

*Liga***TURF**<sup>®</sup>



SPORTS AND LEISURE  
**SYNTHETIC  
SURFACE  
SPECIALISTS**



RUGBY  
SOCCER  
AFL



# FROM AMATEUR TO PROFESSIONAL

We've got you covered

The Ligaturf football range is proudly brought to you by Advanced Polymer Technology (APT). Our mission is to provide high quality, innovative, customer driven surfaces for all sporting codes.

Installing outdoor sports surfaces demands specific expertise, a high level of precision and experience. We ideally accommodate your specific conditions and ensure that your Ligaturf Football systems have excellent performance characteristics over the entire surface.

*Whatever your code, we have a surface and solution for you.*



# PRODUCT FEATURES

	RS+ 240	RS+ 260	ULTIMATE 260	HB 260	HB 250
 FIFA certified	■	■	■	■	■
 World Rugby certified		■	■	■	
 AFL/CA certified		■		■	■
 ERFL certified		■		■	
 'Entanglement Technology'	■	■	■	■	■
 <b>COOLplus</b> ® function	■	■	■	■	■
 Bicolour	■	■	■	■	■
 100 % PE formulation	■	■	■	■	■
 Resource conservation	■	■	■	■	■
 Professional	■	■		■	■
 Multisport	■	■	■	■	■
 Force reduction	■	■	■	■	■
 Energy return	■	■	■	■	■
 Heavy metal free	■	■	■	■	■
 No toxic fumes or V.O.C's	■	■	■	■	■
 Recycled rubber used	■	■	■	■	■

Our synthetic turf systems are the result of decades long research and development. We continuously drive towards the same goal, to produce synthetic surfaces that are specially designed to combine playability, durability and the demands of football activities which enable athletes to achieve perfect performances.

Our LigaTurf range is manufactured in our ISO approved facilities in Melbourne and in Germany. We independently test for quality, durability and performance. This means that every surface we install is guaranteed not only to look good but also to perform at the highest standard all year round.

Research and development is undertaken by our trained team of chemists working with sports professionals to establish the specific characteristics required for each code, or indeed multi-sport suitability. With the in-house team directing the manufacture of our LigaTurf range, the result is a product that exceeds athlete expectations. Our flexibility to accommodate your needs sets us apart from our competitors.

Sports is a combination of passion and technique; when these two elements meet they create sublime, magical moments.

We have the surface to suit your every need and that surface is LigaTurf.



## 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 by 100% final inspection and testing according to our ISO 9001 certification. Our LigaTurf systems can be tested and certified upon completion to meet one or all of the international football bodies performance requirements.



# LigaTurf RS+ 240 COOLplus®

**LigaTurf RS+240 COOLplus®** is the proven elite system developed for professional football turf systems where sports performance and outstanding durability is desired. Thanks to the yarn design and the surface structure, the **LigaTurf RS+240 COOLplus®** is in a league of its own when it comes to both playing qualities and wear resistance.




The innovative **'Entanglement Technology'** ensures maximum protection against wear. The fibres stay upright for longer, which results in consistent playing qualities and improved protection for the players, whilst reducing maintenance costs. The **COOLplus®** function provides a considerable reduction in turf temperatures.



### Areas of Use

Elite football stadiums  
Professional training facilities  
Professional and amateur clubs



-  FIFA certified
-  'Entanglement Technology'
-  COOLplus® function
-  100 % PE formulation
-  Resource conservation
-  Professional
-  Multisport
-  Force reduction
-  Energy return
-  Heavy metal free
-  No toxic fumes or V.O.C.'s
-  Recycled rubber used

## KEY BENEFITS

- Football turf not synthetic grass!
- Reliable traction and rotation characteristics ideal for football codes
- Soft filament for a gentle feel to the skin
- Extreme wear resistance
- Proven, simple maintenance processes
- Environmentally friendly
- FIFA recommended certifications
- Leading European football club references



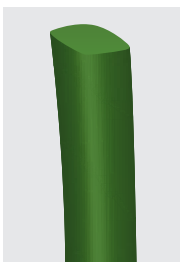
Usage	Heavy	Moderate	Light
Hours per week	60	40	20
Recommended resurface time (yrs)	8-10	10	10+

## OUR DIFFERENCE

**LigaTurf RS+ 240COOLplus®** is designed to meet FIFA certification upon completion of the field in conjunction with quality construction standards. Longevity is assured from the exclusive Polytex sports yarn UV stability. The fibres have a rhomboid cross section and a thickness of 360 micron.

