

LigaTURF®



CHOSEN FOR
FIFA HEADQUARTERS

SOCCER | RUGBY | AFL



polytan

from amateur to professional

WE'VE GOT YOU COVERED

The **Ligaturf®** Australian Made surfacing range is proudly produced by APT Asia Pacific at our Melbourne headquarters. Polytan exclusively install LigaTurf surfaces with our specially trained technicians. Our mission is to provide high quality, innovative and customer driven surfaces for all types of sports.

All surfaces we offer are manufactured in-house at our ISO approved facility in Melbourne and go through rigorous testing, extensive research, and development, so you can rest assured you will be receiving the ideal surface for your desired sporting application. Our surfaces are specifically designed with high quality, durability, longevity, playability, and performance characteristics in mind. whom employ specially trained staff to install our respective products.

**Whatever your sports needs might be, we
have a surface and solution for you.**

PRODUCTS INCLUDED IN THIS BROCHURE

- LigaTurf Cross 250
- Ligaturf HB250
- Ligaturf HB260
- Ligaturf RS+260 COOLplus®

With our **LigaTurf** range, we offer tailored solutions with ideal playing properties for every demand and budget – from multipurpose pitches, elite stadiums for football professionals right through to grassroot athletes.

Our **LigaTurf** football range is a complex, high tech system consisting of a force reduction layer and synthetic surface.

Extensive research and development is undertaken by a trained team of chemists working with sports professionals to establish the specific characteristics required for football and multi-sport suitability.

CERTIFIED AND PREFERRED

All our synthetic surfaces comply with the current national and international standards, including all environmental requirements. The consistent high quality of our surfaces is ensured 100% by final inspection and testing according to our ISO 9001 certification.

As the Preferred Producer we have intimate knowledge of the rigorous requirements to ensure our fields meet certification.

LIGATURF PRODUCT FEATURES



FIFA Preferred Producer



World Rugby Preferred Turf Producer



AFL/CA certified



RFL certified



Entanglement Technology



COOLplus® function



Bicolour



100% PE formulation



Resource conservation



Professional



Multisport



Force reduction



Energy return



Heavy metal free



No toxic fumes or V.O.Cs



Recycled rubber used

CROSS 250

The Best of Both Worlds



The new LigaTurf Cross 250 offers the look and feel of an elite football facility. We continue to develop our products to meet industry requirements across Football, Rugby & AFL applications. The Cross system is the ideal solution for busy professional training facilities, sports schools and professional clubs alike.

Our exclusive twintuft formulation has been designed to provide a perfect balance between protection, durability, softness and strength on artificial turfs used by professional clubs and players around the globe.

Areas of use:



SAFETY

- » Force reduction
- ⚡ Energy return
- ⚡ Shockpads

TECHNOLOGY

- 👁️ COOLplus® Technology
- ⚠️ Entanglement Technology
- ✓ Independently tested

ENVIRONMENT

- ♻️ Recycled rubber
- ⚖️ Heavy metal free
- 🌿 Resource conservation
- 🏠 Non-toxic fumes nor V.O.C.s

USAGE	HEAVY	MODERATE	LIGHT
Hours per week	60	40	20
Recommended resurface time (years)	7 - 9	9 -10	10+

KEY BENEFITS

DURABILITY AND PERFORMANCE

Ligaturf Cross 250 synthetic turf is designed with a 'twintuft' combination of monofilament yarn fibres. Texturised filaments are highly durable and encapsulate the infill from day one. Straight monofilament fibres from our RS+ systems offer unparalleled performance.

SAFETY

The shock pad layer of the **LigaTurf Cross 250** system meets the shockpad absorption and critical fall height criteria as set by football authorities.

FUNCTIONALITY

The combination of performance infill and stabilising infill in the system is designed to stabilise the surface, reduce heat build up and encourage excellent playability.

OUR DIFFERENCE

The **LigaTurf Cross** system provide users with the look and feel of natural football turf, with the 'twintuft' combination of fibres creating the ideal football turf.

This synthetic turf system has been designed for football usage with a 'twintuft' combination of monofilament fibres, combined with texturised filament yarn fibres to allow for optimum function capabilities of each system.

The RS+ monofilament fibres offer the highest performance characteristics with a high resilience to wear, controlled traction and rotational values. These non-directional fibres enable a perfect ball roll and generate fast game speed with excellent touch characteristics.

