

## Installation Procedures for Turf

Establishing a new healthy and attractive lawn involves making good decisions and choices. You must choose the best turf for your site. Seed, sprigs, plugs or sod can establish grass. The type of grass will determine your options. No matter which method you choose, site and soil preparation are extremely critical for best results. The following are general procedures for turfgrass installation.

### Site Preparation

Preparing the site involves removing weeds and debris, planning for drainage, and grading the site. This is not soil prep.

- Control weeds with a nonselective herbicide. Hard-to-control weeds may require more than one application.
- Remove debris. Items that might be left from construction if this is a new site.
- Plan for easy maintenance and an aesthetic appearance. Avoid terraces, steep grades, poorly drained areas, and heavily shaded spots if possible.
- Install drainage systems in poorly drained areas.
- When possible, remove the topsoil (usually 4 to 6 inches) and stockpile it nearby if grading is needed.
- Build protective walls to save trees if the final grade is to be appreciably higher than the present level.
- Shape the underlying subsoil to the desired contour, and redistribute topsoil uniformly above the subsoil. A 2 to 3 percent slope is needed for proper drainage away from buildings.
- Make certain the soil is firmed after shaping. Use a roller or other equipment
- If possible, mix 1 to 2 cubic yards of organic material such as peat moss or compost per 1,000 sq. ft. into the top 4 to 6 inches of subsoil if planting in heavy clay or very sandy soils. This will improve root growth and assist with drainage
- **Note, these steps are not always followed, but is best for long term health of the lawn**

### Soil Preparation

- Take soil samples from the front yard and the backyard to determine soil pH and nutrient requirements.
- Based on the soil test report recommendations or the fertilization guidelines, incorporate lime and fertilizer into the top 4 to 6 inches of the soil using a rototiller.
- Rake or till the site to establish a smooth and level final grade. Hand raking is the best way to level the soil and work out hills and valleys to establish the final grade. Allow time for rain or

irrigation to settle the soil, and roll lightly to firm the soil before planting seed, sprigs, plugs, or sod. Hand rake again to break up the crusty surface before planting.

## When and How to Plant Lawns

### Cool-Season Grasses

Cool-season grasses are best seeded from mid-August to late September, depending on location. Seeding beyond these dates increases the chance of failure caused by winter injury. It is also possible to seed in late winter or early spring in some regions of the country. You may successfully install a cool-season grass sod anytime in the cooler portions of the growing season when the ground is not frozen.

### Warm Season Grasses

Warm-season grasses may be seeded successfully between mid-March and July 1, depending on the species used.

Warm-season grasses are best established by sodding at the same dates suggested for seeding, about April until July 1. Sod will not produce roots unless the soil temperature exceeds 55°F for several weeks.

Warm-season grasses may be planted vegetatively by sprigs or plugs from March through July. Sod may be installed later than the recommended dates; however, establishment may not be fully in place before the onset of cold weather.

## Planting

Lawns can be established by seeding, sodding, sprigs or plugs. Selection of seeds or plants is especially important when establishing a lawn. Read the information on the seed tag carefully, and make sure you purchase seed with a high germination rate and little weed seed. One way to be sure you have seed or planting material that is true to type, free of noxious weed seed, and contains low levels of other crop seed, is to purchase certified seed or sod.

**Seeding** is the fastest, most economical method of establishing turf. To ensure uniform coverage, use a centrifugal (rotary) or drop-type spreader. Apply half the seed in one direction and the other half, moving at right angles to the first pass. Lightly cover the seed by hand raking or dragging with a mat or span of chain-link fence. Roll the soil lightly to firm the surface, and provide good seed-to-soil contact. Mulch grass seed with weed-free small-grain straw or hay. Use one bale per 1,000 sq. ft. for warm-season grasses and one to two bales for cool-season grasses. This will help conserve moisture, control erosion, and reduce surface crusting until establishment. Once in place, stabilize the mulch by rolling or watering.

**Vegetative planting** is necessary for some grasses that do not produce viable seed (seed that will germinate). When this method is used, the planting material must be kept fresh and moist from removal site to planting area. Keep planting material moist until established. Fertilize with 0.5 to 1 pound of nitrogen per 1,000 sq. ft. every one to three weeks for the fastest establishment. **Sprigging** is the planting of separate shoots or sprigs (runners, cuttings, or stolons) at regular spacing. This method is best used for planting large areas. Spacing is determined by how fast the grass will spread, how fast you want it to cover, and how much material you have available. The closer the spacing, the faster the lawn will become established. Sprigging is done by broadcasting uniformly the distribution of sprigs (cut stems) over the entire area. The sprigs are pressed into the top 0.5 to 1 inch of soil by hand or by using

an old disk set straight, special planter, cultipacker, or roller. Large areas planted with bermuda grass or zoysia sprigs require a minimum of 3 to 5 bushels (yards) of sprigs per 1,000 square feet and 5 to 10 bushels (yards) for extremely fast cover. St. Augustine grass is seldom established through broadcasting because the stems are too sensitive. Sprigging bermuda grass is often done to establish large lawns or athletic fields. **Plugging** is planting individual pieces (2 inches or larger) of sod on 6-inch or 12-inch centers. This is an excellent way to introduce a more adapted lawn grass into an old lawn to replace old grass by crowding out. Zoysia, St. Augustine grass, and centipede grass are often planted by plugging. **Sodding** is placing sod stripped from one site to another for an “instant” lawn. Lay sod as soon as possible after it has been harvested to prevent injury.

- Make sure the soil is moist (but not overly wet) before laying sod. Irrigating the soil several days before delivery is often adequate.
- Install the sod within 24 hours of delivery if possible. Plan to unstack and unroll the sod if it cannot be laid within 48 hours, otherwise damage may occur.
- While installing, keep sod in the shade to lessen the chance of heat buildup.
- Start sodding from a straight edge (driveway or sidewalk), and butt strips together, staggering them in a bricklike pattern
- Avoid stretching sod. Use a knife or sharp spade for trimming to fit irregularly shaped areas.
- Lay sod lengthwise across the face of slopes, and peg or stake the pieces to prevent slippage.
- After the sod, has been placed, roll the lawn to ensure good sod-to-soil contact. Then begin watering.

All newly planted turf project need special attention to watering needs and fertility needs. Drying out of seedbed, or any installed area can lead to death of the new turfgrass.