AirDrain – What drains better than Air?

For Synthetic Turf/Artificial Grass

The consistent Shock Attenuation properties of the AirDrain system are major contributors to the safety of players and the reduction of concussions. Unlike traditional shock pads or e-layers, AirDrain is 1” high, has 92% air void and 100% vertical drainage. AirDrain’s performance cannot be matched by any other product in the industry.

AirDrain reduces Shock Attenuation by:

- 18.9% on a gravel subbase
- 14.7% on a concrete subbase

Some of the Benefits of an AirField Synthetic Turf Drainage System include:

- AirDrain creates and helps maintain a constant and consistent Shock Attenuation for Synthetic Turf
- ASTM testing proves AirDrain’s shock absorption properties reduces Shock Attenuation
- Only needs a .25% slope for effective drainage
- Patented expansion and contraction built into every part which keeps the grid from buckling
- AirDrain is only limited by the drainage capacities of the profile above and the exit drains below
- AirDrain can be reused multiple times when the synthetic turf must be replaced

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AirDrain – What drains better than Air?

For Rubber-Free Synthetic Turf Solutions Using Non-Rubber Infill

The consistent Shock Attenuation properties of the AirDrain system are major contributors to the safety of players and the reduction of concussions. Unlike traditional shock pads or e-layers, AirDrain is 1" high, has 92% air void and 100% vertical drainage. AirDrain’s performance cannot be matched by any other product in the industry. The AirDrain system works on any type of prepared subbase (Compacted Aggregate, Concrete or Asphalt) or rooftop.

A Rubber-Free Synthetic Turf Solutions provided for Multi-Purpose Fields, Play Areas and general-purpose use reduces maintenance, upkeep and cleaning the surrounding area of rubber pieces that tend to find their way off the field.

Some of the Benefits of an AirField Synthetic Turf Drainage System include:

- AirDrain creates and helps maintain a constant Shock Attenuation for Synthetic Turf
- ASTM testing proves AirDrain’s shock absorption properties reduces Shock Attenuation
- AirDrain creates a 1" air void allowing for 100% vertical drainage over the whole installation
- Patented expansion and contraction built into every part which keeps the grid from buckling
- AirDrain is only limited by the drainage capacities of the profile above and the exit drains below
- AirDrain can be reused multiple times when the synthetic turf must be replaced

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AirDrain – What drains better than Air?
Green Roofing - Synthetic Turf/Artificial Grass

With limited space in urban areas many people for both residential and business use are turning to rooftop surfaces to create multi-use green areas. Building a rooftop multi-purpose areas with an AirField System provides drainage under 100% of the playing surface, prevents ponding, and moves water efficiently for reuse elsewhere on campus.

Over 2,000,000+ square feet and counting of AirDrain rooftop drainage system has been installed.

LACC “LA Community College” 95,000 sqft., MSOE “Milwaukee School of Engineering” 100,000 sqft., UCSD “University of California in San Diego” 80,000 sqft., WPI “Worcester Polytechnics Institute” 174,000 sqft. and Binghamton High School 47,000 sqft.

Benefits of AirDrain in a green roofing system include:

- AirDrain creates and helps maintain a more consistent Shock Attenuation for Synthetic Turf
- ASTM testing proves AirDrain’s shock absorption properties reduces Shock Attenuation
- AirDrain can be reused multiple times when the Synthetic Turf must be replaced
- Can help qualify for LEED™ and other green building credits
- A smaller carbon and development footprint with reduced site disturbance
- Water harvesting reclamation and reuse is easy
- AirDrain creates a 1” air barrier on the rooftop which increases the insulating properties.
- AirDrain is a 100% recycled copolymer which has the impact modifier “metallocene” added to it for qualification as a “No Break” plastic, making it able to withstand extreme heat and cold and still maintain performance
- Resins can be made to the following specification “Flammability UL 94, Flame Retardant, High Impact Polypropylene Copolymer Resins”

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Playground Drainage for Synthetic Turf/Artificial Grass

Not all drainage is created equal! AirDrain offers 100% vertical drainage and has 92% air void. This combination effectively collects and redirects water easily. Additionally, AirDrain raises the entire profile a full 1”, letting gravity drain the entire playground quickly and efficiently. The combined effect of AirDrain is a more stable surface area, reduced expenses for repairs and more play time.

A drainage system should allow for water to quickly drain away from the surface and be directed to exit drains, thus allowing a shorter turnaround time for the continuation of play. AirDrain provides drainage which is unmatched in the industry – up to 40gpm/sf – allowing the surface to be free of water. AirDrain is only limited by the drainage capacity of the profile above and the capacity of the exit drains.