The texturised filaments are highly durable and used in our tough, short pile Olympic hockey surfaces without infill. In this system, LigaGrass texturised yarn fibres add further durability and encapsulate the infill reducing ball splash.



SYSTEM STRUCTURE LAYERS

- 1 50mm pile height with a combination of RS+ monofilament fibres and LigaGrass texturised filament yarn fibres.
- 2 Combination of performance infill and stabilising infill.
- 3 Exclusive Qualiback 'Hybrid Emulsion' secondary backing for superior seam strength.
- 4 The elastic layer is used for shock absorption and protection from critical fall height and reusable for multiple LigaTurf surfaces
- 5 Sustainable organic performance options available



HB250

Grounds For Success



The **LigaTurf HB250** is far more than just turf. It is a complete system designed for performance and built to last. It has been developed to meet the high-performance standards of professional football turf. The use of combined fibrillated and monofilament sports yarn ensures turf durability and resilience, while reduced SBR infill content reduces splash and surface heat. The shock pad layer is critical for shock absorption and protecting serious player injury. It is also re-useable for future turf replacements.

Our **LigaTurf HB250** synthetic turf solution meets the highest standards set by FIFA Preferred Producer, World Rugby Preferred Producer, RFL and AFL/Cricket Australia.

Areas of use:



SAFETY

- » Force reduction
- ⚡ Energy return
- ⚡ Shockpads

TECHNOLOGY

- 👁️ COOL^{plus}® Technology
- ⚠️ Entanglement Technology
- ✓ Independently tested

ENVIRONMENT

- ♻️ Recycled rubber
- ⚖️ Heavy metal free
- 🌿 Resource conservation
- 🏠 Non-toxic fumes nor V.O.C.s

USAGE	HEAVY	MODERATE	LIGHT
Hours per week	60	40	20
Recommended resurface time (years)	7 - 9	9 - 10	10+

KEY BENEFITS

DURABILITY

Ligaturf HB250 synthetic turf is designed using a combination of fibrillated and high performing monofilament sports yarn. Fibrillated yarn promotes durability and high performing monofilament yarn adds performance.

SAFETY

The shock pad layer of the **LigaTurf HB250** system meets the shockpad absorption and critical fall height criteria as set by football authorities.

FUNCTIONALITY

The combination of performance infill and stabilising infill in the system is designed to stabilise the surface, reduce heat build up and encourage excellent playability.

OUR DIFFERENCE

As the workhorse of the Australian synthetic field market our **LigaTurf HB250** is a proven performer and has continued to meet client expectations for over 10 years.

Fibrillated tape fibres offer superior durability for the system with added benefits of encapsulating infill and reducing ball splash. Monofilament yarn fibres provide the performance characteristics required ball sports and traction for athletes. These non-directional fibres enable a perfect ball roll and allow for consistent performance.

LigaTurf HB250 football turf system design incorporated with the unique and innovative rigid flow cell ensures vertical drainage to a horizontal cell reservoir allowing water to be channelled laterally to a perimeter storm water system. The investment benefit removes all drainage infrastructure under the field that will encounter differential settlement over time. This strong focus on system development provides confidence for our clients.



SYSTEM STRUCTURE LAYERS

- 1 50mm pile height turf consisting of fibrillated tape for durability and monofilament for performance.
- 2 Combination of performance infill and stabilising infill.
- 3 Exclusive Qualiback 'Hybrid Emulsion' secondary backing for superior seam strength.
- 4 The elastic layer is used for shock absorption and protection from critical fall height and reusable for multiple LigaTurf surfaces



HB260

One Turf System



LigaTurf HB260 is the most economical, viable for multipurpose solutions. It is a proven system with an excellent track record and has exceeded the expectation of players due to the unobtrusive and minimal impact of the SBR performance infill.

Our **LigaTurf HB260** is the perfect for AFL product for elite stadiums, professional and amateur clubs. It is the most economical, viable and fit-for-purpose solution. This proven system has an excellent track record and has exceeded the expectation of players due to the unobtrusive and minimal impact of the SBR performance infill content for reduced splash and surface heat.

LigaTurf HB260 premium 'One Turf' solution performs to the criteria set by FIFA Quality, AFL/CA, World Rugby and NRL certifications.

LigaTurf HB260 has also been independently Lisport tested (simulated wear) to 150,000 cycles attesting to its true durability.

