

Specification & Maintenance Suggestions For UltimateFlora® Zoysia from Environmental Turf, Inc.

Introduction:

UltimateFlora® Zoysia was developed in Florida by researchers at the University of Florida. It was selected and bred for darker leaf color, fewer seed heads, a more refined leaf structure and, depending on location, faster growth rate than the long-standing standard Meyer zoysiagrass. Research and development of this grass has been ongoing since 1997.

UltimateFlora® Zoysia is well suited for use on residential lawns, parks and common areas in warm-season climates.

It's not just good. It's the Ultimate![™]

Pre-Planting and Establishment:

Sodding will produce an instant turf and is recommended as the quickest way to achieve a lush UltimateFlora® Zoysia lawn.

If Starting with Fresh Soil:

- Base: Make sure soil is clear of weeds and debris. It is recommended that you start with a 4-inch to 6-inch base of a 70/30 top soil/sand mix.

- Test irrigation at site prior to installation: It is recommended that prior to laying sod, irrigation zones are tested to determine that they are functioning properly and as to how much water is delivered to the site per zone in a 30-minute period. Rain gauges may be temporarily staked in each zone to come up with this number. The math will yield information you'll need later, for example, you may find that in a 30-minute period, ½-inch of water is applied. Therefore, if you are attempting to irrigate 1-inch of water, the irrigation will need to run for one hour.

- Irrigate the site the day before installation: The day before grass is laid, the plant bed should be moistened. (Moist, not sloppy.) By moistening the site, the roots of the grass within the sod slab will be encouraged to move out of the slab and into the wet soil below.

- Pre-plant fertilizer the day of installation: A pre-plant fertilizer is recommended with a 1:2:3 ratio. For example: a 5:10:15 or 6:12:18 fertilizer.

- Lay sod by irrigation zones: Irrigation should be applied to new sod within 30 to 45 minutes of it being laid at the site. One-inch of irrigation should be applied in one irrigation cycle. So, using the math acquired in the irrigation system tests, if it takes ½-hour to apply ½-inch of water, then the system should run for one hour. In order to accomplish this, install sod by irrigation zones. Be aware of the area of the lawn covered by each irrigation zone. Lay sod in the first zone, and then turn on irrigation in that zone. Begin laying sod in second zone, and so on. It is recommended that shady areas and full sun areas be under different irrigation zones as sunnier areas will be hotter and require more water than shady areas.

- Rolling: Once installed and irrigated, sod should be rolled using a light roller.

- Irrigation of new sod: For the first 2 weeks after installation, it is recommended that the grass be irrigated 1-inch per irrigation zone. The math done in the irrigation test stage will tell how long the water needs to run in order to reach 1-inch. For the following 2 weeks (weeks 3 and 4), it is recommended that the grass be irrigated to achieve 1-inch of water, every other day. (Depending upon environmental conditions such as extreme heat, drought, high wind, or poor soil, the grass may need more water during establishment. These tips are suggestions only.) At the end of four weeks, irrigation may be reduced to twice a week or when the grass begins to wilt. In areas of shade or partial shade, less water may be needed than in sunny areas, once established.

If Replacing Existing Lawn:

Spray existing lawn with a recommended non-selective herbicide according to label directions. Remove old sod and any existing debris. Level surface to achieve good seed bed conditions. Continue with steps from Fresh Soil above.

Mowing:

UltimateFlora® Zoysia may be mowed using a reel mower or high-speed rotary mower with sharp blades. In our research, we have found that UltimateFlora® Zoysia performs best when mowed at 1-1/2-inches to 2-inches when mowed with a high-speed rotary mower with sharp blades, or from 3/4-inch to 1-1/2-inch when mowed with a reel mower. For best results and deepest color, heights on the shorter end of the scale are suggested. The exception to this is, in situations when the ground is not level, mow to the longer height of cut.

The mowing frequency for UltimateFlora® Zoysia depends on the growth rate of the grass. In hot, humid weather or following a fertilizer application, the grass may have to be mowed more frequently than usual. Regardless, UltimateFlora® Zoysia should be mowed about once per week during the growing season.

As with most zoysiagrasses, to maintain optimum color UltimateFlora® Zoysia should not be scalped. Not more than one-third of the leaf blade should be removed during one mowing session in order to retain the grasses' deep green color. However, if scalping does occur, the grass will recover—though it may take a little time.

Fertilization:

After establishment, UltimateFlora® Zoysia can be fertilized with a complete fertilizer such as 16-4-8. Be sure the nitrogen source is organic or slow release as these types of nitrogen sources do not increase thatch as much as soluble fertilizers may.

