

A black and white photograph of an artificial grass pitch, showing a central white line running down the length of the field.

**ARTIFICIAL GRASS  
PITCHES FOR RUGBY**



## **ARTIFICIAL GRASS PITCHES FOR RUGBY – A CLUB GUIDE TO REGULATION 22 AND THE IRB ONE TURF PROGRAMME**

This document has been produced to provide a non-technical overview of Regulation 22 (standard relating to the use of artificial Rugby turf), and the One Turf programme, from concept to installation, maintenance and beyond, as well as highlighting the clear long-term benefits of artificial turf installation.

Technology in the area of artificial playing surfaces has improved greatly over time and these advances have resulted in artificial turf being widely used for many sports, including Rugby. The IRB Artificial Rugby Turf Performance Specification sets a minimum standard for artificial playing surfaces which may be used in Rugby. It stipulates the testing and approval procedures which manufacturers and other entities involved in the installation of artificial playing surfaces must comply with in order for their products to be approved for use in Rugby. The Game may not be played on any artificial surface which does not meet the requirements of IRB Artificial Rugby Turf Performance Specification, Regulation 22 and IRB Laws of the Game Law 1. (The IRB Artificial Rugby Turf Performance Specification may be amended over time as technology and research evolves in the area of artificial playing surfaces.)

The IRB's *One Turf* programme was launched in December 2010 to redefine the use of artificial turf as a playing surface for Rugby and boost global Rugby participation.

For the first time a structure has been implemented to regulate and standardise the development, performance and maintenance of artificial turf worldwide through the appointment of IRB Preferred Turf Producers and Accredited Test Institutes.

The *One Turf* programme is designed to ensure that the best possible performance standards and consistency are achieved while promoting the highest player welfare standards. This programme was launched following collaboration between the IRB and FIFA through an extensive research, testing and review process.

**Installations which comply with IRB Regulation 22 also conform to FIFA 1 and 2 Star systems for Football (FIFA Quality Concept for Artificial Turf Surfaces).**

### **Why use Artificial Turf?**

- **Playing Time**
  - At least 30 hours playing time per week
  - Perfect for intense usage and multi-sport purposes
- **Financial**
  - Economical
  - Less but more specific maintenance
  - Additional revenue generator
- **Environmental**
  - Eco-friendly
  - Lasts longer than natural turf
  - Recyclable
- **Climatic**
  - Better suited to extreme weather
  - Consistent surface throughout the playing season

### **How to Install a Regulation 22 Compliant Artificial Turf Pitch**

The following is an outline of the process for rugby bodies, clubs, organisations or other entities to have a Regulation 22 compliant artificial turf pitch installed:



Step 1	Unions, clubs or organisations seeking to install or use an artificial turf playing surface should read "IRB Performance Specification for Artificial Turf" on <a href="http://www.irbplayerwelfare.com">www.irbplayerwelfare.com</a> and follow the IRB Regulation 22 requirements (see appendix pages 5-6).
Step 2	Contact a reputable consultant familiar with IRB regulation 22 and/or FIFA Quality Concept.
Step 3	Produce tender document for manufacturer/IRB Preferred Turf Producer.
Step 4	Selected manufacturer/IRB Preferred Turf Producer submits turf sample to IRB Accredited Test Institute.
Step 5	Install laboratory tested and approved product.
Step 6	Installed pitch undergoes field testing.
Step 7	IRB Member Union certifies approved pitch.

*Note that the colour of the artificial turf must be green. Lines should be in a contrasting colour e.g. white or yellow.*

## Who to Use

### UK IRB Accredited Test Institutes

Test Institutes that meet the criteria set out by IRB/FIFA and pass an annual testing regime are eligible to perform tests in accordance with IRB Regulation 22

**Labosport International**  
<http://www.labosport.com>

**Sportslabs Ltd**  
[www.sportslabs.co.uk](http://www.sportslabs.co.uk)

### IRB Preferred Turf Producers

The IRB has appointed Preferred Turf Producers to ensure that the highest performance standards are met when installing artificial turf for rugby.