Areas of use:



SAFETY

- » Force reduction
- ⚡ Energy return
- ⚡ Shockpads
- 🍇 Original patented Drainage Cell System

TECHNOLOGY

- 👂 COOLplus® Technology
- ⚠️ Entanglement Technology
- ✓ Independently tested

ENVIRONMENT

- ♻️ Recycled rubber
- ⚖️ Heavy metal free
- 🌿 Resource conservation
- ⚠️ Non-toxic fumes nor V.O.Cs
- ✓ Independently tested

USAGE	HEAVY	MODERATE	LIGHT
Hours per week	60	40	20
Recommended resurface time (years)	7 - 9	9 -10	10+

KEY BENEFITS

DURABILITY

LigaTurf HB260 synthetic turf is designed with both fibrillated and monofilament sports yarns. The combination of monofilament and fibrillated into the one football turf product allows it to offer the advantages of each yarn: fibrillated for durability, monofilament for resilience.

SAFETY

Performance benefits of the underlying shock pad incorporate shock absorption with drainage capabilities meeting critical fall height measures for all ages and standards of play.

FUNCTIONALITY

Infill ratio 6-parts sand to 1-part rubber is designed for the sand to stabilise and firm the grass system to take advantage of the performance characteristics of the shock pad. The lower SBR infill content reduces heat build-up and surface radiation.

OUR DIFFERENCE

LigaTurf HB260 has been developed to meet the performance criteria of all football codes with durability and resilience of the turf fibres complimented by reduced SBR infill content for reduced splash and surface heat.

The modular shock pad layer is instrumental for shock absorption and promotes critical fall height performance, is re-useable in future turf replacements and has vertical drainage capabilities.

LigaTurf HB260 football turf system design incorporated with the unique and innovative rigid flow cell ensures vertical drainage to a horizontal cell reservoir allowing water to be channelled laterally to a perimeter storm water system. The investment benefit removes all drainage infrastructure under the field that will encounter differential settlement over time. This strong focus on system development provides confidence for our clients.



Kellyville | Blacktown | New South Wales | Australia



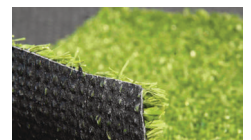
Fibre Shape

Accelerated testing confirms that **LigaTurf HB260** yarn has set unmatched new standards for resilience and durability



SYSTEM STRUCTURE LAYERS

- 1 60mm pile height combination of fibrillated tape for durability and monofilament for performance.
- 2 Combination of performance infill and stabilising infill
- 3 Exclusive Qualiback 'Hybrid Emulsion' secondary backing for superior seam strength.
- 4 Proplay modular shock pad layer for sports performance absorption and fall height.
- 5 Optional Original Patented System: drainage cell layer under shock pad and synthetic turf eliminates all infrastructure required in base construction.



RS+260

COOLplus®

One Turf System



Areas of use:



SAFETY

- » Force reduction
- ⚡ Energy return
- ✓ Independently tested

TECHNOLOGY

- 🔗 COOLplus® Technology
- ⚙️ Entanglement Technology
- 🧴 100% PE Formulation

ENVIRONMENT

- ♻️ Recycled rubber
- ⚖️ Heavy metal free
- 🌿 Resource conservation
- 🚫 Non-toxic fumes nor V.O.C.s
- ✓ Independently tested

In conjunction with quality construction standards, the **LigaTurf RS+260 COOLplus®** synthetic turf system meets strict requirements for FIFA Quality, AFL/CA, World Rugby and NRL certifications. **LigaTurf RS+260 COOLplus®** has been successfully installed worldwide for many years and is preferred by professional and amateur players alike. This excellent “ONE TURF” product provides the best solution for rugby and premier football turf.

Our **LigaTurf RS+260 COOLplus®** is designed to provide a surface suited to club rugby standards of play whilst achieving the greater usage expected of a “one turf” synthetic surface. The result is a playing surface with a great range of football performance, outstanding longevity and at the same time meeting expectations in rugby playability.

LigaTurf RS+260 COOLplus® synthetic turf system has been successfully installed worldwide for many years and is preferred by professional and amateur players alike. No risk, no hassle and includes a proven maintenance regime to address high wear activity.

LigaTurf RS+260 COOLplus® meets FIFA Quality, as well as World Rugby and Australian Rules field testing requirements in conjunction with quality construction standards.