Depending on soil type, generally do not apply more than 3-pounds of nitrogen per square 1,000 foot per year. The 3-pounds of nitrogen per 1,000 square foot per year may be applied in many different ways. For example:

- Twice per year: 1-pound of nitrogen in spring, 1-pound in fall, reserving the last pound of nitrogen if necessary.
- Three times per year: 1-pound of nitrogen in spring, 1-pound in summer, 1-pound in fall.
- Six times per year: 1/2-pound of nitrogen every other month.

Zoysiagrass, in general, does not like to be over-fertilized or over-irrigated. Err on the side of caution. Less truly is more.

As for soil, zoysiagrass seems to favor a soil pH a little on the high side: 5.5 to 7.5 .

Irrigation:

UltimateFlora® Zoysia is a fairly drought-resistant turf. UltimateFlora® Zoysia can survive on as little as 3/4-inch to 1-inch of water for irrigation per watering, once established, depending on soils. (Very porous sandy soil will require higher amounts of irrigation.)

The best way to irrigate zoysiagrass once established is on an as-needed basis. Indications that the turf may need to be irrigated include: the grass leaves begin to curl and turn a bluish-grey color; footprints are evident for a count of 10; and the soil is loose and dry. If these conditions exist, irrigate to wet the soil to a depth of six to eight inches.

Thatch Control:

Thatch buildup is the most serious issue on zoysiagrass. Thatch can be defined as an accumulation of living and dead plant tissue, such as leaves, stems and roots of the grass, which develops between the soil surface and the green vegetative cover. Once there is an excessive thatch buildup, there is excess run-off of water, pesticides are tied up in the thatch layer and therefore not effective, and mowing often results in severe scalping. Most thatch problems are due to improper mowing, fertilizing and watering.

Frequent mowing at recommended heights, combined with clipping removal, can help prevent thatch accumulation. Also, avoiding excessive amounts of nitrogen fertilizer can help prevent thatch.

If thatch occurs, verticutting, (vertical mowing), can help to remove the thatch layer. Thatch removal should be done before the fall season to allow the turfgrass ample time to re-grow.

Insects:

In general, zoysiagrasses are resistant to chinch bugs, an insect known as a pest in St. Augustinegrass.

Zoysiagrasses are prone to damage by nematodes, white grubs and hunting billbugs. The presence of these pests can be monitored and treated with any of several insecticides labeled for these insects and for use on zoysiagrass.

However, it should be noted that in the 14 months of research on UltimateFlora® Zoysia, at the Avon Park and Punta Gorda, Florida, sod farms of Emerald Island Turf, Farm Manger Rex Cunningham reports that he has only had to treat UltimateFlora® Zoysia for insects once -- and that was for fireants.

Disease:

In general, some zoysiagrasses may experience disease problems such as dollar spot, brown patch or rust. However, these diseases are usually suppressed in properly fertilized and irrigated turfgrass. In intensively maintained lawns, fungicides may be needed to prevent these diseases. See labels for instructions.

Weed Control:

There are both pre- and post-emergent herbicides that may be used safely on zoysiagrass to control most weeds. Pre-emergence herbicides may be applied to control crabgrass, goosegrass or foxtail on some zoysiagrass lawns. Post-emergence herbicides may be applied as needed to control summer annual and broadleaf weeds such as knotweed, spurge and lespedeza. Always be sure to check that the herbicide selected is labeled for use on zoysiagrass. Remember, when applying any pesticide, to carefully follow the manufacturer's recommendations and precautions.

Drought Resistant:

UltimateFlora® Zoysia is Drought Resistant, once fully established. It has built-in mechanisms to help it stand up to drought. Should drought conditions occur, a mature stand of UltimateFlora® Zoysia will shut down and go "dormant," meaning it will stop growing and turn a tan color. Once sufficient water is applied, the grass should green up and begin growing again. This is significant in that St. Augustine grass will stay green as long as possible and then die. St. Augustine grass, which is the traditional grass of Florida, does not have this dormancy mechanism to help it withstand severe drought. However please note that as UltimateFlora® Zoysia is a plant, as are all turgrasses, it will eventually need some water to survive. If a drought is prolonged enough, even a drought resistant grass such as UltimateFlora® Zoysia may experience some stress-related damage.

Summary:

The above suggestions are just that, suggestions. All grasses react differently to the unique environment in which they are planted and the way they are maintained. It is important to monitor your turfgrass in your local environment and react accordingly.

That said, UltimateFlora® Zoysia was bred to be a highly tolerant turfgrass that offers an exceptionally lush lawn. We believe you'll agree: ***It's not just good. It's the Ultimate!***[™]