**FieldTurf Tarkett S.A.S**  
[www.tarkett-sports.com](http://www.tarkett-sports.com)

**Limonta Sports S.A.S**  
[www.limontasport.com](http://www.limontasport.com)

**SIS (Support in Sport) Ltd**  
[www.supportinsport.com](http://www.supportinsport.com)

**Greenfields B.V**  
[www.greenfields.eu](http://www.greenfields.eu)

**Mondo S.P.A**  
[www.mondoworldwide.com](http://www.mondoworldwide.com)

## Further Information

**IRB Regulation 22**  
<http://www.irb.com/lawregulations/regulations/index.html>

**IRB Artificial Rugby Turf Performance Specification Technical Document March 2011 Edition**  
[http://www.irbplayerwelfare.com/pdfs/Turf\\_Performance\\_Tech\\_Spec\\_EN.pdf](http://www.irbplayerwelfare.com/pdfs/Turf_Performance_Tech_Spec_EN.pdf)

**IRB Laws of the Game Law 1: The Ground**  
<http://www.irblaws.com/EN/laws/2/1/section/law/>

**FIFA Quality Concept for Football Turf**  
[http://www.fifa.com/mm/document/afdeveloping/pitchequip/fqc\\_football\\_turf\\_folder\\_342.pdf](http://www.fifa.com/mm/document/afdeveloping/pitchequip/fqc_football_turf_folder_342.pdf)

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## TESTING PROCEDURES

### The Surface

The artificial turf system comprises three main layers. Underneath the artificial turf sits a shock absorbing layer (optional) and the sub-base which is the foundation.

The testing of a system will occur both within an IRB Accredited Test Institute (laboratory type testing) and again upon the completed of the installation (field testing). A system will undergo a series of tests to establish its suitability for installation. Only a system that has completed and passed both the laboratory and field testing process will have met the requirements of this specification and is therefore ready for use in Rugby.

### Testing Protocols

#### *Laboratory Tests*

The laboratory testing will identify the quality of the turf product, ensure sustainability and environmental resistance and demonstrate the required player performance characteristics necessary for Rugby.

#### *Field Tests*

The performance of the artificial turf also depends upon the preparation of the sub-base together with the quality of the installation of the artificial turf system. Therefore the installed turf will also undergo field testing. Field testing should be conducted within three months after installation of the pitch where practicable. Taking into consideration that the artificial weathering test takes several weeks, and that the field tests can only be performed after the installed pitch has settled, the final approval of a newly developed system may take up to six months.

### Test Procedures

There are three basic categories that define the overall performance of an artificial surface suitable for the game of Rugby. These may be broadly defined as:

1. Ball/Surface Interaction – the reaction of a ball to the surface
2. Player/Surface Interaction - the reaction of a player to the surface
3. Durability – the resistance of the surface to wear and tear and the environment

The series of tests are as follows:

### Laboratory Tests

1. Identification tests – to characterise the surface being tested
2. Durability - the ability of the surface to withstand the effects of play
3. Climatic Resistance – the ability of the surface to withstand the effects of weathering
4. Player/Surface Interaction
5. Ball/Surface Interaction

### Field Tests

1. Construction tests – slope, evenness, base, permeability
2. Player/Surface Interaction
3. Ball/Surface Interaction
4. Identification tests – to ensure the system installed matches the product tested in the laboratory

*Further information about the tests can be found in the IRB Artificial Turf Performance Specification.*

### Modifications

Any minor modifications in the profile or composition of an artificial playing surface which has passed the Laboratory Tests must be submitted to a Test Institute together with relevant evidence that the surface continues to satisfy the requirements of the IRB Artificial Rugby Turf Performance Specification. Any significant change will require a complete re-evaluation of the surface by a Test Institute.



## **Maintenance**

The party acquiring and/or responsible for the maintenance and/or management of the Artificial Rugby Turf surface must demonstrate to the Test Institute on a periodic basis as required by the Union and/or the IRB, that it is maintaining the Artificial Rugby Turf surface such that it continues to meet the IRB Artificial Rugby Turf Performance Specification, the requirements of Regulation 22 and Law 1.1 of the Laws of the Game.

## **Continued Testing & Approval**

Approved Status is valid for a period of two years. Each Artificial Rugby Turf surface will be re-tested by a Test Institute every two years during its lifetime to ensure that through an appropriate maintenance regime it continues to meet the IRB Artificial Rugby Turf Performance Specification, the requirements of Regulation 22 and Law 1.1 of the Laws of the Game.