USAGE	HEAVY	MODERATE	LIGHT
Hours per week	60	40	20
Recommended resurface time (years)	8 – 10	10	10+

KEY BENEFITS

DURABILITY

LigaTurf RS+ 260 COOLplus® is designed to provide a playing surface with a great range of football performance, outstanding longevity and at the same time meeting expectations in rugby playability. No risk, no hassle and includes a proven maintenance regime to address high wear activity.

SAFETY: PLAY LONGER!

Designed to provide a surface suited to FIFA Quality, AFL/CA, World Rugby, NRL and multisport standards of play whilst achieving the greater usage expected of “ONE TURF” synthetic surface.

FUNCTIONALITY: PLAY NOW!

LigaTurf RS+ 260 COOLplus® is utilised at the best AFL, football and rugby clubs in the Asia Pacific region, while meeting AFL, FIFA and World Rugby standards.

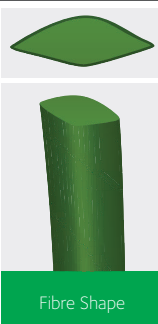
OUR DIFFERENCE

LigaTurf RS+ 260 COOLplus® offers an outstanding playing surface and durability far superior to the Lisport wear testing requirements for FIFA.

Longevity is assured from the exclusive Polytex sports yarn UV stability and to satisfy the demand for better force absorption and fibre recovery.

The exclusive 'Entanglement Technology' is a proprietary feature of the Polytex fibres, which interlaces the molecular chains in the turf fibre into a three-dimensional matrix. The result is an exceptionally soft surface and greater protection against splicing with optimum playing properties and a considerably longer lifespan.

Unique **COOLplus®** function directly reflects the IR radiation which is invisible to the human eye due to the formulation that embeds pigments in the turf filaments. It effectively retards the heating process of the turf.



Fibre Shape

The fibres have a rhomboid cross section and a thickness of 360 micron. Exclusive 'Entanglement Technology' is a feature of a **COOLplus®** sports fibre.

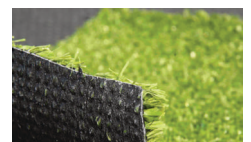
Edgars Creek Secondary College | Wollert | Victoria | Australia



Gardiner Park | Glen Iris | Victoria | Australia

SYSTEM STRUCTURE LAYERS

- 1 60mm pile height exclusive Polytex mono-filament sports yarn – incorporating spring-back technology for highest durability and play characteristics.
- 2 Combination of performance infill and stabilising infill
- 3 Exclusive Qualiback 'Hybrid Emulsion' secondary backing; for superior seam strength.
- 4 The shockpad layer is engineered to provide excellent sports performance whilst further contributing to recycled system content and reusable for multiple LigaTurf surfaces.
- 5 Specifically, designed pavement engineered to construction standards and tolerances.

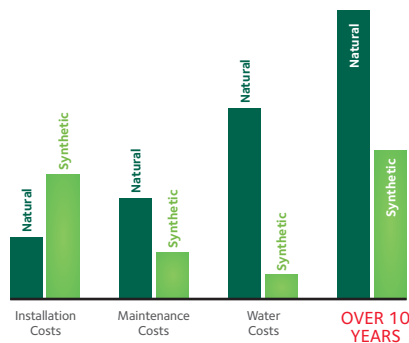


SYNTHETICS TURF SYSTEM

Installation and Advantages

LIFECYCLE COSTINGS

Compare how an 8,000 square-metre installation of LigaTurf stacked up to the estimated cost for a natural turf, projected over 10 years.



1 NATURAL OR SYNTHETIC?



2 SELECTING YOUR PREFERRED LIGATURF PRODUCT



3 DESIGN AND CONSTRUCTION BEGINS



4 INSTALL ELASTIC BASE LAYER



1 NATURAL OR SYNTHETIC?

Synthetic turf football surfaces are becoming increasingly popular at elite, international and training facilities since the surface provides an even consistency and a field players can perform on all year round. An organisation's (sport club, association, local or state government) decision whether to have a natural grass or synthetic turf sports ground comes down to their specific objectives for environmental, social, health and financial outcomes.

There are many things to consider during your decision making process, some of which should include:

- Demand and capacity
- Local climatic and environmental factors
- Sport specific requirements
- Broader environmental issues
- Social impacts
- Health impacts
- Asset management and lifecycle costing

2 SELECTING YOUR PREFERRED LIGATURF PRODUCT

When making your selection consider which sporting application system will best suit your intended use. Will you only be playing elite soccer on this field or is this perhaps a community project where a budget option with multi-sport capabilities would apply? Whatever your needs, we have a LigaTurf surface to suit.

