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INNOVATIONS IN STORM WATER MANAGEMENT FOR SYNTHETIC FIELD APPLICATIONS



ENGINEERED SPORTFIELD SOLUTIONS

Sport Tank Water Management Structures are a patented system that provides a more efficient alternative to traditional storm water management for synthetic turf applications. In many municipalities, the management of storm water runoff is a critical analysis to the overall public works plan. Synthetic turf fields prove to be a significant challenge when they are designed to be a free draining system. Unlike a natural field, synthetic fields typically include a significant drainage and storage system constructed with natural aggregate below the turf. Utilizing Sport Tank within the synthetic turf system, storage of water runoff is maximized by the void space created by the structural modular unit.

After a rain event, Sport Tank will allow you to completely manage storm water. It can be used as storage detention, storage retention and/or infiltration system.

Product Benefits:

- **Cost Effective**—Ideally suited for perimeter trench installation in synthetic turf applications
- **High-volume storage within a small footprint:** 95% void internal area
- **Modular Design:** Can be placed in any shape to efficiently use space and stackable in depths of more than 7'
- High Strength: May be used under parking lots and roads
- **Increased Infiltration:** Outer shell is 90% open thereby increasing ground water recharge
- **Easy Transportation:** Can be supplied un-assembled to reduce delivery cost
- Lightweight and easy to install: Can be put in place by hand
- **Permanent and Maintainable Storage Volume:** All storage volume is isolated inside a geosynthetic envelope and has no reliance upon non-sustainable, temporary, or assumed void space in aggregate backfill





Independent testing has shown that Sport Tank can withstand up to 34 psi.

SPORT TANK = LEED CREDITS

Using Sport Tank in your project can earn as many as 13 possible LEED credits.



Sustainable Sites-4 Credits

- Maximize Open Space
- Minimize Development Footprint
- Reduce Storm Water Quantity
- Improved Storm Water Quality

Water Efficiency Credit—5 Credits

- Recycle Storm Water
- Reduce Demand on Potable Water

Materials-Resource-3 Credits

- Recycled Plastics
- Ship Flat and Assemble on Site

Sport Tank is a modular system that can be assembled to a variety of heights from 9.5" up to over 7'.

Innovative & Design Credit-1 Credit

STORM WATER MANAGEMENT SOLUTIONS



STORAGE & RE-USE

Sport Tank promotes a clean water storage area under your synthetic turf field. Utilizing sport tank within your synthetic turf system will allow complete collection of storm water from your field to be used for other applications. Sport Tank maintains 100% of its capacity inside the structure, thereby eliminating the use of aggregate storage. This completely maintenance-free system, provides maximum storage in limited space, and is the better way to store storm water.

RETENTION & INFILTRATION

Sport Tank promotes a localized storage area so that water can infiltrate into the subsoil at a controlled rate for ground water re-charge. Sport Tanks are the ideal way to manage storm water run off in permeable or semi permeable soil conditions. The system is designed to capture surface water through infiltration and then filter the water for recharging into water table.

DETENTION

Sport Tank is designed to manage the temporary storage of storm water to prevent excess runoff from being discharged into the existing storm sewer systems. In a detention system, the storm water is stored then discharged over time so runoff does not exceed the allowable discharge rate. Engineering a detention system for a synthetic turf field is maximized with Sport Tank while utilizing a minimum of the required space.



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TECHNICAL SHEET

SPORT	TANK Din	nensions
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Module (Units)	Width (Inches)	Length (Inches)	Height (Inches)	
Mini (1/2)	16.06	26.97	9.45	
Single (1)	16.06	26.97	17.72	
Double (2)	16.06 26.97		34.65	
Triple (3)	16.06	26.97	51.57	
Quad (4)	16.06	26.97	68.50	
Penta (5)	16.06	26.97	85.43	
Surface Area	95% Void			
Material	100% Polypropylene with 85% Recycled Content			
Biological and	Inert to comm	only found chemicals a	nd biologicals	
Working Temperature	-21° F to 131° F			

Volume							
Module Units	Tank Volume (CF)	Tank Volume (Gal)	Water Storage (CF)	Water Storage (Gal)	Number of Plates	Weight (Ibs)	
Mini (1/2)	2.4	17.96	2.28	17.06	2/2/4	8.75	
Single (1)	4.44	33.22	4.22	31.56	4/4	13.97	
Double (2)	8.69	64.97	8.25	61.72	7/8	25.99	
Triple (3)	12.93	96.72	12.28	91.88	10/12	38	
Quad (4)	17.17	128.47	16.31	122.03	13/16	50	
Penta (5)	21.42	160.21	20.35	152.19	16/20	62	

Ultimate Load / Uncomfined Crush Testing

Тор	Top Load	Side Load
Crush Load (PSI)	34	3.58
Displacement (Inches)	0.433	0.394

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