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## **APPENDIX A**

### **REGULATION 22: ADDITIONAL REQUIRMENTS FOR INSTALLATION AND USE OF ARTIFICIAL RUGBY TURF SURFACES**

Rugby Bodies, Clubs, organisations or other entities seeking to install an Artificial Rugby Turf surface must adhere to the following conditions in addition to the testing and approval regime established by Regulation 22 and the IRB Artificial Rugby Turf Performance Specification:

1. Permission to install or use an artificial playing surface must be sought in writing in advance of installation or the first use from the Union in whose territory the surface is intended to be installed or used. The Union must ascertain:
  - (a) in the case of a request for installation, that the artificial playing surface has passed the Laboratory Tests; or
  - (b) in the case of a request for use, that the artificial playing surface has been certified in accordance with the IRB Artificial Rugby Turf Performance Specification.

Where the artificial playing surface has met the IRB Artificial Rugby Turf Performance Specification, the requirements of Regulation 22 and Law 1.1 of the Laws of the Game, the Union shall grant such permission. Where a Union is the party seeking to install or use an artificial playing surface then permission shall be sought from the IRB.

2. The permission of the Union pursuant to Section 1 above shall be granted for a period of two years, following which the Artificial Rugby Turf surface shall be re-tested by a Test Institute. Where the Artificial Rugby Turf surface continues to meet the IRB Artificial Rugby Turf Performance Specification, the requirements of Regulation 22 and Law 1.1 of the Laws of the Game, the Union shall grant permission for use of the surface for a further period of two years. The Artificial Rugby Turf surface shall then be re-tested by a Test Institute every two years of its lifetime and Unions shall grant permission for use of the surface for further periods of two years accordingly.

3. This permission does not constitute and/or imply an endorsement by the granting Union or the IRB of the artificial playing surface(s) concerned.

4. During the period for which permission is granted, the Artificial Rugby Turf surface may be used for the playing of the Game including International Matches.

5. The IRB Preferred Turf Producer and/or entity contracted to install the artificial playing surface shall be responsible for the supply of equipment and training in relation to maintenance of the artificial playing surface. The IRB Preferred Turf Producer and/or entity contracted to install/maintain the artificial playing surface shall indemnify and hold harmless the IRB and its associated companies and the Union, and its and their officers,



employees and agents from and against all demands, claims, legal actions, damages, costs (including without limitation, legal costs and the fees of any expert witness(es) incurred in connection with any action(s) or proceeding(s)), loss, interest, or expenses in connection with any injury sustained by a Player as a result of the surface and/or any failure to comply with the IRB Artificial Rugby Turf Performance Specification and/or any other act or omission by or on behalf of the IRB Preferred Turf Producer and/or Manufacturer and/or installer of the artificial playing surface and/or the entity responsible for maintenance of the artificial playing surface (as the case may be).

6. The IRB Preferred Turf Producer and/or entity contracted to install/maintain the Artificial Rugby Turf surface shall have in place and shall maintain public liability insurance cover with a reputable insurer to cover any claim that may arise in the sum of £5 million sterling.

7. The Union in whose territory the Artificial Rugby Turf surface is to be used should ensure that all participants playing on the Artificial Rugby Turf surface understand and appreciate any inherent danger in participating in the sport on the Artificial Rugby Turf surface.

8. The Union shall log injuries sustained by Players participating on the Artificial Rugby Turf surface.

9. The IRB may request sample injury surveys and such further and supplemental information as it requires from Unions to monitor the ongoing safety of Artificial Rugby Turf. Unions requested to undertake such surveys shall not unreasonably withhold permission and will make best endeavours to facilitate the surveys and requests for information. In response to such requests Unions shall use the form attached (Appendix 1) modified as appropriate. It is the responsibility of the Union concerned to obtain the requisite consents, in accordance with local law, of Players, coaches and medical personnel, as appropriate, for the collection of personal information and provision of such information to the relevant Union, the IRB, its associated companies and any other entity designated by the IRB for use in connection with Regulation 22 and the IRB Artificial Rugby Turf Performance Specification.

10. Manufacturers shall not in any way seek or promote any association with the IRB. IRB Preferred Turf Producers shall only be allowed to associate with the IRB to the extent granted in their agreement with the IRB.

11. The IRB shall be entitled to impose such further conditions as it considers appropriate in the best interests of Players and the Game.

**For further information contact WRU Club Development officers:**

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The WRU shall not be liable for any loss or damage whatsoever arising from the use of or reliance on the information contained in this Guidance Note.

The WRU reserves the right to amend or withdraw the information contained in this Guidance Note. Clubs should also refer to WRU entry and license criteria where appropriate.

Produced in association with the IRB.