3 DESIGN AND CONSTRUCTION

Every sporting facility project is different and presents its own unique aspects and challenges. Polytan ensure our design and construction teams have qualified industry professionals working on your project to transform it from your original concept to creation. Part of a successful, winning formula is engaging local expertise in the form of local grounds personnel, caretakers, environmental authorities, civil contractors and combining their knowledge to meet all the local requirements and standards. We recommend you only use certified, approved installers.

4 THE ELASTIC 'SHOCK ABSORBING' LAYER

The shock absorption layer of the LigaTurf® system is installed on site and consists of recycled SBR granules and our in-house Qualipur bonding agents. It is suitable for multiple LigaTurf surfaces and ensures the synthetic surface is both stable and yielding to protect athletes. Factors that are key in sports physiology, such as shock absorption and deformation, are permanently kept within a precisely defined value range thanks to the special APT formulation.

5 LAYOUT THE SURFACE AND APPLY THE ADHESIVE



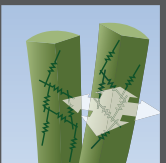
6 APPLY THE INFILL



COOLplus® TECHNOLOGY

All **LigaTurf** systems feature proprietary infrared-reflective **COOLplus®** sports yarn technology.

Sunlight is comprised of a wide spectrum of radiation including visible light, UV radiation and infrared (IR). Infrared radiation causes molecular vibration, which translates into heat energy when it is absorbed by an object. Our proprietary **COOLplus®** yarn technology does not absorb infrared rays, translating into less molecular vibration and cooler surface temperatures. Studies show **COOLplus®** surface temperatures are consistently 10-20% lower than the competitive systems. The result is better player comfort and reduced need for irrigation!



DURABILITY

The '**Entanglement Technology**'

in the **COOLplus®** sports fibre interlaces the molecular chains in the turf fibre into a three dimensional shape. The result is an exceptionally soft surface and greater protection against splicing with optimum playing properties and a considerably longer lifespan.



5 PROJECT SPECIFIC ROLL LAYOUTS

A unique roll layout plan is prepared for every LigaTurf project to ensure that as many game lines as possible are incorporated into the product during manufacturing, reducing the need to cut-in lines onsite. The location of seams is also carefully considered to position seam lines away from the most highly used sections of the pitch; enhancing durability and longevity. Markings for multiple sports as well as unique and striking colour combinations can be included to make each project a unique showpiece!

6 ONE STOP SHOP FOR UNMATCHED QUALITY

All processes of yarn, turf, backing, and seaming adhesives are produced inhouse at our ISO 9001 approved manufacturing facility in Melbourne. We are the only FIFA Preferred Producer with Australian-based manufacturing and have full control over all quality processes. Importantly we are NOT an agent sourcing products and components from an overseas manufacturer and/or third-party suppliers. Purchasing from a local manufacturer ensures you are supporting Australian jobs and the Australian economy.

7 QUALIPUR HYBRID EMULSION

In-house manufacture of this polyurethane seaming adhesive creates unmatched seam strength. This increases the durability and longevity of seams which means fields have a much longer overall life expectancy.

8 GRIP AND TRACTION: THE FILLING MATERIALS

Regardless of the application and type of turf, LigaTurf football systems are filled with stabilising and performance infill. The infill is an extremely important component of the system for football pitches in particular as it provides the authentic feeling of playing in studs. This gives players the necessary grip and added traction when changing speed or direction as well as providing realistic ball behaviour and protection against injuries.

9 CERTIFIED AND PREFERRED

The high quality and excellent playing properties of our synthetic turfs have also been verified by numerous seals of quality and certificates. Our synthetic football turf systems meet the current national and international standards with completed LigaTurf fields meeting requirements of the various sport requirements – an achievement that makes us particularly proud.

10 THE KEY TO SUCCESS: PROFESSIONAL INSTALLATION

Outdoor sports surfaces demand a high level of precision and experience. Ensuring that your system has excellent performance characteristics over the entire surface and longevity we recommend that you only use a certified, approved installer.

*Liga***TURF**[®]
MADE IN AUSTRALIA

Proudly installed by

polytan

1800 663 812

Factory 2, Dunlopillo Drive
Dandenong South VIC 3175 Australia
enquiry@polytan.com.au
www.polytan.com.au