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.

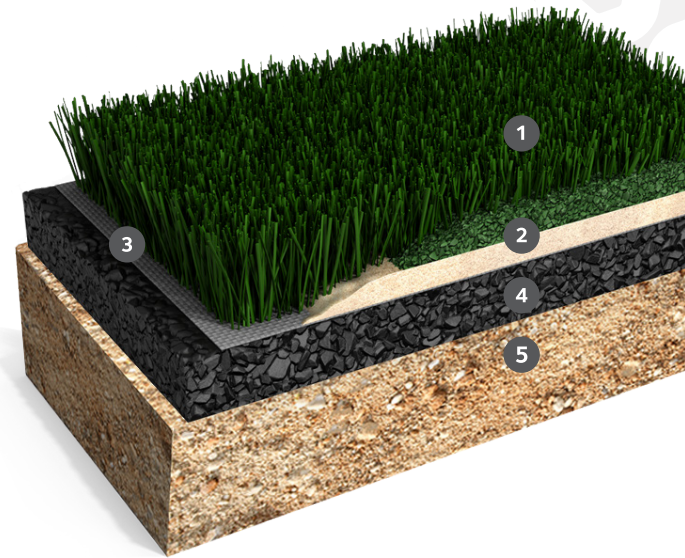
Unique **COOLplus®** function directly reflects the IR radiation which is invisible to the human eye due to the formulation that embeds pigments in the turf filaments. It effectively retards the heating process of the turf.



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

Fibre shape

## SYSTEM STRUCTURE LAYERS



- 1 40mm pile height exclusive Polytex mono-filament sports yarn - incorporating spring-back technology for highest durability and play characteristics.



- 2 Recycled SBR rubber granule infill and the latest Bionic Fibre technology. Kiln dried silica sand stabilising infill.



- 3 Exclusive Qualiback ‘Hybrid Emulsion’ secondary backing; for superior seam strength.



- 4 Elastic layer shockpad, engineered to provide excellent sports performance whilst further contributing to recycled system content and successfully reused on multiple resurfacing projects.



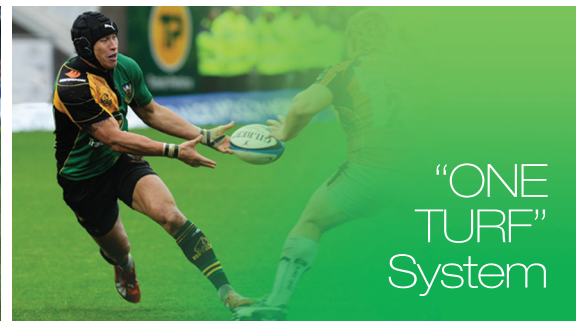
- 5 Specifically designed pavement, engineered to construction standards and tolerances.



# LigaTurf RS+ 260 COOLplus®

**LigaTurf RS+260 COOLplus®** synthetic turf system 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.

**LigaTurf RS+260 COOLplus®** meets FIFA ONE and TWO STAR, as well as IRB and Australian Rules field testing requirements in conjunction with quality construction standards.



### Areas of Use

Rugby stadiums  
Professional training facilities  
Professional and amateur clubs



-  FIFA certified
-  World Rugby certified
-  AFL/CA certified
-  ERFL certified
-  'Entanglement Technology'
-  COOLplus® function
-  100 % PE formulation
-  Resource conservation
-  Professional
-  Multisport
-  Force reduction
-  Energy return
-  Heavy metal free
-  No toxic fumes or V.O.C.'s
-  Recycled rubber used

## KEY BENEFITS

**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 club rugby standards of play whilst achieving the greater usage expected of a "ONE TURF" synthetic surface.

