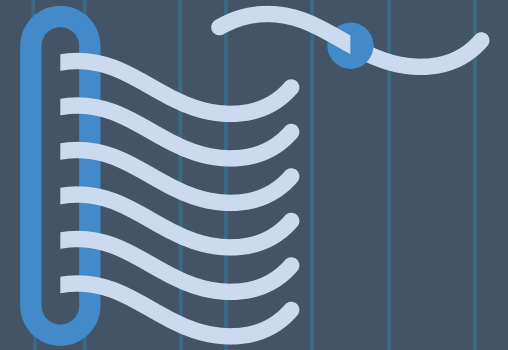
SMOOTH INSTALLATION

300%
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*Surface volume calculations. 2021.

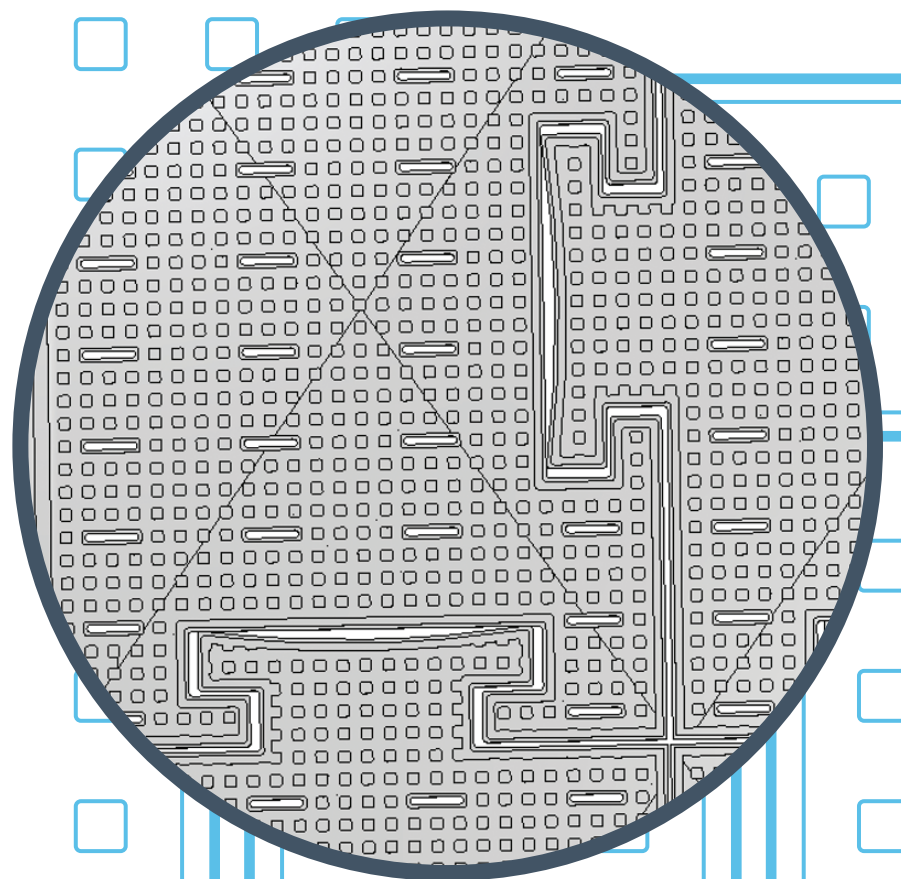
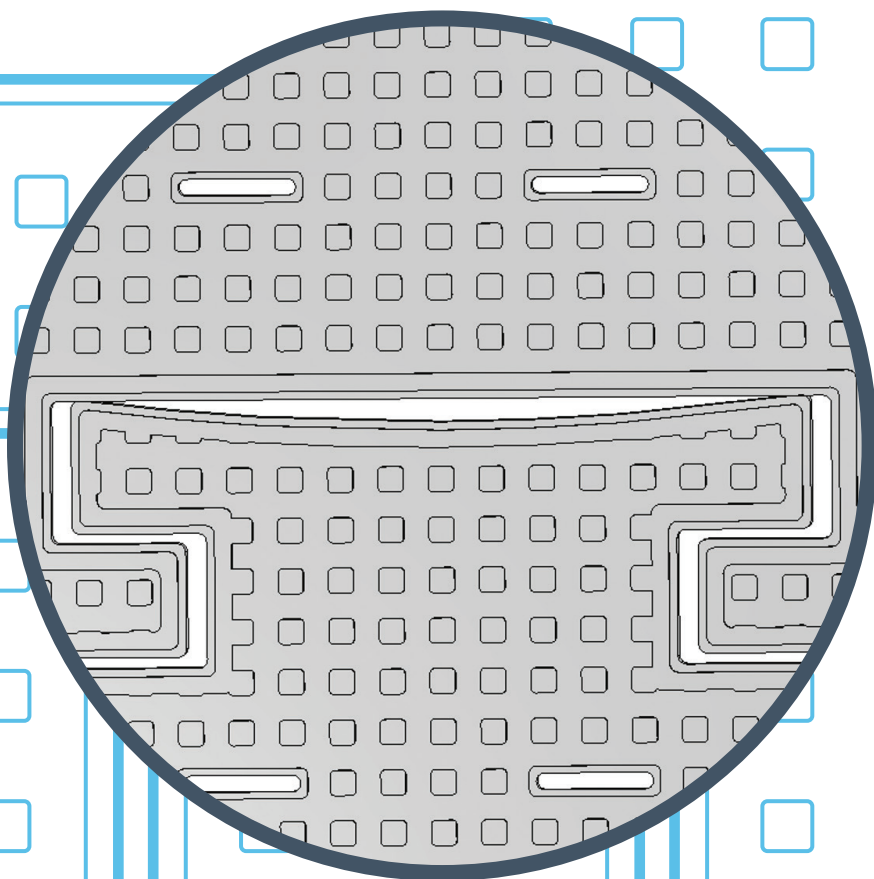
SOTERIA MAX

