Non-Filled Turf for Football: Designing for Sustainability and Performance

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GreenFields

PART OF THE TENCATE GROUP

Designing and producing fibres and fabrics for synthetic turf

TENCATE GRASS
FIBRES AND FABRICS

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Greenfields

TigerTurf · SGW synthetic grass warehouse · CHALLENGER TURF PREMIUM SYNTHETIC GRASS

Designing, testing and supplying synthetic turf systems

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Installing and maintaining synthetic turf systems

Weitzel Sportstättenbau · GEO SURFACES · ACADEMY SPORTS TURF · Medallion · OPSA · PALMYRA · CSCsport

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GBN
ARTIFICIAL GRASS RECYCLING

Recycling synthetic turf

AFFILIATIONS

- At GreenFields we always put the players first whilst promoting quality at the same time
- Affiliations with several local and international organisations
- Proud to be a preferred producer/supplier to FIFA, World Rugby and FIH
  - Three most prominent international sports governing bodies for synthetic turf surfaces
  - Highest accolade of their licensing/contract programmes
  - GreenFields have a global commitment to work with the sports bodies to provide high quality facilities for all levels of the game
- Drivers for certification
  - Performance
  - Safety
  - Durability
  - And now… Sustainability

FIFA PREFERRED PROVIDER FOOTBALL TURF | GreenFields

PREFERRED TURF PRODUCER WORLD RUGBY

PREFERRED SUPPLIER FIH QUALITY

SYNTHETIC TURF COUNCIL EMEA ESTC FULL MEMBER

GreenFields PURE PT

NO INFILL – EXTREMELY DURABLE – ULTIMATE PERFORMANCE – DESIGNED FOR FOOTBALL

GREENFIELD PURE PT

GreenFields Pure PT is a 100% non-infill product for soccer that delivers high player comfort and durability in addition to ultimate performance.

GreenFields Pure PT is not only a game changer within artificial turf for soccer but also a very responsible choice.

NO INFILL – EXTREMELY DURABLE – ULTIMATE PERFORMANCE

KEY BENEFITS

- Combination of fibre density, shape and length of the yarns guarantees a more durable product with an extended lifespan
- A true non-infill product - lower operating costs combined with minimal field maintenance requirements results in a more environmentally friendly turf
- Developed with unique fibre combinations, the turf feels soft to the touch without compromising on player comfort and grip, and ball roll
- GreenFields Pure PT is designed to better match the properties of a natural, high-quality turf without the need for infill materials

GreenFields PURE PT

DURABILITY

New Sample

3000 Cycles

6000 Cycles

PURE

NO INFILL – EXTREMELY DURABLE – ULTIMATE PERFORMANCE

SUSTAINABILITY

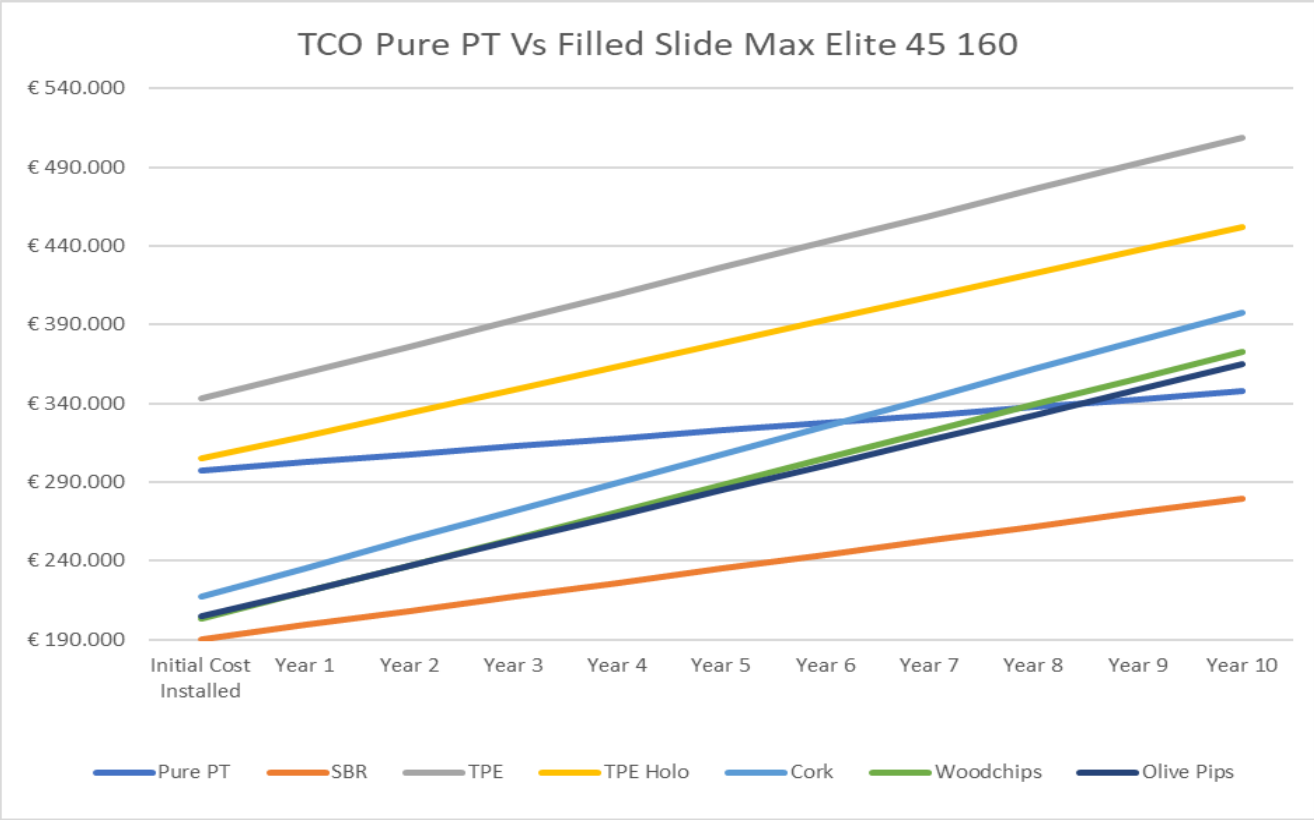
- Designed to be a more durable product - an extended lifespan
- A true non-infill product
- No intentionally added microplastics
- Quicker installation time
- Lower operating and maintenance requirements and costs
- Reduced number of components – improved recyclability