### Functionality: Play Now!

**LigaTurf RS+ 260 COOLplus®** is utilised at the best European and New Zealand rugby clubs whilst also meeting the requirements of football.



Usage	Heavy	Moderate	Light
Hours per week	60	40	20
Recommended resurface time (yrs)	8-10	10	10+

## 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.



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

Fibre shape

## SYSTEM STRUCTURE LAYERS



- 1 60mm pile height exclusive Polytex mono-filament sports yarn - incorporating spring-back technology for highest durability and play characteristics.



- 2 Recycled SBR rubber or Bionic infill fibre technology, proven quality performance infill.



Kiln dried silica sand stabilising infill.

- 3 Exclusive Qualiback 'Hybrid Emulsion' secondary backing; for superior seam strength.



- 4 Elastic layer shockpad, engineered to provide excellent sports performance whilst further contributing to recycled system content and successfully reused on multiple resurfacing projects.



- 5 Specifically designed pavement, engineered to construction standards and tolerances.



# LigaTurf Ultimate 260 COOLplus®

**LigaTurf Ultimate 260 COOLplus®** is the budget priced, workhorse of the LigaTurf surfaces being used successfully around the world. The **LigaTurf Ultimate 260 COOLplus®** is a recent development to offer longevity advantages over its predecessor.

Installed directly over the base course for an economical solution it offers the ultimate look, ultimate feel, ultimate longevity.

Thanks to our **'Entanglement Technology'** and **COOLplus®** function, the **LigaTurf Ultimate 260 COOLplus®** provides the feeling of playing on natural grass with the fibres providing a softness for sliding.



### Areas of Use

Training facilities  
Professional and amateur clubs



-  FIFA certified
-  World Rugby certified
-  'Entanglement Technology'
-  COOLplus® function
-  100 % PE formulation
-  Bicolour
-  Resource conservation
-  Multisport
-  Force reduction
-  Energy return
-  Heavy metal free
-  No toxic fumes or V.O.C.'s
-  Recycled rubber used



## KEY BENEFITS

**LigaTurf Ultimate 260 COOLplus®** is designed to provide a playing surface with proven football performance, outstanding longevity and at the same time meeting expectations at a high level. No risk, no hassle and includes a proven simplistic maintenance regime to address high wear activity.

### Safety: Play Longer!

Designed to provide a surface suited to all standards of play whilst achieving the greater usage expected of a synthetic surface at a budget price!

### Functionality: Play Now!

**LigaTurf Ultimate 260 COOLplus®** is quick to install, meets a budget and is outstanding in appearance.



Usage	Heavy	Moderate	Light
Hours per week	60	40	20
Recommended resurface time (yrs)	7-9	9-10	10+

## SPECIFICATION

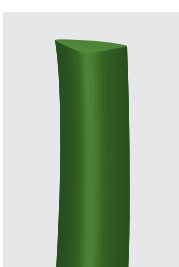
**LigaTurf Ultimate 260 COOLplus®** is designed to meet FIFA ONE and TWO STAR upon completion of the field in conjunction with quality construction standards. The system offers an excellent playing surface and durability given superior results to that of FIFA wear testing requirements. Longevity is provided from the exclusive Polytex sports yarn design.

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.



The fibres have a triangular cross section and a thickness of 250 micron. This is also available in a dual colour combination.



Fibre shape

## SYSTEM STRUCTURE LAYERS



- 1 60mm pile height exclusive Polytex mono-filament sports yarn - incorporating spring-back technology for highest durability and play characteristics.



- 2 Recycled SBR rubber granule, SmartFil rubber granule proven performance infill. Kiln dried silica sand stabilising infill.



- 3 Exclusive Qualiback ‘Hybrid Emulsion’ secondary backing; for superior seam strength.



- 4 Specifically designed base course, finished to specified construction standards and tolerances.



- 5 Note: To meet the requirements for Rugby and Australian Football League, the addition of the optional elastic shockpad layer is required.



