



FIELD MARKING PAINT

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Pioneer Manufacturing/800-877-1500
For information, circle 160, or
see www.OneRS.net/209sp-160

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Newstripe/800-624-6706
For information, circle 165, or
see www.OneRS.net/209sp-165



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FIELD MARKING PAINT



FIELD MARKING PAINT

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see www.OneRS.net/209sp-162

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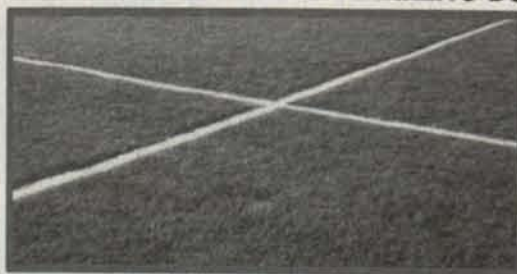
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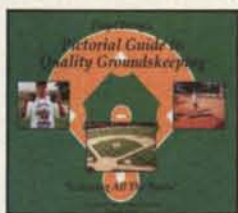
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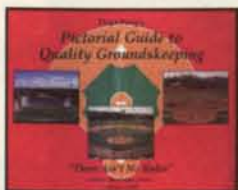
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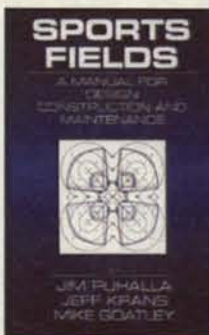
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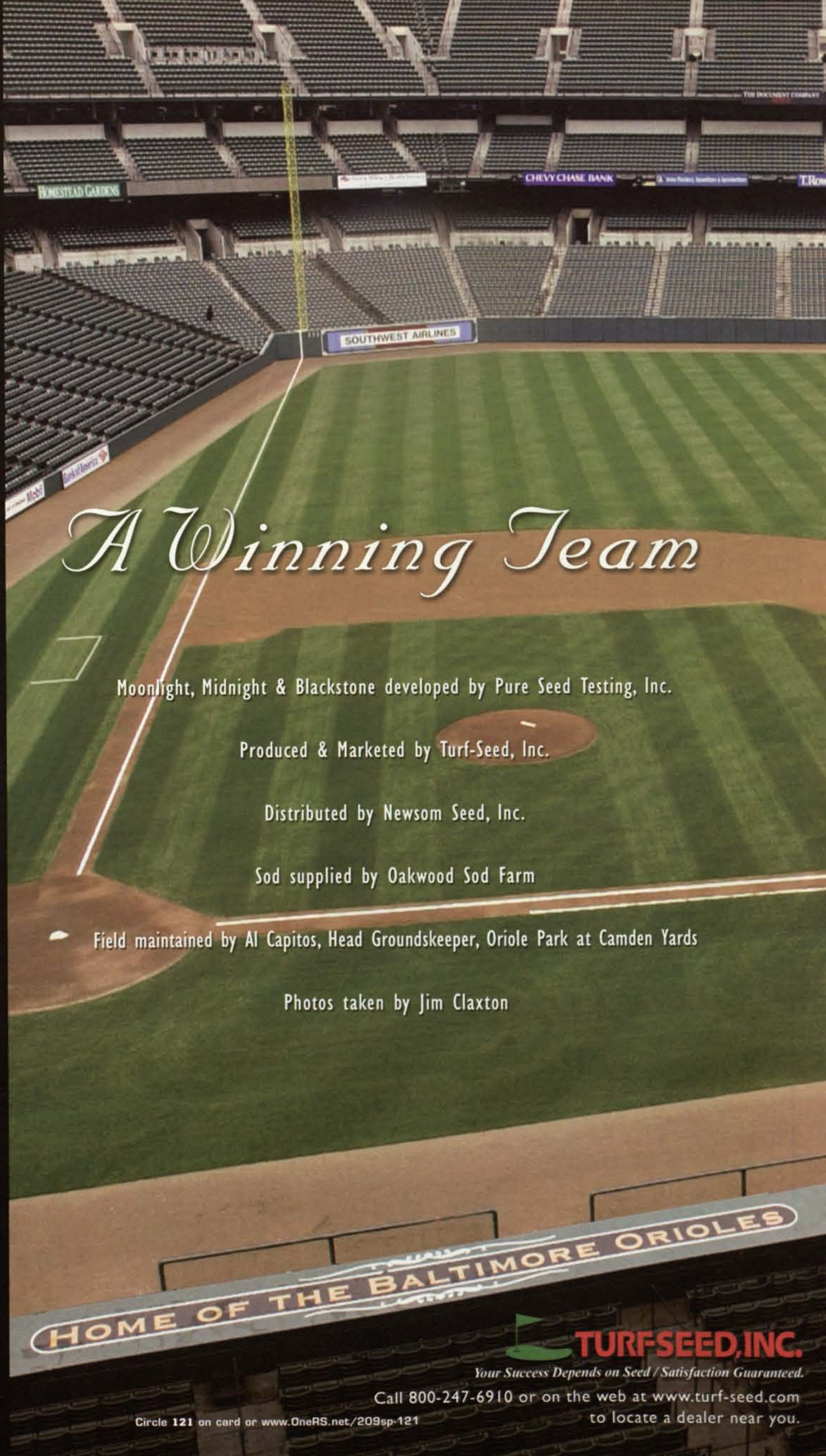
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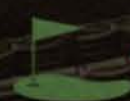
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Field maintained by Al Capitos, Head Groundskeeper, Oriole Park at Camden Yards

