

Floating In a Root Zone

By Dave Doherty

OK...we've had hundreds of meetings. We've done all of our homework. We've selected an architect and a construction company, and chosen the type of grass for surfacing or resurfacing our greens.

We've had the sands that are available to us analyzed frontwards and backwards, upside down and inside out. We've have lab certification of what the physical properties will be for all of our possible different root zone mixes, using each of the different sands with both organic materials and inorganic amendments in ratios of 100/00, 95/05, 90/10, 85/15, 80/20 and sometimes 75/25.

We've crossed our Ts and dotted our Is and are ready to go forward with our project with great anticipation, but maybe a little apprehension.

We have chosen a mix of 90/10 based on many factors: *Physical properties that meet USGA recommended specifications, monetary issues, quality of irrigation water, type of grass selected, and surface air movement*

On the chosen date, the construction company begins the process of very carefully floating our selected 90/10 ratio greens' mix into the greens' cavities. After floating the mix into the greens' cavities the construction company or the grounds crew will water the mix to help it settle and to add some firmness before seeding or sodding. This is in many cases all that is done when firming up our greens' mix, and in many cases this limited procedure is not enough.

Since we selected a 90/10 mix, we need to work a little harder to settle or firm up our new greens. ***Additional watering as well as extensive rolling is required.***

Many courses that have selected to go with a lighter mix such as a 90/10 will need to water extensively and roll the greens with a two-ton roller until the desired firmness is achieved.

This watering and rolling process is normally done after the greens' cavities have been filled and shaped. If the superintendent or grow-in specialist is not familiar with bringing in greens of the lighter mix this last step of firming before seeding or sodding can be very intimidating.

During the entire planning and execution process we have formed a mental picture that we must be very, very, very careful not to modify the greens mix. **Extreme caution does need to be taken so that the drainage system is not compromised.** This mental picture carries over to a feeling of not bruising or hurting the mix with anything mechanical, and to the less experienced person it can be a rather scary thing to instigate and execute.

A course I have worked with for many years and has a reputation of having some of the finest greens in the world compacts newly built greens in four segments, each of three-inch increments. After the drain system and gravel is in place three inches of greens' mix is added/floated into the greens' cavity, watered and compacted using a vibration method – 9 to 12 inch depth.

This process is continued three more times for the mix at the six to nine inch depth, the three to six inch depth and the surface to three inch depth. Once seeding or sodding is completed these greens are ready for play and with very settling over

the next few years and with the proper agricultural practices, very little change over the life of the greens.

And when removing the top three to four inches when regrassing, the same watering and compaction procedure should be executed before seeding or sodding.

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