Close up side view of thick-cut sod. The quarter at the center provides a perspective on the actual thickness of the sod.

By Matthew Trulio

It isn't a cure-all and it certainly isn't cheap, but when it comes to the “last resort” resodding of sports turf for immediate play, it's hard to beat thick-cut sod in terms of stability and performance. From Candlestick Park, to the Rose Bowl, to less high-profile venues around the country, thick-cut sod has been used to get troubled fields ready for play, in a hurry.

The key, of course, is weight. Where conventional sod might be cut with 1/2-to 3/4-inch of soil, thick-cut sod often comes with as much as 2-1/2 inches of soil attached. That added weight, as much as four times that of conventional sod, makes thick-cut sod inherently stable, which translates to near-instant playability with minimal slippage. Combined with “long roll” technology, in which thick-cut sod is laid in lengths sometimes exceeding 30 feet, thick-cut sod presents the ultimate in “overnight” stability.

The Thick Of It

A number of factors must combine to make thick-cut sod a viable alternative for any given situation. First, you’ve got to have the basic need for it. If you’re not in a hurry to resod a field for an imminent event, it makes little or no sense to use thick-cut sod, given both its significantly higher price than conventional sod and inherent soil interface difficulties. Second, you’ve got to have the budget.

Jeff Cole, marketing manager for West Coast Turf in Palm Desert, CA, which grows bermudagrass and bentgrass, attributes the higher cost to two factors. “One is freight,” Cole explains. “Freight is a big consideration. We are restricted to what we can put in a truck by weight, not by volume. Ordinarily, we may be able to put 10,000 square feet of conventional sod in a truck. With thick-cut sod, because of the added weight, we may only be able to ship 2,500 square feet per truck. That means we’d need four trucks to ship the volume of sod — four times the cost.

“The other thing that contributes to the higher price is that with thick-cut sod, we’re removing valuable soil from the field,” he continues. “We’re restricting the ability of that field or area to regrow. With bermudagrass, when you cut sod, roots are left underneath — there’s no need to ‘reseed.’ But when you take the amount of soil you do with thick-cut sod, the bermuda is very slow to come back. We sometimes have to go back and add stolons to the area. Also, picture a sod field of 10 acres. You’ve harvested some sod at conventional thickness, and then you get an order for an acre of thick-cut sod. Now you’ve got one acre in your 10-acre field that’s lower than the rest, and that can create problems later on.”

The advantage of thick-cut sod, again, is the extra weight provided by the extra soil. However, Cole points out, this extra soil has its drawbacks, particularly in the area of soil "matching."

“You can have a pretty big problem with it if your soils don’t match up fairly well, particularly if the existing soil is sandier than soil that comes with the sod,” he explains. “If you had a sports field or golf tee that was made to USGA specifications, you wouldn’t want to use thick-cut sod on it long-term, because the roots will never leave the soil layer. Also, with thick-cut sod, the grass can survive for an indefinite period of time, but if you put a lot of weight or compaction on it, the long-term effects wouldn’t be positive. We’ve always felt that it’s better to take sod with as little soil as possible, because you don’t want to create a different layer or medium.”

Dr. Tim Bowyer is general manager of golf and sports turf for Southern Turf Nurseries, a Warren’s company based in Norcross, GA. For 18 years, Southern Turf Nurseries resodded the infield of
Atlanta Fulton County Stadium with thick-cut sod after the Braves had finished their baseball, so the Falcons could play football on it. (The Falcons now play inside the Georgia Dome.) Although Southern Turf Nurseries still provides and installs thick-cut sod in facilities when appropriate, Bowyer is also quick to point out the detriments of long-term applications of the product over sand-profile fields.

"There are major agronomic drawbacks in taking sod with two inches of soil and placing it on a sand-profile field for long-term repair purposes," he asserts. "The long-term impacts can be very negative. Now you have a thick layer of soil that will not percolate as quickly as the soil beneath. You end up with standing water on the field, or worse, conditions where clay and silt wash out of the soil and into the sand profile, and affect the ability of water to move through that profile."

Installation Tips

Assuming you're not going to use the large-roll concept for laying thick-cut sod, you'll probably want a few extra crew members for the job. Keep in mind that the sod can weigh four times that of conventional sod, and the extra muscle will come in handy. Weight aside, the sheer thickness of the sod adds another dimension to pre-installation.

"You've got to remember to excavate the surface to the same depth of the sod," Bowyer notes.

As for the laying of the sod itself, the technique doesn't differ substantially from that of conventional sod. However, Cole suggests making sure the sod bed is especially firm, pre-rolled and watered, prior to installation. Whether the thick-cut sod is brought in on pallets by a forklift or rolled directly onto the field by a long-roll installation machine, the sheer weight of product, combined with the weight of machine, can lead to rutting.

Because thick-cut sod contains extra soil, it may not require the immediate watering of conventional sod installations. Naturally, you want to approach irrigation after installation on a case-by-case basis. If the grass appears or feels dry, if the weather is particularly hot and arid, or if the installation takes hours under the hot sun, an immediate application of water may be necessary, even on thick-cut sod. But you may not want to water the sod simply as "a matter of course," particularly if there's a game to be played on it immediately.

"Thick-cut sod is a very, very specialized product that costs money — its primary benefit being you can play on it almost immediately," says Cole. "On a tee box, for example, you can realistically lay sod and hit golf balls off of it when you're finished. Thick-cut sod is for special events and circumstance where conventional sod just isn't going to work."

Bowyer adds that, in most cases where thick-cut sod is installed over sand-profile fields, it is removed after the event and replaced with a conventional-cut or even a washed sod. To leave the thick-cut sod in place, he asserts, would be ill-advised, because it defeats the purpose of the sand profile.

"The reason thick-cut sod gets used on sand-profile fields is because the maintenance of the field has failed," Bowyer concludes frankly. "The growing months prior to the playing season haven't been taken advantage of, and when play begins, the turf gets destroyed. It's truly a question of management prior to the problem."