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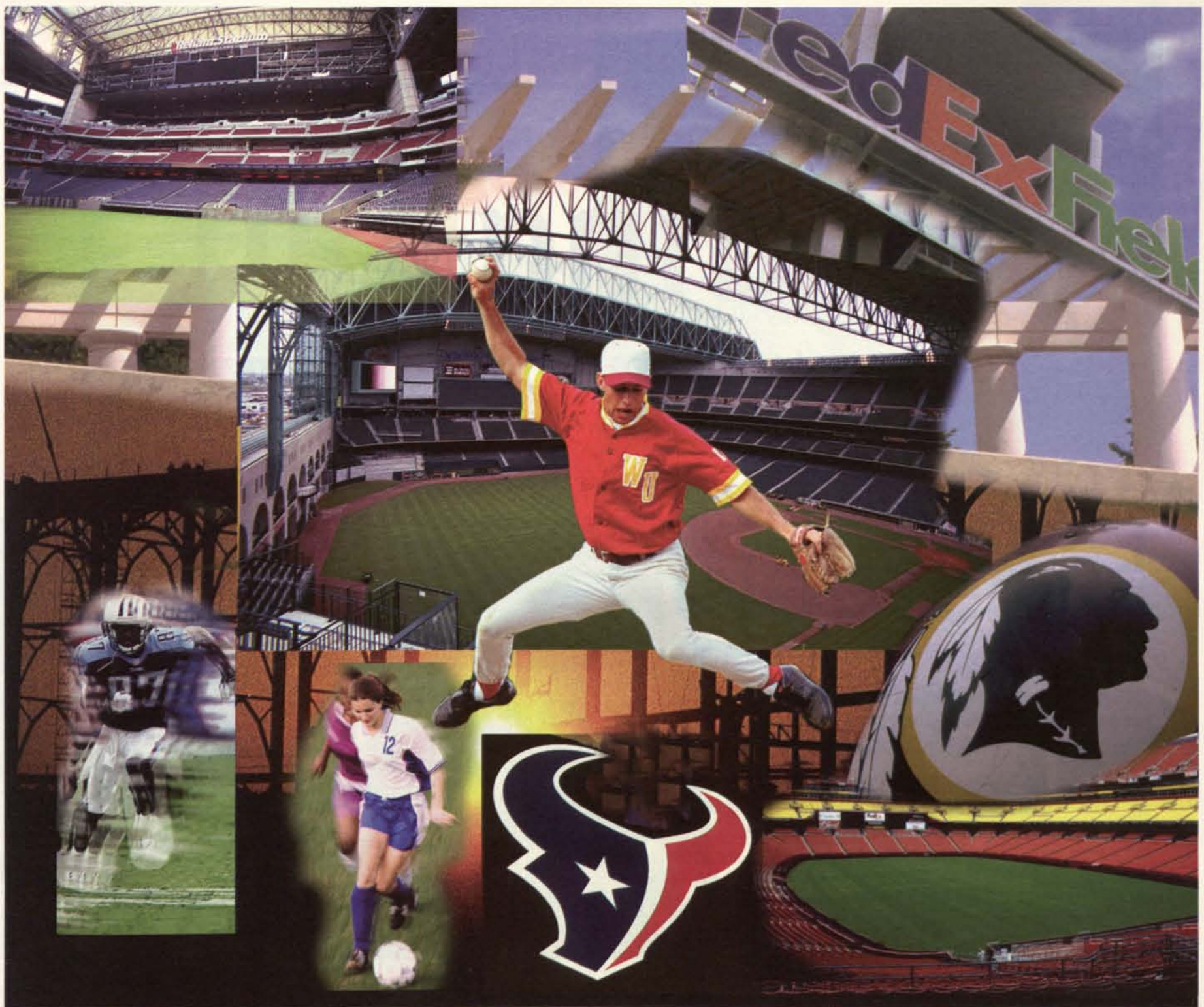
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Standing tall