PowerBase YSR

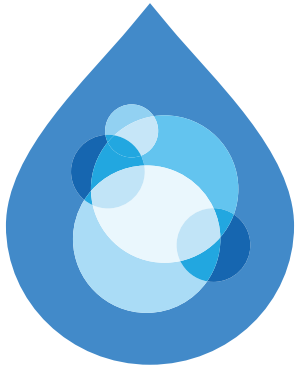


INNOVATIVE PAD IMPROVES INSTALLATION

SHARK TAIL EXPANSION GAUGES



LONG TERM INVESTMENT

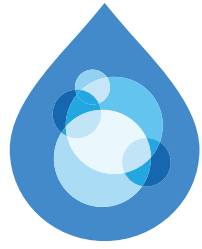


With outstanding technical performance, SoteriaMax™ provides the best value in the market for expanded polypropylene turf pads.

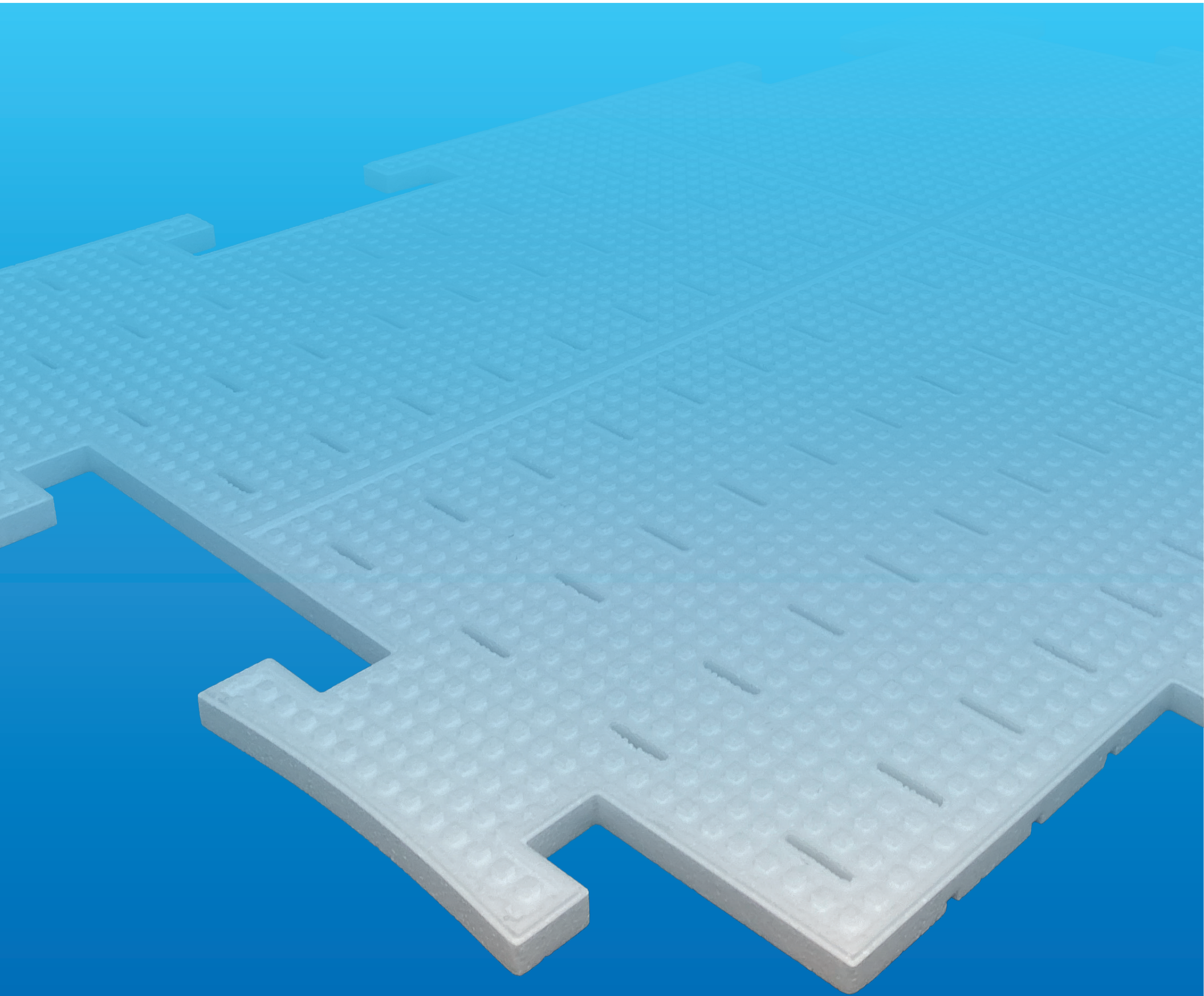
	TEST METHOD	VERIFICATION	SOTERIAMAX BY SAFEPLAY	POWER BASE YSR
NOMINAL THICKNESS	-	-	25 mm	25 mm
TENSILE STRENGTH	ASTM D3574 - E	LABOSPORT R21270CAN-AA1	> 80 psi	> 80 psi
TENSILE ELONGATION	ASTM D3574 - E	LABOSPORT R21270CAN-AA1	> 30%	> 30%
COMPRESSION STRENGTH 25% strain 50% strain	ASTM 3575-08 - D	LABOSPORT R21270CAN-AC1	≥ 20 psi > 30 psi	≥ 20 psi > 30 psi
COMPRESSION SET (35 psi for 30 min - set after 24 hrs)	Internal Test Method	Internal Test Method	<10%	<10%
COEFFICIENT OF LINEAR THERMAL EXPANSION (per 1°C change)	ASTM D696	JSP ARPRO®	<0.10 mm /m	<0.10 mm /m
THERMAL CONDUCTIVITY (Lambda value)	EN 12667:2001 / ISO 7345	ARPRO® Thermal conductivity and CLTE	0.0377 W/mK	0.0377 W/mK
THERMAL RESISTANCE (R value)	EN 12667:2001 / ISO 7345	ARPRO® Thermal conductivity and CLTE	0.64 km2/W	0.64 km2/W
WATER ABSORPTION (after 24 immersion)	DIN 53 428	JSP ARPRO®	≤1%	≤1%
WATER PERMEABILITY	ASTM 1551-9 / DIN 18 035-6	LABOSPORT R21270CAN-AJ1	> 500 in/hr	> 500 in/hr
