



**GreenFields**  
A TenCate Grass Company

**A PERFECT PITCH  
FOR EVERY PLAYER**



“

Hybrid fields give you the opportunity to train with the highest intensity and play competitions during every day of the week and in all age categories

”

**ERNEST FABER**

*Head of Youth Education*  
PSV Training Complex  
De Herdgang  
The Netherlands





# CONTENTS

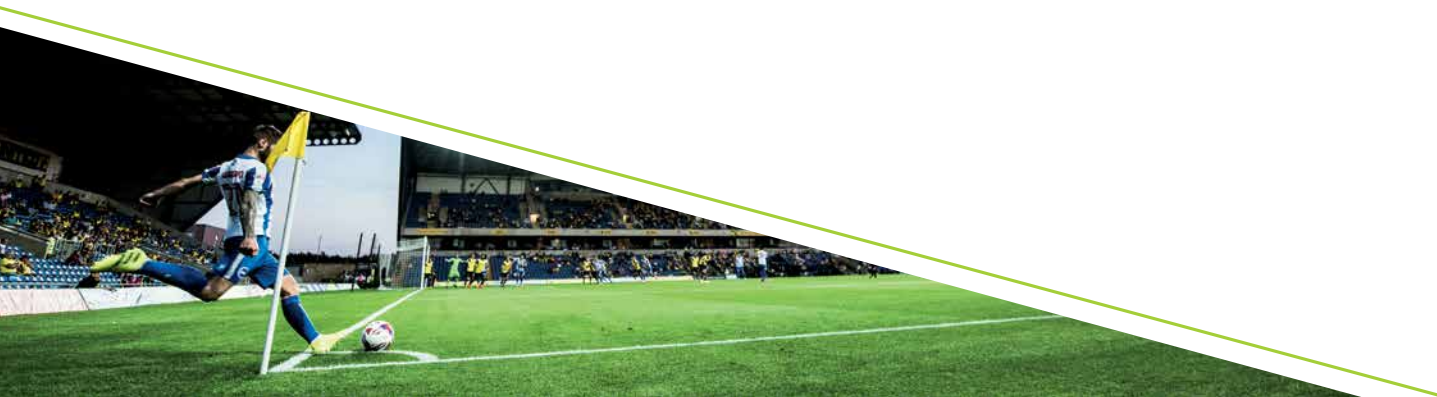
PAGE 4	WHY GREENFIELDS?
PAGE 6	WHAT IS XTRAGRASS?
PAGE 8	WHY XTRAGRASS?
PAGE 10	WHERE CAN XTRAGRASS BE USED?
PAGE 12	INSTALLATION
PAGE 13	PROUD USERS OF XTRAGRASS
PAGE 14	PERFORMANCE TESTING
PAGE 16	MAINTENANCE
PAGE 18	ENVIRONMENTALLY FRIENDLY
PAGE 20	CONTACT DETAILS



# WHY GREENFIELDS?

GreenFields is a global supplier and innovator of sports turf technology. GreenFields has a breadth of experience in the development, production, installation and maintenance of synthetic sports turf systems, and the ability to provide high quality, innovative products to provide a perfect pitch for ever player. All this has enabled GreenFields to become one of the front runners in this industry.

## OUR EXPERIENCE SPEAKS FOR ITSELF:



## GREENFIELDS COMMITS TO AND FOCUSES ON:

- ▲ Customer satisfaction from system design up to support during the life cycle of a pitch
- ▲ Best value over life products
- ▲ Fit for purpose system certification in close cooperation with our R&D department and accredited laboratories
- ▲ A sustainable business throughout the supply chain, as part of the TenCate Grass Group
- ▲ Front runner of recycling end-of-life artificial turf
- ▲ The highest industry quality standards (FIFA, FIH, WR, etc.) by inhouse testing and external certification



### OUR MISSION

To enable everyone to play sport at the best possible pitch every day, everywhere.