Goal posts designed to resist frenzied fans

BY JOHN KMITTA

Every autumn some things are certain to happen. Not only the changing of the leaves, shorter days and cool winds, but tailgate parties, marching bands and storied rivalries—the certainties of college football. Almost as certain is the prospect that raucous fans will charge football fields throughout the land as part of that questionable tradition of “tearing down” the goal posts. What is becoming less certain is that they will actually succeed.

Merchants Environmental Industries (MEI), a Chicago-based engineering and contracting firm, has spent the last decade designing goal posts to withstand the onslaught of overzealous attackers.

“We got into [the goal post business] a little over 10 years ago,” said Bob Allen, vice president of MEI. “We were asked to get involved when Northwestern University was losing almost a goal post per week. They had lost a lot of games and the students had no reason to be happy, so they made themselves happy by tearing the goal posts down. The university asked us to design something that would be resistant to these weekly tear downs.”

Northwestern, the University of Illinois, Notre Dame, Arizona State and Penn State are some of the 25 universities that now use MEI’s goal posts.

“Mostly it is schools that are looking forward to really good seasons,” said Allen. “The schools that are perpetually in the upper rankings are the schools that want them, because those are schools that do a lot of celebrating.”

MEI builds the posts and ships them to the facility they will be used at. Then MEI sends a crew of three or four men who will put the posts in and show the people at the university how to do it, so that they can take them out, put them back and adjust them in the future.

According to Allen, the posts are of steel construction with machined steel parts; the core is machined steel and then there is steel pipe. The posts weigh approximately a ton and a half, but they are removable for maintenance. They go into the ground approximately 6 feet. There is a sleeve in the ground and they slide into the sleeve.

“The posts have evolved over time,” said Allen. “It’s somewhat like building a safe. If you build a safe,

someone figures out how to crack it. Then you build it better, and they figure out another way to crack it. So it’s been an evolving situation.”

According to Allen, the fans can’t get the posts down simply with people.

“The posts that we’ve had problems with are those that fans have come at with tools,” said Allen. “In one case the fans used a fire hose at the stadium and wrapped it around the posts. In another case they used chains that they found on campus. In two cases they used the television cables - approximately an inch in diameter - that were coming into the stadium. If you have enough people on the end of a 100-foot-long cable, then you have more people than could actually climb on the posts. So we’ve informed [school officials] that they can’t let people get out there with tools, equipment, ropes, and chains.”

Allen explained that the way the posts are built, even if they do bend, they don’t come down.

“Accidents happen if a post goes down really fast and people are crushed in the fall,” said Allen. “Or you get a bunch of people on a post and all of a sudden it goes over, whereas, with our steel posts, the steel won’t buckle. It will bend, but it won’t buckle. Even though the fans have been able to bend them, there has never been a situation in which people have been in danger. That’s a big issue for the schools, and they understand that. If the fans bend it, nobody is going to get hurt in the bending process.”

