Launch of the FIFA Quality Concept for artificial turf in 2001: red card for inferior turf

- Artificial turf will undergo stringent quality tests before qualifying for one of the two FIFA standards
The key elements are:

- Laboratory & field tests, 2 different levels
- Integration into „Laws of the Game“
- Licensing programme for manufacturers
- Reinvestment of net revenues into FIFA Goal program
Objectives of the FIFA Quality Concept for artificial turf:

- High quality & playability of artificial fields
- Ensured safety of players
- Install artificial turf in locations where useful
FIFA Quality Concept

Laboratory tests

1. Identification tests
2. Durability
3. Climatic resistance
4. Ball/surface interaction
5. Player/surface interaction

=> Natural turf in good condition as benchmark
FIFA Quality Concept

Player/Surface Interaction
Field tests

1. Construction tests
2. Ball/surface interaction
3. Player/surface interaction

The construction/installation of the field is decisive for the performance and quality.

=> Only the final installation gets the FIFA certification!
FIFA Quality Concept

Ball/Surface Interaction
FIFA Quality Concept

15 licensees and 102 FIFA RECOMMENDED installations
AGENDA (4)

1. History of artificial turf
2. FIFA quality concept
3. Artificial turf and competitions
4. Introduction of the new standard
5. Benefits of artificial turf
6. Conclusion
Introduction of new Standard
(Integration of UEFA)

Objectives:

• To create a higher standard in order to have products developed that are even closer to good natural turf

• Harmonize the two different standards (FIFA, UEFA) under one roof
Introduction of new Standard
(Integration of UEFA)

2001-2004

1 July 2004

Top Clubs, Stadiums,
National Training &
Matchplay,
Municipality, Goal-
Project

Minimum requirement for artificial turf according to the „Laws of the Game“
Development of the new and higher standard was based on:

- Players Feedback
- Product test data analysis
- Medical research
FIFA RECOMMENDED 2 STAR

Shock absorbency

Hardness when running

- Very Hard
- Hard
- Normal
- Slightly Soft
- Soft

Hardness when running
FIFA RECOMMENDED 2 STAR

Shock absorbency

Surface impact when tackled

- Very soft
- Soft
- Normal
- Hard
- Very Hard

Surface impact when tackled
FIFA RECOMMENDED 2 STAR

Shock absorbency

FIFA RECOMMENDED 1 STAR 55% - 70%
FIFA RECOMMENDED 2 STAR 60% - 70%
Vertical ball rebound

- No bounce
- Slight Bounce
- Normal Bouncy
- Too Bouncy

Ball rebound

- No bounce
- Slight Bounce
- Normal Bouncy
- Too Bouncy
FIFA RECOMMENDED 2 STAR

Vertical ball rebound

FIFA RECOMMENDED 1 STAR
FIFA RECOMMENDED 2 STAR
(Natural Grass in ideal condition 60cm – 84cm)

Vertical Ball Bounce

<table>
<thead>
<tr>
<th>FIFA criteria</th>
<th>Vertical Ball Bounce</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.00%</td>
<td>35.00%</td>
</tr>
<tr>
<td>40.00%</td>
<td>45.00%</td>
</tr>
<tr>
<td>50.00%</td>
<td></td>
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</tbody>
</table>

FIFA Recommended fields

Series 1

60cm – 100cm
60cm – 85cm
FIFA RECOMMENDED 2 STAR

Angled ball behavior (15° and 50km/h)

Ball speed after high pass

<table>
<thead>
<tr>
<th>Speed Level</th>
<th>Ball Speed (km/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Fast</td>
<td>0</td>
</tr>
<tr>
<td>Fast</td>
<td>35</td>
</tr>
<tr>
<td>Normal</td>
<td>30</td>
</tr>
<tr>
<td>Slow</td>
<td>25</td>
</tr>
<tr>
<td>Very Slow</td>
<td>20</td>
</tr>
</tbody>
</table>

Ball speed after high pass
Angled ball behavior (15° and 50km/h)

FIFA RECOMMENDED 1 STAR
45% – 70%

FIFA RECOMMENDED 2 STAR
45% – 60%

Wet conditions
45% - 80%

![Angled Ball Behaviour Diagram]
FIFA RECOMMENDED 2 STAR

Ball roll

Ball speed after ground pass

- Very Fast
- Fast
- Normal
- Slow
- Very Slow

Ball speed after ground pass
FIFA RECOMMENDED 2 STAR

Ball roll

FIFA RECOMMENDED 1 STAR  
4 - 10 m

FIFA RECOMMENDED 2 STAR  
4 - 8 m

Ball Roll

FIFA recommended fields

Series 1
FIFA RECOMMENDED 2 STAR

Slip resistance (New test method)
Slip resistance:
- Scale
- Deceleration
FIFA RECOMMENDED 2 STAR

Sliding ability

Injuries after sliding

- No effect
- Scratch
- Skin Burn
- Cut
- Bruise

Injuries after sliding
Securisport (New test method)
- Skin abrasion
- Skin burn
Introduction of new Standard
(Integration of UEFA)

- Harmonization with UEFA completed by February 2005
- One standard only: FIFA Quality Concept
- FIFA RECOMMENDED 2-STAR for UEFA competitions such as Champions League, UEFA Cup and EURO 2008 qualification matches