Infill Matters: Infill choices, design and common pitfalls

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Game Plan

• Available Alternative Infills

• Project Lifecycle
  • Planning/Design
  • Installation
  • Operations & Maintenance

• Future
Goal

NEXT LEVEL
Why Alternatives?
Overview of Alternatives
Field Lifecycle

Planning

Time for Replacement

Design

O&M

Installation

Time for Replacement
Planning/Design

- Holistic Solutions
  - Sport/Performance/Safety
  - Longevity
  - Maintenance
  - Environmental Responsibility
  - Costs

Image Source: www.greenbiz.com
Planning/Design

• Infill Dictates System
  • Turf Type and Properties
  • Shock Pad

• Compatibility of Components

• Importance of Infill Depth
  • Infill Depth Standards/Tolerances
  • Warranties
Installation

• RFI - Room For Improvement
  • Schedule - Final Component Completion Stress
  • Inconsistent Approaches/Methods
  • New Systems
BHAG

Infill Depth Perfection
What field owners are buying...
What field owners are getting...
Infill Depth Map
Infill Depth Map
Infill Depth Map
Infill Depth Map

Infill Depth Check Summary:
1. Total Measurements = 321
2. Minimum Value = 15 mm
3. Maximum Value = 38 mm
4. Average Value = 28.82 mm (1.17 in)

Legend:
- *Mess.*: Measurement
- Range of Values (mm):
  - 25-40
  - 15-25
  - 10-15
  - 5-10
  - 2.5-5
  - 1.5-2.5
  - 2.5
  - 2
  - 1.5
  - 1
  - 1

Note:
- Depicted in feet
- Data collection was performed using a Global Positioning System (GPS) with on-site measurement taken using a depth gauge
- All measurements were taken at the site on August 19, 2019
- All measurements are in millimeters
Infill Depth Map

Infill Depth Check Summary:
1. Number of Measurements = 195
2. Minimum Value = 18 mm
3. Maximum Value = 34 mm
4. Average Value = 33.33 mm (1.31 in)
Infill Depth Impact on Performance

2.25" dual fiber, no thatch, no pad

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<th>Vertical Deformation</th>
<th>Shock Absorption</th>
<th>Energy Restitution</th>
<th>Rotational Resistance</th>
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<th>HIC @1.3m</th>
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Operations/Maintenance

• Infill Choice Impacts
• Owner's Commitment
• Proactive Maintenance = Longer Life
• Top Off

Image Source: www.sportslabs.files.wordpress.com
Field Replacements

• Plan early
• Begin with the end in mind
• Reuse/recycling
• Compost/disposal
Takeaways

• Coordination (Design & Install)
• All Infills ≠ Equals
• Check Infill Depths (Before Leaving!)
• Maintenance
The Future

- FieldTurf’s Genius System
- Robots
- AR / VR / AI's effect on Turf
- Laser Guidance/3D scanning / LiDAR
- Product “Lease”
- Closed-Loop Systems
- Design/Plan for the Next Generation

Image Source: www.forthesmarthome.com
Thank you!

Questions???

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