Protect the Player. Protect the Planet.

SHOCKPAD SERIES®
BY BROCK

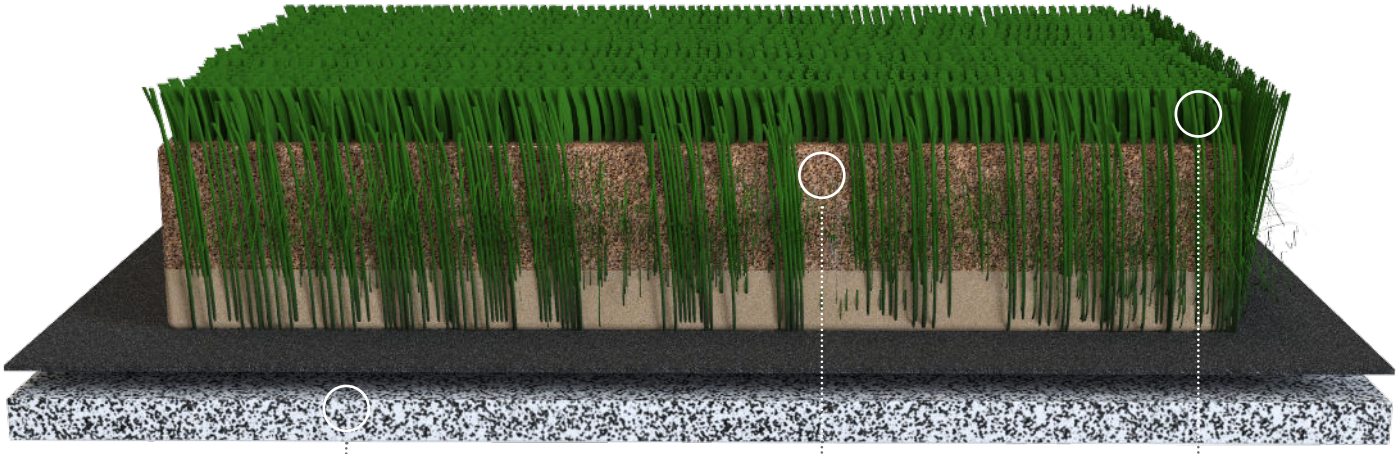
Benchmarking natural turf.

3 There are three measurements used to characterize safety and performance of a surface:

The Test	The Testing Device	The Goal
HIC (Head Impacts) **ASTM F355 E Missile** HIC is the internationally recognized test standard for head injuries. It drops a 10 lb hemispherical impacter from increasing heights to determine Critical Fall Height. It's the same test used in playgrounds, automotive crashes, wall padding, pole vault, and the WR Reg22 standard for artificial turf. The higher the Critical Fall Height, the more protective the surface is for head injuries.	1	**1.7-2.3 m** **(5'7"-7'6" ft)** **CRITICAL FALL HEIGHT**
GMAX (Body Impacts) **ASTM F355 A Missile** This test method covers the measurement of certain shock-absorbing characteristics, like during body impacts. It's applicable to natural and artificial playing surface systems. It does not correlate to head injury. It drops a 20 lb flat missile from 24". GMax is a good measurement when used in conjunction with HIC above, but as a stand alone test is not a total measure of field safety.	2	**71-115 G's** **GMAX**
VERTICAL DEFORMATION **(Firmness Under Foot)** **EN14809 Vertical Deformation** This test simulates the heel strike of an adult running athlete in stride. This is the softness or hardness under foot during play. A great natural grass field hits the "sweet spot" of being firm under foot while producing very low gmax and high Critical Fall Height. Which is why quality natural turf is the benchmark for quality artificial turf.	3	**6-11 mm** **VERTICAL DEFORMATION**

The goal of any artificial turf surface is to mimic a high-quality, natural grass playing field. Achieving this requires a more sophisticated approach than laying "rug over rock". Think of Brock ShockPad/SERIES as the "intel inside" of your field.

The ShockPad/SERIES comes in several thicknesses, from 14mm to 20mm, depending on the turf you select, always keeping the performance of the overall system in mind. Fields that utilize a SP shock pad demonstrate the safety, speed and impact performance that replicates a quality natural turf surface; plus they drain fast and last longer.



ShockPad/Series
Impacts, firmness, drainage, consistency

Infill
Traction, speed, firmness, heat, consistency

Turf Carpet
Aesthetics, ball behavior, skin friction, heat

A shock pad for every turf.

SHOCKPAD/14
14 mm thickness

SHOCKPAD/17
17 mm thickness

SHOCKPAD/20
20 mm thickness

14 mm

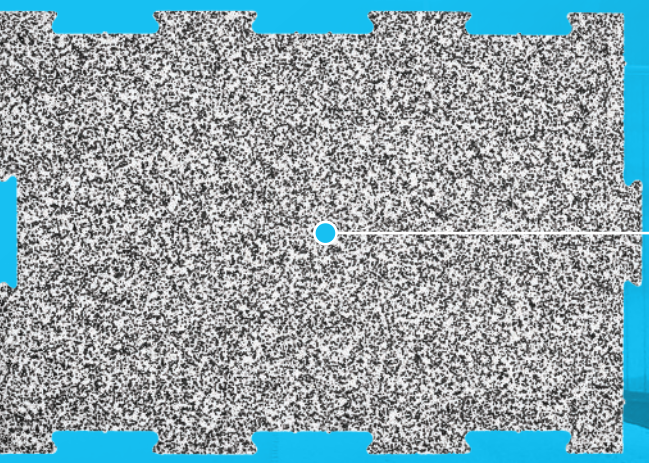
17 mm

20 mm

www.brockusa.com / 877-276-2587

US Patents: 8,236,392, 8,353,640 and D637318 and other patents pending.

