For optimum growth, turfgrass needs just four things (in the proper balance)… sunlight, air, water and nutrients. Reduce any of these, or provide too much of any one and the turfgrass will suffer or die. In the right proportions, turfgrass will flourish, providing beauty to the landscape, a clean and safe place to play, plus many other benefits!

**Irrigation:**

- **RTF® (Rhizomatous Tall Fescue)** produces the deepest roots (1.5–3 ft) of all cool season turfgrasses.
- There is no such thing as an ‘automatic’ irrigation system, but **smart controllers and low precipitation irrigation heads greatly increase water savings and efficiencies**! Regular water audits, ensuring that equipment is operating correctly, and using soil probes or soil moisture measuring devices help fine-tune irrigation schedules, promote healthy turfgrass, and decrease water waste.
- **Never set an automatic irrigation system and walk away for the rest of the summer!**
- The goal of effective irrigation management is to apply the correct amount of water to hydrate the root zone soil profile at the correct time to optimize water uptake by the root system. This requires calculating the amount and frequency of water applications based on the actual precipitation rate and distribution uniformity of your irrigation system, the infiltration rate of your soil, weather data (used to estimate the ET or Evapotranspiration of the turfgrass), rooting depth, and the water-holding capacity of the soil.

Consult a qualified landscape professional for assistance!

- Your new RTF lawn either from seed or sod should immediately receive a deep watering of at least 1” of water, unless during a cool and wet time period.
- For the first two weeks or until the turf is well rooted keep the soil below the turf moist with daily (or more frequent) waterings of approximately ¼ inch with each application. **Increased watering may be required during hot, dry or windy periods.**
- As soon as the turf is rooted water only as needed with **longer duration** (i.e. ½”) and **less frequently** (2-4 days apart depending on weather conditions) to promote a deeper root system.

**Fertilization:**

- **Turfgrass fertilization practices directly influence water use and year round turf performance.** Regular soil analysis can provide extreme clarity to the deficiencies or satisfactory levels, e.g., nutrients, pH or organic matter, within the soil.
- **Fertilization Schedule:**

<table>
<thead>
<tr>
<th>Application Date</th>
<th>Analysis (N-P-K)</th>
<th>Fe (Iron)</th>
<th>SRN</th>
<th>N applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1-15</td>
<td>25-3-10</td>
<td>5%</td>
<td>70%</td>
<td>¾ - 1 lb</td>
</tr>
<tr>
<td>June 1-15</td>
<td>25-3-10</td>
<td>5%</td>
<td>70%</td>
<td>½ - 1 lb</td>
</tr>
<tr>
<td>August 15-31</td>
<td>25-3-10</td>
<td>5%</td>
<td>70%</td>
<td>¾ - 1 lb</td>
</tr>
<tr>
<td>October 1-15</td>
<td>20-3-20</td>
<td>6%</td>
<td>60%</td>
<td>1 lb</td>
</tr>
</tbody>
</table>

- **Use only fertilizers with slow release nitrogen (SRN) forms and with similar formulations as shown above.** All application rates should never exceed 1 lb total N per 1,000 sf. The total N applied annually on RTF® should range from 3-4 lbs of N, while with perennial ryegrass you will apply 5-6 lbs of N with at least one extra application. Doing this will ensure strong and healthy turf and root growth while not promoting disease susceptibility from high nitrogen spikes.
- **Due to increased risk of fungal disease pressures, consult a qualified landscape professional for assistance prior to applying fertilizer after October 15.**
- Consult a qualified landscape professional for assistance!
Mowing:

- RTF® is well suited to be mowed at a 1.5 to 3” height range.

- Never remove more than 1/3 of the grass's original height in one mowing. Especially when not bagging grass clippings.

- Reincorporating the grass clippings returns nutrients to the soil, resulting in less fertilizer use.

- Always mow with a sharp rotary blade! A dull blade increases the healing time the plant needs to repair itself after mowing, which leads to increased water loss as well as making the plant more prone to the onset of disease (or infection) from getting into the grass plant.

- To promote a healthy and dense turf when your lawn is actively growing periodically (Spring & Fall) mow your lawn ½-1” shorter than your normal mowing height.

Aerating and Dethatching Facts:

- Tall fescue produces the least amount of thatch of all cool season turfgrasses.

- Thatch is a layer of dead and living organic matter between the green grass and the soil.

- Dethatching is only needed when the noticeable thatch layer begins to exceed ¾” in depth. If ever needed spring is the best time to dethatch because conditions are optimum for rapid recovery and you are preparing the lawn for the coming growing season. Some natural thinning of the turf will always occur during winter dormancy and often prevent the need of dethatching!

  - Timing – Target April to mid-May. Fertilize with Nitrogen @ 1 lb N/1,000 sq ft

- Regular aerating in the Pacific Northwest can be very beneficial. Aerating or coring punches small holes in the lawn allowing air, moisture, and nutrients to get to the root system. This is done best in late summer to early fall when temperatures are starting to cool and the soil is only slightly moist. In heavy clay soils with poor drainage a second aeration in Spring may also be beneficial.

Shade Facts:

- A healthy RTF® lawn should receive 3-5 hours of full sun, preferably in the morning and shade in the afternoon. That creates an environment where there is enough sun to grow healthy grass, the dew dries out in the morning, and the shade moderates the heat load during the afternoon.

- Factors that reduce lawn performance especially in shade are:

  Poor air movement, poorly drained soils (especially when there is standing water for extended periods of time), extended leaf cover in the fall, and foot or pet traffic are all factors that can incrementally add to turf decline.

- Severe shade makes it impossible to grow functional turf. Shady lawns can at times look good, but are always fragile. Most of the time you can compromise by removing some trees, thinning others, raising crowns of some trees, and carefully picking the areas where you want to grow grass.

- Shade interferes with light wavelengths necessary for carbohydrate production through the process of photosynthesis; therefore shaded lawns should receive less nitrogen in near direct proportion to the amount of shade. High nitrogen fertilization increases succulence which may result in increased disease, e.g., fusarium patch and net blotch, and traffic injury. Nitrogen also encourages top growth of the plant at the expense of root growth.

- Irrigate deeply and infrequently and if possible design irrigation zones differently than your full sun portions of your lawn. A shaded portion should be watered in direct proportion to the amount of shade, which could likely require half as much water as the nearby full sun portion.