SUSTAINABILITY COMPARISON - INSTALLATION

- Installation comparison
  - Non-filled Pure PT with white painted lines
  - Typical football filled system 45mm with sand and cork and inlaid white lines
  - Costs based on installation in the Netherlands

Operation	Pure PT Non-filled	MF Elite 45 Filled	Saving	Saving - Cost
Number of trucks required	3	11	8 trucks	Approx 78%
Time required to install including infill material, lines, clamping system as required	6	7	1 day	Negligible
Glue and tape	2100m tape, 600kg glue	2700m tape, 950kg glue	600m tape, 350kg glue	Approx 22% Approx 35%
Waste on site	Approx 3,5 ton	Approx 4 ton	Approx 0,5 ton	Approx 12,5%

TOTAL COST OF OWNERSHIP



- Pure PT 6th initial installation cost
- By year 10 TCO 2nd only to SBR
  - option removed with legislative\changes leaves Pure PT a favourable option
- SBR option removed with legislative changes leaves Pure PT a favourable option.
- Pure PT to have an extended life over organic filled pitches.
- Reduced operational and maintenance costs as no infill to maintain and top up over the lifespan. Maintenance requirements regarding decompaction etc reduced

GreenFields PURE PT

Perfect for cold climate

PURE

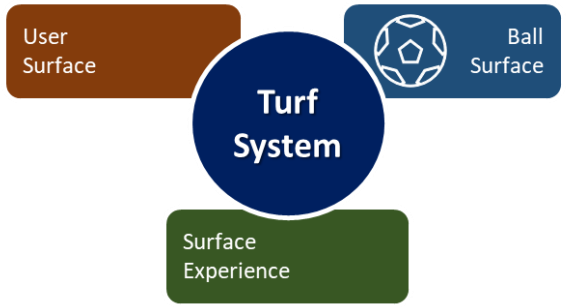
NO INFILL – EXTREMELY DURABLE – ULTIMATE PERFORMANCE

PLAYER FEEDBACK

User Surface Interface

The users interaction with the surface including a range of parameters that can be categorised into:

1. Grip (e.g. friction, traction, slip, purchase, stability, confidence)
2. Comfort (e.g. skin friction, burn, abrasion, slide)
3. Stiffness (e.g. hard, soft, foot stability)



Ball Surface Interface

The interaction between the ball and the surface including a range of parameters that can be categorised into:

1. Speed (e.g. roll speed, fast, slow)
2. Rebound (e.g. bounce, height, low, dead)
3. Predictability (e.g. trueness, consistency, spin, control, directionality)

Surface Experience

Factors impacting the experience of playing on the surface:

1. Consistency (e.g. predictability, uniformity, trueness, repeatable)
2. Skill Exploitation (e.g. undertaken skills, demonstrate ability,)
3. Environmental Impact (e.g. same in all conditions, no freezing, heat impact)

2. Player Perception – Skedsmo (NO)

- Performed exceptionally well under extreme conditions
- Attracted a lot attention and generated a lot positive feedback
- Resulted in several new leads and confirmed projects
- Detailed report based on extensive questionnaire being prepared

Pure PT References

A PERFECT PITCH FOR EVERY PLAYER

WWW.GREENFIELDS.EU

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GreenFields
A TENCATE COMPANY

Skedsmo Stadion

Skedsmokorset, Norway

Fedrelandet

Fetsund, Norway