LATERAL TRANSMISSIVITY Flow rate at .005 gradient Flow rate at .0075 gradient Flow rate at .01 gradient	ASTM D4716	LABOSPORT R21270CAN-AJ1	per Labosport testing 0.30 gpm/ft 0.40 gpm/ft 0.50 gpm/ft	per Labosport testing 0.30 gpm/ft 0.40 gpm/ft 0.50 gpm/ft
HEAD INJURY CRITERION 1000 - Critical Fall Height	ASTM F3146	LABOSPORT R21270CAN-AI1	1.2 m	1.2 m
GMAX	ASTM F355 - A	LABOSPORT R21270CAN-AG1	<90 g	<90 g
SHOCK ABSORPTION	ASTM F3189	LABOSPORT R21270CAN-AE1	>60%	>60%
VERTICAL DEFORMATION	ASTM F3189	LABOSPORT R21270CAN-AE1	<10mm	<10mm
ENERGY RESTITUTION	ASTM F3189	LABOSPORT R21270CAN-BF1	36%	36%
RESISTANCE TO CHEMICALS	JSP Method	JSP Based on ASTM F925	≤2	≤2
MICROBIOLOGICAL ANALYSIS BACTERIA RESISTANCE Fungi resistance	ASTM G22	Express Analytical Services 99-04-306-02	No Growth No Growth	No Growth No Growth
HEAVY METALS	CAM 17	eurofins 15-02-0865	Compliant	Compliant
VOCs	EPA Method 8260B	Material Certification	Compliant	Compliant
SVOCs	EPA Method 8270C	Material Certification	Compliant	Compliant
CALIFORNIA TITLE 22	California Title 22	eurofins 15-02-0865	Compliant	Compliant
CALIFORNIA PROPOSITION 65	Prop 65	Material Certification	Certified	Certified

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SAFEPLAY LLC
TESTED. TRUSTED. TRUE.



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THE SELF-COOLING PAD



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SOTERIAMAX.COM