# HB260

**LigaTurf HB260** is the most economical, viable and fit for purpose solution. 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.

**LigaTurf HB260** premium 'One Turf' solution performs to the criteria set by FIFA Quality Program One & Two Star, World Rugby Regulation 22, AFL / Cricket Australia and Rugby League splash test.
















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



## Areas of Use

Training facilities  
Professional and amateur clubs



-  FIFA certified
-  World Rugby certified
-  AFL/CA certified
-  ERFL certified
-  'Entanglement Technology'
-  COOLplus® function
-  100 % PE formulation
-  Bicolour
-  Resource conservation
-  Multisport
-  Force reduction
-  Energy return
-  Heavy metal free
-  No toxic fumes or V.O.C.'s
-  Recycled rubber used

## KEY BENEFITS

**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 Proplay 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.



Usage	Heavy	Moderate	Light
Hours per week	60	40	20
Recommended resurface time (yrs)	7-9	9-10	10+

## 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 channeled 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



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 resilience.



- 2 Recycled SBR granule infill and latest Bionic Fibre technology  
Kiln dried silica sand 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.



Optional Patented System: drainage cell layer under shock pad & synthetic turf eliminates all infrastructure required in base construction



# HB250

**LigaTurf HB250** is based on the **LigaTurf HB260** system with 10mm less pile; also incorporating a shock pad layer and reduced rubber infill.

**LigaTurf HB250** solution performs to the criteria set by FIFA Quality Program One & Two Star, and AFL / Cricket Australia. **LigaTurf HB250** fibre, infill and shock pad combination is the same as what was independently Lisport tested (simulated wear) to 150,000 cycles attesting to its true durability.



### Areas of Use

Training facilities  
Professional and amateur clubs

-  FIFA certified
-  AFL/CA certified
-  'Entanglement Technology'
-  COOLplus® function
-  100 % PE formulation
-  Bicolour
-  Resource conservation
-  Multisport
-  Force reduction
-  Energy return
-  Heavy metal free
-  No toxic fumes or V.O.C.'s
-  Recycled rubber used



## KEY BENEFITS

**LigaTurf HB250** 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 Proplay shock pad incorporate shock absorption with drainage capabilities meeting shock absorption and 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.



Usage	Heavy	Moderate	Light
Hours per week	60	40	20
Recommended resurface time (yrs)	7-9	9-10	10+

## OUR DIFFERENCE

**LigaTurf HB250** has been developed to meet the performance criteria for football turf combining 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 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 channeled 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 that our surfaces are not only built to look good and play well, but are also built to last.

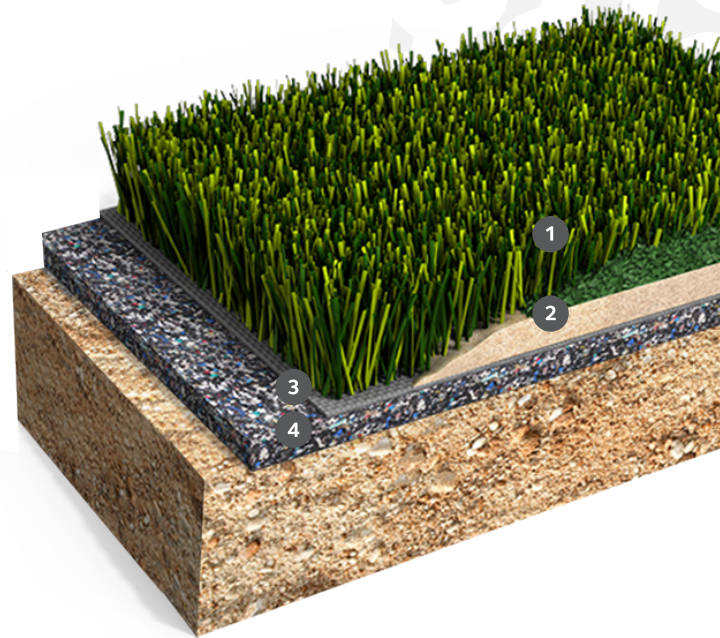


Accelerated testing confirms that LigaTurf HB250 yarn has set unmatched new standards for resilience and durability.