### OUR VISION

We continuously improve our product portfolio, based on the needs of our customers. Through our system approach, we strive to deliver artificial turf with the best player experience and durability at all sports levels.

# WHAT IS XTRAGRASS?

The GreenFields XtraGrass hybrid system combines the positive properties of natural grass with the strength and durability of artificial turf, providing an elite playing surface for sports. Plus, the patented weaving technique offers an increased fibre bind, compared to tufted solutions in the market.



## THE SYNTHETIC GRASS FIBRES:

- ▲ are woven into a partially biodegradable backing, creating a closed backing for easy and qualitative installation, the rootzone mixture will not fall through, so no bumps in the pitch. The biodegradable yarns will be fully degraded within two months, creating a matrix of large uniform voids, through which grass roots grow, and moisture and nutrients flow.
- ▲ absorb some of the pressure and wear that would normally occur on the natural grass, resulting in a more durable surface.
- ▲ protect the natural grass, maintaining surface stability and reducing damage.

When a player stops, turns or accelerates, the synthetic fibres assist with traction and reinforcement, ultimately reducing divots and other damage to the surface.

With professional stadiums opting for XtraGrass, it proves to be an optimum playing surface, maintaining both structural stability and aesthetic impact during extreme (weather) conditions.



**REDUCES SOIL COMPACTION**

And therefore, prevents root asphyxiation

**PROTECTS THE CROWN OF THE PLANT**

The most sensitive part of the plant (the node between the root and the leaf)

**PROVIDES A SUPPORT FOR THE ROOTS TO ANCHOR**

Through the partial biodegradable backing



# WHY XTRAGRASS?

The XtraGrass hybrid system provides a 100% natural grass feeling and a green looking pitch all year round! Providing players with an advantage by enabling them to train on the same pitch as they play their matches on, whilst also reducing the risk of injury from a consistently stable surface.



**PLAY  
BETTER**



**PLAY  
SAFER**



**PLAY  
LONGER**



INCREASED SURFACE  
STABILITY



REDUCED SURFACE  
RELATED INJURIES



100% NATURAL  
PLAY



PLAY 365 DAYS  
A YEAR



PLAY IN ANY  
WEATHER



COST  
EFFECTIVE



GREEN ALL YEAR  
ROUND

## FINANCIAL BENEFITS

- ▲ XtraGrass is more cost effective than other turf systems, sometimes even half the price.
- ▲ Maintenance costs are equal to a natural grass pitch.
- ▲ XtraGrass is 100% recyclable and can be disposed of at the end of its product life cycle.
- ▲ Due to the durability of XtraGrass, additional events can be held to increase revenue.



	NATURAL GRASS	TUFTED HYBRID	INJECTED HYBRID	 <b>WOVEN HYBRID</b>
<b>PLAYING HOURS/ YEAR</b>	★ stadium: 50 training: 250	★★★★★ stadium: 200 training: 800	★★★★★ stadium: 200 training: 800	★★★★★ stadium: 200 training: 800
<b>PLAYABILITY</b>	★ in case of good weather, one season	★★ the whole year, 2-3 years because of bad tuft bind	★★★★★ the whole year, 10+ years	★★★★★ the whole year, 10+ years
<b>STABILITY</b>	★★ moderate	★★★★ good (with dense backing), moderate on backings with openings (infill goes through) Aeration damages the backing; stability gets worse in time	★★★★ good, but the fibres in the root zone result in a hard field	★★★★★ very good (closed backing at installation), even after years of maintenance and aeration the stability remains very good; aeration doesn't damage backing
<b>OPTICS AFTER WEAR</b>	★★ moderate	★★★★ reasonable (bad tuft bind) but protects the crown of the grass	★★★★ reasonable (moderate adhesion in root zone) protects the crown of the grass	★★★★★ always green optics (sustainable fibre combination) protects the crown of the grass
<b>ROOT ZONE</b>	★★★★ deeply rooted	★★ moderate: small openings in the backing	★★★★ deeply rooted (injected in existing field)	★★★★★ deeply rooted through the open backing
<b>INSTALLATION</b>	★★★★ sods or seeding	★★★★★ lay-and-play sods or rolling out and seeding	★★ slow injecting process and heavy machinery	★★★★★ lay-and-play sods or rolling out and seeding
<b>MAINTENANCE</b>	★★★★ intensive daily maintenance; repairing with sods	★★★★ aeration damages the backing; repairs with sods	★★ aeration only has very temporary effect; repairs are very labour intensive (manual injection of fibres)	★★★★★ yarns in woven construction can move aside with aeration; repairs with sods
<b>RECYCLABILITY</b>	★★★★★ natural product	★★ moderate (difficult to process due to latex)	★★ moderate (deeper excavation needed to reclaim fibres)	★★★★ good (durable carpet with only one synthetic raw material thus easy to recycle)