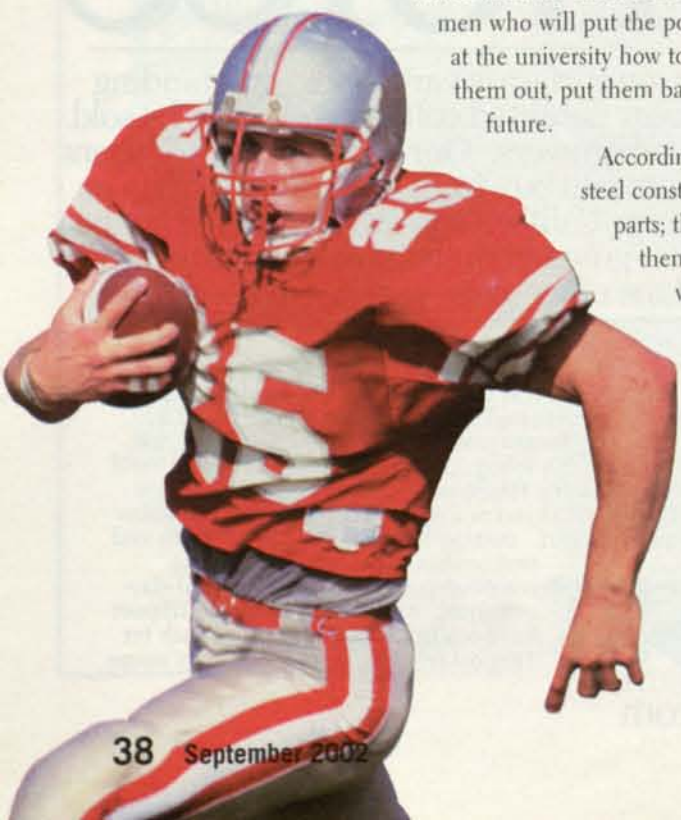
“They’re not cheap. For just the goal posts alone without installation is about \$20,000. But you don’t have to lose many goal posts to justify that cost.”

ST

John Knitta is Senior Editor of SPORTSTURF magazine. He can be reached via e-mail at jknitta@mail.aip.com.



One company has spent a decade designing goal posts to withstand the onslaught of overzealous (and probably overserved) attackers.





GOOSENECK GOALPOSTS

Future Pro has gooseneck-style football goalposts in high school and collegiate dimensions. These 4 1/2-in. gooseneck posts bury 48 in. into the ground for stability. Future Pro does offer ground sleeves for removable installations. Posts have a 60-in. setback and 20-ft. aluminum uprights. The crossbars are 3 1/2-in. steel tubing. Safety yellow powder coating is offered on both collegiate and high school dimensions, white powder coating on high school only.

Future Pro/800-328-4625
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Putting on the pads

AN ESSENTIAL ITEM for any goal post is the padding. According to Jim Bernecker, vice president of marketing at Promats, a Fort Collins, CO, manufacturer of protective field wall padding and related equipment, there are essentially two types of goal post padding: round cored-out foam and hexagonal pads.

"What was always the case was that you would take a round piece of foam, core it out to whatever diameter pole you had, and make a vinyl wrap," said Bernecker. "The foam had a slit in it. You would wrap the foam around the pole, then put the vinyl wrap around the foam and attach it using Velcro or grommets."

"But whatever goes down the posts gets into that foam. If it is in Florida in the humidity, then the foam is exposed to the elements. Unless you take it down and put it away properly—and nobody really gives a goal post pad any attention—they will rot and stink."

Last year Promats introduced a hexagonal pad that has flat sides. The foam is beveled appropriately for whatever size post. The hexagonal pad folds flat for storage and also creates a flat surface for graphics. There are several ways to apply the graphics: enamel for hand-painted graphics, silk screening, vinyl tape and sewn-on vinyl.

