



# Football Technology & Innovation

## UPCOMING EVENTS

6 Oct 2021 — 7 Oct 2021  
FIFA Quality Programme  
Conference & Research  
Symposium 2021. Home of  
FIFA, Zurich, Switzerland

11 Oct 2021 — 15 Oct 2021  
FIFA Quality Programme  
Conference Licensing &  
Technical meeting, online  
sessions

26 Oct 2021 — 29 Oct 2021  
International trade fair for  
leisure, sports and movement  
facilities (FSB). Cologne,  
Germany

<https://www.fifa.com/technical/football-technology>

- The name gives it away Football Technology and Innovation
- Very much a focus on new technologies and how these can enhance football across the board
- Innovation programme open to applicants to trial new tech at a high level in the game if sanctioned by IFAB
- Ongoing research which may be funded by FIFA
- The turf programme continues to evolve;
  - Updated artificial turf manual by end of 2022
  - New natural pitch standard W.I.P



## FIELD CERTIFICATE

### Home of FIFA

FIFA is pleased to confirm that the football turf system  
**LigaTurf RS Pro II CoolPlus 240 S ACS 70 Bionic Fibre**  
has been installed by  
**Polytan GmbH**

at  
**Home of FIFA - FIFA - Zürich (Switzerland)**

The installation has been tested and certified to the  
**“FIFA QUALITY PROGRAMME FOR FOOTBALL TURF – FIFA QUALITY PRO”** standard.

Validity Period: **10.08.2021 to 09.08.2022**

Field No.: **1000609**

Re-Test Number: **3**



TM Football Turf | 2015

Gianni Infantino  
FIFA President

[Football-Technology.FIFA.com](https://www.football-technology.com)

Zurich, 01.10.2021



# FIFA Basic

Only available for:

## Extension of FIFA Quality installations

- Previously certified installations
- Only field test (same as retest procedure)

## Temporary installations

- Limited to FPP and standard licensees products
- valid for 3 month
- Requested by Competition Organizer
- Skin Friction test recommended



Characteristic	Temporary installation	Retest – Quality extension	Consistency
<b>Shock Absorption</b>	55% - 70%	<b>50% - 70%</b>	+/- 5% absolute
Vertical Deformation	4mm – 11mm	4mm – 11mm	+/- 2mm absolute
Rotational Resistance	25Nm – 50Nm	25Nm – 50Nm	+/- 5Nm absolute
<b>Ball Roll</b>	<b>4 – 12m</b>	<b>4 - 15m</b>	+/- 3m absolute
<b>Ball Rebound</b>	<b>60 -105cm</b>	<b>60 – 115cm</b>	+/- 15cm absolute
Surface regularity of playing surface	10mm	10mm	-
Free pile height	For information	For information	-
<b>Infill depth</b>	<b>&lt;-3 mm from PD*</b>	For information	-
Minimising infill migration into the environment - Field design	For information	For information	-

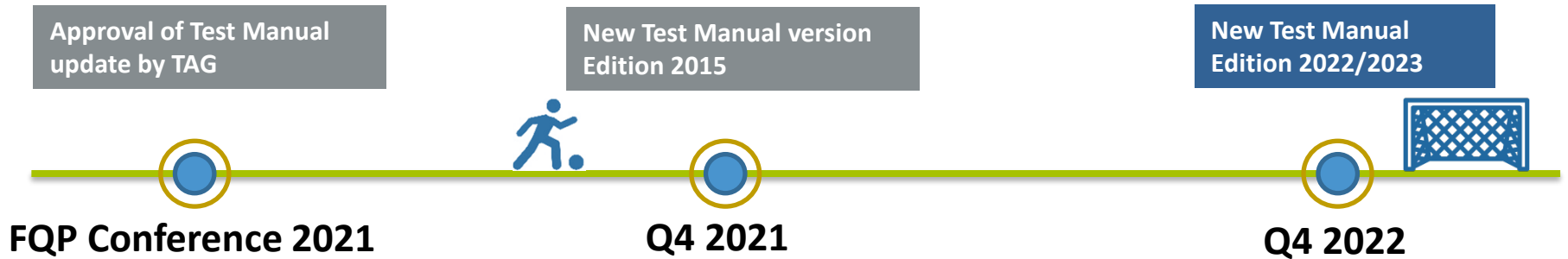
## Other requirements

- Test locations | 6 & 19 points
- Logos on the field of play & multisport line markings permitted (for competition use regulation of the local organiser apply)
- Maintenance equipment: brush & tractor or maintenance contract

# FIFA Basic – Identification for Temporary cert.



Component	Characteristic	Test method	Requirements
Artificial turf – green	Tufts per unit area	ISO 1763	$\leq \pm 10\%$
	<b>Tuft withdrawal*</b>	<b>Visual inspection -&gt;*development of on-site field test</b>	<b>Fibers not easily torn off</b>
	Pile length above backing (all colours)	ISO 2549	$\leq \pm 5\%$
	Total pile weight	ISO 8543	$\leq \pm 10\%$
Pile yarn(s) – All colours including line markings	Thickness of yarn	FIFA Test Method 25	$\geq 90\%$
	Pile yarn characterisation	FIFA Test Method 22	Same polymer
	Yarn Dtex	FIFA Test Method 23	$\leq \pm 10\%$
Performance infill (if supplied as part of system)	<b>Particle size</b>	<b>FIFA Test Method 20</b>	<b>Largest sieve retained mass &gt;10% within Product Declaration</b>
	Particle shape	EN 14955 procedure 6.3	Similar shape
	Composition (TAG)	FIFA Test Method 11	$\leq \pm 15\%$ relative
Stabilising infill (if supplied as part of system)	<b>Particle size</b>	<b>FIFA Test Method 20</b>	<b>d&gt;0.315 Maximum 2 sieves difference max.</b>
	Particle shape	EN 14955 procedure 6.3	Similar shape
	<b>Bulk density</b>	<b>EN 1097-3</b>	<b><math>\leq \pm 20\%</math></b>
Shockpads / e-layers (if supplied as part of system)	Shock Absorption	FIFA Test Method 4a	$\leq \pm 5\%$ Force Reduction
	Thickness	EN 1969	$\geq 90\%$ of manufacturer's declaration
	Shock pad type	Visual	Similar as PD



✓ **PAH (approved)**

- Pile length (new TM)
- Tufts per Unit area (new TM)
- DSC (new TM)
- TGA (update TM)
- Infill depth (New req.)
- Shock Pad Testing (new TM)
- Re-use of infills (new Annex)
- Toxicology on infills (new Annex)

✓ **FIFA Basic (approved)**

- Temporary installations
- Extension of certification

- AAA (new TM)
- Rotational Resistance (new TM)
- Skin injury (new TM)
- Lisport XL (new TM)
- Cam-sizer sieve analysis (new TM)
- On-site tuft bind (update TM)
- Yarn Brittleness (update TM)
- Non-filled/Mineral/Natural infills
- New Sub-base guidelines
- FIFA Basic product requirements (new installation certification)