# WHERE CAN XTRAGRASS BE USED?

Due to the strength and increased durability of XtraGrass, it can withstand dual sports play as well as single sports.



FOOTBALL



RUGBY



AMERICAN FOOTBALL



## XTRAGRASS CAN BE USED EFFECTIVELY AT A NUMBER OF VENUES, INCLUDING:

### ▲ STADIUMS

The high durability and improvement in player performance make it perfect for stadium usage. For enclosed stadiums, the growth of natural grass can be more difficult and the introduction of XtraGrass can ensure a green looking, stable pitch all year round.

### ▲ TRAINING PITCHES

Due to its reduced surface wear, XtraGrass can withstand the high levels of play that are required on a training pitch.

### ▲ INTENSIVELY USED AREAS

XtraGrass adds strength to high wear areas, such as goal mouths, linesman runs and the centre of pitches.



“

PSV strongly believes in  
the future of hybrid  
football pitches!

”

**MARCEL BRANDS**

*Technical Manager*  
PSV Training Complex  
De Herdgang  
The Netherlands



# INSTALLATION

XtraGrass' specialists have developed a typical pitch profile to ensure the pitch meets all requirements, such as optimum drainage, growing conditions and playing characteristics.

Based on local conditions systems can be added such as undersoil heating, irrigation and subsurface aeration. The drainage system will be dimensioned based on local climate conditions and form an integral part of the pitch profile construction.

## THE INSTALLATION PROCESS

- ▲ GreenFields has in-house specialists in XtraGrass installation and natural grass seed cultivation.
- ▲ XtraGrass is manufactured as carpet rolls and can be installed on a conventional pitch sub-base with the natural grass seed then planted.
- ▲ XtraGrass can be grown at a grass nursery to be installed as sods for an instant ready pitch for immediate play or to repair high wear areas like the goal areas of the pitch.



**EXPERIENCE**



**SPEED**



**CONVENIENCE**



# PROUD USERS OF XTRAGRASS

With the playing characteristics of 100% natural grass, XtraGrass is used in large stadiums, in training facilities, and for amateur use; offering more playing hours and a more stable field.



▲ Arena Lviv - Lviv, Ukraine



▲ Kassam Stadium - Oxford, England



▲ GelreDome - Arnhem, The Netherlands



▲ FC Zenit - St Petersburg, Russia



▲ The Lensbury Hotel - London, England



▲ De Herdgang - Eindhoven, The Netherlands

# PERFORMANCE TESTING

Leading sports laboratories around the world have tested XtraGrass extensively, to ensure that XtraGrass provides an optimum playing surface for competitive sports.