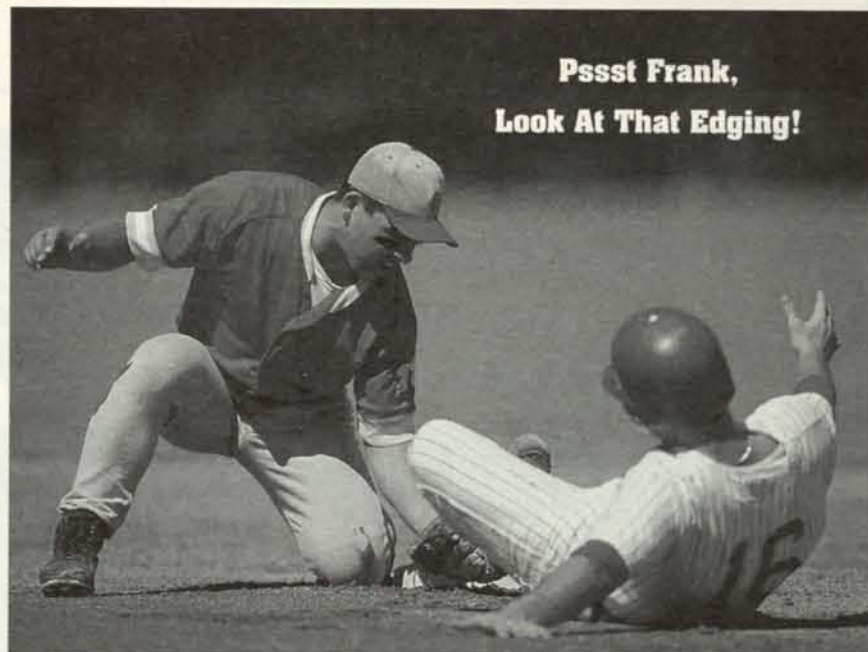
The hex pad completely encases the foam in vinyl. However, there are companies that make round pads completely encased in vinyl, so complete encasement is not specific to a hex pad.

"The 18-ounce coated vinyl used in a goal post pad is a heavy, tough material," said Bernecker. "And it is easily repaired if it gets torn. You can patch it with vinyl-to-vinyl cement, and it is as strong as a sewn seam if done properly. If somebody gets a tear in a goal post pad, if it's quickly repaired it will never affect the internal foam. But people need to do it before it gets wet."

As for the foam itself, Bernecker points out that not all foam is alike.

"You can have 3 inches of foam with 10 different densities, so the density of the foam is a big deal," said Bernecker. "The NFL wants 6 inches of foam, but you could have 6 inches of foam that won't react to impact any different than 2 inches of foam. The foam density is an issue that gets into indentation load deflections and pounds per cubic foot, but the bottom line is based on what we know works."

- John Kmita



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DEBRIS, LEAF PUSHER

SweepEx has introduced its new debris & leaf pusher attachment, ideal for leaves, cans, and bottles. This pusher basically adds a strong net to the broom attachment that allows you to carry more material farther. The pusher bolts to the front of any SweepEx Pro Series broom, which are available in 48-, 60-, 72-, and 90-in. lengths.

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Extra points

FOOTBALL FANS REVEL in the touchdowns, the passing game, and the power rushers. Few, however, realize the importance of the kicking game. The same is true from a historical standpoint.

American football as we know it began very similar to its ancestors, soccer and rugby. Early matches emphasized the kicking game. But throughout the years the importance of the "goal from the field," or "field goal" as it came to be known, has changed. In 1882 a field goal was worth five points. In 1904 it was changed to four points. And in 1909 it changed to the current 3 points. As the game evolved, so too did the goal posts.

According to Kent Stephens, collections manager at the College Football Hall of Fame in South Bend, IN, records show that the goal posts used in 1873 were simply two poles 25 feet apart.

"In 1876 rule number 4 in the football rule book required that the goal posts be 11 feet in total height, 18-feet 6-inches wide and the cross-bar be placed 10 feet high, which only allowed for one foot over



the cross-bar," said Stephens. "By 1890 the uprights had to be 20 feet in height. In 1959 college football widened the posts to 23 feet 4 inches. And in 1991 the posts were moved back to 18 feet 6 inches."

According to Gene Henshaw, president/GM of Stackhouse Athletic Equipment, a Salem, OR, manufacturer of athletic equipment, Stackhouse has been making goal posts for 30 years and has used steel and aluminum for the duration of those 30 years.

"Prior to that, going back to the 1940s and 1950s goal posts were wood and in the H style," said Henshaw. "In the late 50s or early 60s goal posts trended toward steel or aluminum."

Stephens could not pinpoint an exact year in which the last stadium switched from wooden goal posts to steel or aluminum, but added that the Rose Bowl was still using wood as late as 1969.

- John Kmita