The most proven Shock Pad on the market.



21 Sq Feet

STABLE

Large robust dovetail interlock makes installation fast and easy.

POROUS

Open pore structure allows water to pass vertically through material.

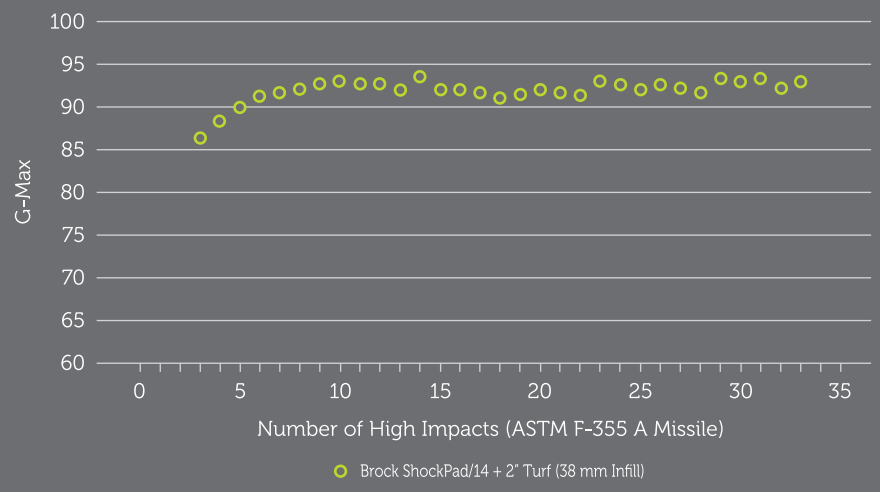
DYNAMIC

Interaction of particles keeps field stiff for running, soft for impacts.

Low GMax for the life of your field.

Our goal was simple: A great natural grass field will produce a GMax of around 90-100 Gs and be firm and fast to play on. A synthetic turf over ShockPad/SERIES will do the same thing, and maintain it for the life of the field. Testing shows how even after years of high impacts *in the same location* the GMax is low and consistent.

Brock ShockPad/14 Long Term GMax Study ASTM F-355 2" Turf



16 YEAR WARRANTY

When you replace your turf, the Shock Pad is reused for the next turf life.

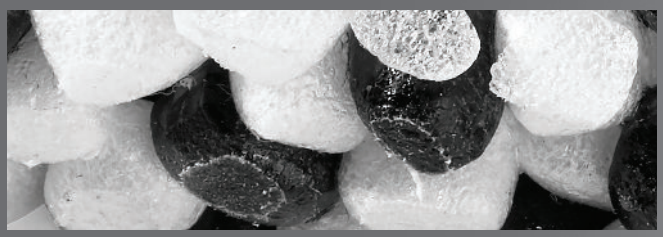
Use Brock SP Series when:

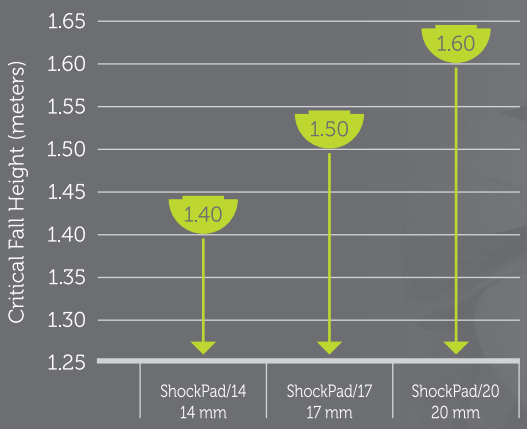
1 Replacing an old, hard synthetic turf field. Using a shorter turf and SP results in better play and greater safety, doesn't change the field profile, and offsets some of the cost of the pad.

2 New synthetic fields designed with a draining stone base, where long term safety is required. Again, we recommend a slightly shorter turf over SP. The thickness of the SP is determined by the turf you select. The shorter pile turf, the thicker the SP should be in order to attain the highest safety levels possible.

It's a work horse.

Brock's ShockPad series will outperform other "shock pads" nearly twice as thick. That's because it's engineered for artificial turf and the impact it will experience during play. A patented material using polypropylene with a microcoating binder produces a material with an open pore structure for fast drainage and a unique impact profile ideal for artificial turf.





ASTM F355 E Missile;
2" Turf, 65% Sand 35% Rubber,
Critical Fall Height
(Higher is Better)

Fast drainage.

Vertical permeability of ShockPad/17 is far greater than the turf itself, so as long as the stone base below and the turf above allows water to pass, Brock SP will only enhance drainage.

>700 in/hr
ShockPad/17 Pad

<50 in/hr
Synthetic Turf Only

BROCK®
IMPROVING THE FIELD OF PLAY

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FSC®