## SUMMARY OF THE XTRAGRASS TEST RESULTS:

- ▲ XtraGrass reinforcement does not affect the growth of natural grass
- ▲ Significantly higher traction values than natural grass
- ▲ Above average values for rainwater infiltration rates
- ▲ Compaction, ball bounce and traction results all met STRI specifications for professional playing fields

CHARACTERISTICS	TEST RESULTS	REQUIRED
Ball rebound	77 cm	60 - 100 cm
Ball roll	9 m	4 - 10 m
Force reduction	60%	55 - 70%
Deformation	5 mm	4 - 9 mm
Traction	44 Nm	25 - 50 Nm
Football pace	60%	50 - 70%
Energy restitution	26%	20 - 50%







THE ARTIFICIAL FIBRES CLOSELY RESEMBLE  
NATURAL GRASS LEAVES IN COLOURS AND SHAPES  
Making the pitch look even more natural

NATURAL GRASS LEAVES ARE HIGHER  
THAN THE SYNTHETIC FILAMENTS  
User plays on the natural grass

NO MAJOR DAMAGE TO THE FIELD LIKE DIVOTS  
Because of the increased stability created by the fibres

# MAINTENANCE

The GreenFields grounds team members are specialized in giving tailored advice about the ongoing maintenance and annual renovations, required for an XtraGrass pitch.

Our experienced team is involved in the upkeep of XtraGrass at a number of high-profile venues, including The Kassam Stadium and PSV de Herdgang. Who better to support you in the maintenance of your new pitch than the specialists who designed, manufactured and installed it!

## XTRAGRASS REQUIRES NO EXTRA MAINTENANCE COMPARED TO A NATURAL GRASS PITCH, YET HAS ADDITIONAL BENEFITS:

- ▲ A standard rootzone mixture is required, which retains nutrients and water
- ▲ Because of its unique lateral structure, XtraGrass is one of the few hybrid pitches that can be aerated
- ▲ Due to reduced surface degradation and the presence of consistent synthetic turf fibre, pitch repairs are much easier and less frequent for the Grounds Team to manage





“

With over 25 years of experience in grounds work, this is the best pitch I've worked on. The pitch looks great and plays quick, with no divots. The players love it!

”

**PAUL CURRIER SR.**

*Head Groundsman*  
The Kassam Stadium  
England



# ENVIRONMENTALLY FRIENDLY



## MINIMAL WEAR OF THE FIBRES

The natural grass (cutting height approx. 3 cm) is higher than the 1.5 cm high synthetic fibres. Therefore, there is only a very minimal wear of the synthetic fibres and a minimal risk of spreading microplastics.



## UP TO 95% NATURAL GRASS PER M<sup>2</sup>

Natural grass has the environmental benefit that it exchanges CO<sub>2</sub> for O<sub>2</sub> which supports the recommended O<sub>2</sub> daily intake for individuals.



## SUSTAINABILITY

XtraGrass is developed, produced and installed based on materials from the same product family (polyolefins) for both the fibres and the backing, which makes the carpet easy to recycle. In addition, seams are sewed together - no glue is applied. Chemical analysis indicates that XtraGrass has no detectable leaching of PACs and phthalates. XtraGrass does not contain heavy metals.



## TUFT LOCK AND INFILL

XtraGrass is a woven system and therefore has a superior yarn bind (120 N), minimizing the risk of losing synthetic fibres into the environment. In addition, it only requires natural infill, which means there are no intentionally added microplastics in this product.





“

The pitch plays fast and has more stability under foot. Usually I have tender muscles after each game, but on the XtraGrass pitch I feel great.

”

GURAM KASHIA

*Captain*

Vitesse

The Netherlands







## A PERFECT PITCH FOR EVERY PLAYER

[www.greenfields.eu](http://www.greenfields.eu)  
E: [info@greenfields.eu](mailto:info@greenfields.eu)  
T: +31 (0)548 633 333

[www.greenfieldsturf.co.uk](http://www.greenfieldsturf.co.uk)  
E: [info@greenfieldsturf.co.uk](mailto:info@greenfieldsturf.co.uk)  
T: +44 (0)1204 699 930

[www.greenfieldsasia.com](http://www.greenfieldsasia.com)  
E: [info@greenfields.eu](mailto:info@greenfields.eu)  
T: +65 6282 7495

[www.greenfieldsusa.com](http://www.greenfieldsusa.com)  
E: [info@greenfieldsusa.com](mailto:info@greenfieldsusa.com)  
T: +1 855-773-6668



XGB.EN/20-02 | 1.3