



Chicago Bears' Facilities: Natural Turf Stands the Test of Time

FACILITY LOCATIONS:

Bourbonnais, IL, USA

and

Lake Forest, IL, USA

PRODUCTS:

Turfacer® MVP®

and

Profile® Products
Greens Grade™

REFERENCES:

Ken Mrock
Head Groundskeeper
Chicago Bears



Project Summary

In the summer of 2001, the Chicago Bears were in search of a new training facility in their home state of Illinois. The selection committee consisted of multiple Bears staff members, but none more integral than Head Groundskeeper, Ken Mrock. After multiple visits and discussions about the nine schools and facilities in consideration, Olivet Nazarene University in Bourbonnais, Illinois was chosen as the new "Summer Home of the Chicago Bears". With a large, open canvas comprised of intramural sports, soccer and football fields, the native plot of land was a promising new spot for the National Football League club.

Once the decision was made, Mrock knew what needed to be done in order to provide a safe and playable surface professional athletes could rely on. A long-time user of Profile Porous Ceramics®, manufactured by Profile Products®, Mrock knew amending the native soil was the first order of business. Managing moisture and relieving compaction within the rootzone were the top priorities during the soil modification process. To prevent the likelihood of poor root growth and turf stress from the summer heat, Profile's Turface® MVP® particles were selected and rototilled into the top four inches of the soil at a rate of 15 percent by volume.

"The entire playing area, sidelines and surrounding sections totaled ten acres," explained Mrock. "I knew the ceramics would give me a great deal of pore space to help balance air and water evenly across that much turf. The Turface particles provided an ideal environment for the plant to thrive."

Profile Porous Ceramics feature 74% internal pore space, coupled with a high level of durability, degrading only 3% over 20 years. This permanent solution gave Mrock the confidence he needed in order to establish premium natural turf that would stand the test of time.

After the successful amending process, the new practice site was graded and sodded. Even with Mrock's confidence in the ceramic particles, he was thrilled with the results that followed. Over the next 12 years, the fields where the Bears and ONU sports teams practiced and played remained healthy with no need for re-sodding or major renovation.

"I can honestly say that in a 12 year time span, we only lost two practices to rain," said Mrock. "I attribute that to the Turface that was tilled into the top four inches. It was able to absorb the moisture and allow the coaches, players, and my team to get our work done," said Mrock.

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Ken Mrock

Head Groundskeeper, Chicago Bears

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While the physical structure of the soil is critical in both natural turf and sand-based fields, Mrock also has cooperation from the coaching staff. The success of both facilities in part comes from proper rest and recovery cycles. Rotation schedules move players around multiple fields at each location in order to give the turf time to recover after the aggressive use it receives during play.

Mrock is proving each day that natural grass really can do more. His fields have gone 12 years without renovation or re-sodding, where the life expectancy of artificial turf fields average only 8 years.

"We are proving that with a proper investment in the rootzone mix and a sound maintenance program, we can manage grass fields to play as good as any surface," concluded Mrock.

Mrock was confident in the use of Profile Porous Ceramics thanks to its incorporation at Halas Hall five years earlier. The results he saw at the day-to-day practice facility of the Chicago Bears, which incorporated Profile Greens Grade into the sand-based rootzone, assured him that he could get similar results with native soil. Over the years, he has seen similar positive results. Mrock attributes the success at Halas Hall to the construction of the sand-based rootzone and the use of Profile Porous Ceramics.

"The long-term effect with the use of Profile is so encouraging. It stays there," he said. "The drainage and root structure are fantastic. We've gone through numerous growing seasons and most of the turf is still pristine."



*Sand-based fields at Halas Hall
Lake Forest, IL*

Long-Term Cost Comparison: Artificial vs. Natural Turf

	Artificial Turf (AT)	Natural Turf (NT)
Total Installation Cost	\$1,125,000 ²	\$112,500 ²
20 Year Replacement/ Rehab Cost *	\$1,280,000 ²	\$28,000 ²
20 Year Maintenance Cost	\$206,000 ² (\$10,300/year)	\$500,000 ² (\$25,000/year **)
20 Year Total Cost	\$2,611,000²	\$635,000²
Longevity	8-10 years	12-15 years
Avg. Surface Temp.	AT can range between 50-70° hotter than NT ¹	

* Assumes two AT replacements and one major NT rehab

** Cost for premier/professional natural turf fields

1. University of Arkansas Turfgrass Science: <http://turf.uark.edu/turfhelp/archives/021109.html>
2. Forbes SportsMoney: <http://www.forbes.com/sites/mikeozanian/2014/09/28/how-taxpayers-get-fooled-on-the-cost-of-an-artificial-turf-field/>
3. Sports Turf Managers Association: http://www.stma.org/sites/stma/files/STMA_Synthetic_Guide_2nd_Edition.pdf



Photo courtesy of Lee Hogan

*Aerial view of ONU practice fields
Bourbonnais, IL*