Fibre shape

## SYSTEM STRUCTURE LAYERS



- 1 50mm pile height combination of fibrillated tape for durability and monofilament for resilience.



- 2 Recycled SBR proven performance infill.  
Kiln dried silica sand 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.



Optional Patented System: drainage cell layer under shock pad & synthetic turf eliminates all infrastructure required in base construction



# Synthetic Turf System Installation and Advantages

## NATURAL OR SYNTHETIC?

The use of synthetic turf football surfaces is becoming more widespread throughout the world. 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:

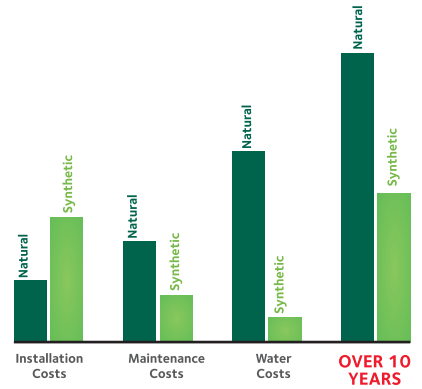
- Demand and capacity
- Local climatic and environmental factors
- Sport specific requirements
- Broader environmental issues
- Social impacts
- Health impacts
- Asset management and lifecycle costing



1. Natural or Synthetic?

## 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.



## SELECTING YOUR PREFERRED LIGATURF PRODUCT

LigaTurf systems are the first choice for playing fields where football is exclusively played. They are pleasantly soft and provide a natural feel for the players with optimum rolling and rebound properties for football, rugby and Australian rules football (AFL).

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.



2. Selecting your preferred LigaTurf product

## DESIGN AND CONSTRUCTION

Every sporting facility project is different and presents its own unique aspects and challenges. Ensure your design and construction teams have the correct experience to translate your vision into a reality. 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.



3. Design and construction begins



4. Preparation of the base and drainage

## THE ELASTIC 'SHOCK ABSORBING' LAYER

The shock absorption layer of the APT system is installed onsite and consists of recycled SBR granules and bonding agents to ensure that the LigaTurf synthetic surface is both stable and yielding to protect the 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. Install the elastic base layer

6. Layout the surface and apply the adhesive



**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!

7. Apply the infill



**QUALIBACK HYBRID EMULSION:**

Extensive research and development led to the highly successful 'Hybrid Emulsion' secondary backing coating to replace outdated technology. The upgrade of this critical system component is based on our chemical manufacturing excellence for formulating acrylic and polyurethane coatings. In-house manufacture and application of the revolutionary 'Hybrid Emulsion' secondary backing for artificial turf is a substantial improvement from conventional and outdated SBR latex.

**QUALIPUR SEAMING ADHESIVE:**

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.

**GRIP AND TRACTION: THE FILLING MATERIALS**

Regardless of the application and type of turf, APT football systems are in-filled with kiln dried sand and rubber. 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.

8. **CERTIFIED AND PREFERRED**

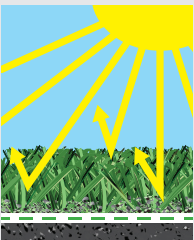
The high quality and excellent playing properties of our synthetic turfs have also been verified by numerous seals of quality and certificates. Our synthetic football turf systems meet the current national and international standards with completed LigaTurf fields meeting requirements of the various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

9. **THE KEY TO SUCCESS: PROFESSIONAL INSTALLATION**

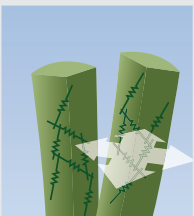
Outdoor sports surfaces demand a high level of precision and experience. Ensuring that your system has excellent performance characteristics over the entire surface and longevity, we recommend that you only use a certified, approved installer.



Enjoy your new LigaTurf Field



**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.



*Ligature***TURF**<sup>®</sup>

SPORTS  
AND LEISURE  
**SYNTHETIC  
SURFACE  
SPECIALISTS**

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