For playgrounds constructed with AirDrain the grid is installed on top of a 1.125” or 2.125” poly green foam pad which is placed directly onto the properly prepared subbase of concrete, asphalt or compacted aggregate. This creates a 1” air void and allows for maximum drainage.

Benefits of an AirDrain playground drainage system include:

- AirDrain raises the entire profile 1” off the subbase and brings gravity into play
- AirDrain’s 92% air-void space allows for fast and easy water removal
- Consistent fall height and shock attenuation for the life of the project provides a safe play area
- AirDrain is a 100% recycled copolymer which has the impact modifier “metallocene” added to it for qualification as a “No Break” plastic, making it able to withstand extreme heat and cold and still maintain performance
- AirDrain’s quick snap connectors allows for effortless installation
- Minimal site disturbance, excavation and disposal
- Compact shipping reduces transportation costs

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AirDrain – What drains better than Air?

For Pet Relief Areas: Pet Playgrounds, Dog Runs, Kennels and More.....

AirDrain is a proven success! With over 500+ Pet Relief areas installed, AirDrain Drainage by AirField Systems is the ideal synthetic drainage system used in dog day care facilities, pet playgrounds, airport dog potties and general use common areas for dogs across America.

AirDrain is made with the highest quality 100% postindustrial recycled content. Due to 92% air void underneath the turf, unwanted waste can be washed away quickly by using an easily installed flushing system. This flushing system attaches to any water source and uses inexpensive PVC piping around the perimeter of the grid.

Low cost, easy to install, do it yourself drainage makes AirDrain the ideal synthetic drainage system for kennels, dog boarding, pet facilities, dog parks, vet clinics, and even in your own backyard.

Pet areas are installed every day in public and private facilities across the world. Whether you utilize natural or artificial turf, the AirField System is a stress-free way to turn any common space into a fun place for people and their furry friends.

No more worrying about expensive and destructive gravel drainage and no problems with waste being left behind. An AirField System is the easiest and fastest way to install a Pet recreation area.

Benefits of an AirDrain Pet Relief areas include:

• 100% post manufactured industrial recycled content
• 92% air-void for fast and easy waste removal
• Ability to flush the area daily
• AirDrain’s quick snap connectors allows for effortless installation
• Minimal site disturbance, far less excavation and disposal
• Compact shipping reducing transportation costs

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AirDrain Drainage ASTM D4716 Synthetic Grass and Natural Grass Testing

What drains better than air!

If your field floats, has ponding or infill migration (which is an extreme player safety and owner liability issue) and you can’t figure out why, maybe because they said it would drain XX amount per hour when in reality, it doesn’t and never will.

Those issues don’t get better they get worse! Countless hours in maintenance and grooming, adding materials etc. etc. what’s the cost of that every month?

In a Cost Value Performance scenario, no product comes close to AirDrain!

Over the years, many architects and engineers have asked us just how fast will the AirDrain grid drain. Our reply has always been that the AirDrain is only limited by what is above it and the exit drains due to the fact that the area of an AirDrain part is 1” inch high and has a 92% air void.

Recently, our AirDrain grid was tested using the ASTM D 4716 Hydraulic Transmissivity Standard Test Method. The testing was done using plates on top and bottom of the AirDrain part, setting them to the required slope and adding water from one end down the slope. AirDrain was draining so fast they had to modify their testing equipment to accommodate the volume of water AirDrain could move.

As it turns out there is practically no resistance to drainage using the AirDrain grid? The most important factor to consider is the percentage of slope that the AirDrain is sitting on.

To put this in perspective of rainfall, AirDrain can handle anything that Mother Nature throws at it. On a nearly completely flat surface (1/2% of 1% slope) AirDrain will drain 2.85 inches of rainfall in one minute.

For example, it could rain over 171 inches in an hour and AirDrain could drain it. AirDrain can hold .576 gallons of water per sqft. if needed until it can evacuate to the perimeter exit drains.

AirDrain has been used in specs and projects where the city or county has limited the water that can be introduced into the sewer system or has limited the size or volume of the exit drains on a roof top. AirDrain’s capability to hold water .576 gallons of water per sqft. in the grid until the exit drains can evacuate it is another plus for the AirDrain System.

No other product on the market comes close to AirDrain’s ability to drain a project, it’s not even close.

So when you see the claims of manufacturers rainfall per hour drainage, ask them if they have the test that really shows a products drainage capability.

Now you know!

Nothing Drains Better Than Air!