

Back Messages: Planting Commercial Turf

1. Apply full lime recommendation and thoroughly mix into the soil four to six inches deep. Use a high quality agricultural ground limestone product to meet the lime recommendation on this report. Manufacturers of agricultural ground limestone products provide a number called the calcium carbonate equivalent, or CCE, on the label. CCEs with high numerical values (close to 100 or above) indicate a pure lime source (greater ability to neutralize soil acidity). The amount of lime recommended on this report is based on an agricultural ground limestone with a CCE of 100. If your lime source is close to or equal to 100, you don't need to adjust the recommended amount. In the event that you use a lime source with a CCE well below 100, use the following formula to adjust the required amount.

$$\text{Actual liming material required} = \frac{(\text{Soil test recommendation in lbs of lime/1000 square feet}) \times 100}{\text{CCE of liming material}}$$

Example Only:

Soil Test Recommendation: Apply 75 lbs lime/1000 square feet

CCE on label: 80 percent

$$\begin{aligned} \text{Actual liming material required} &= \frac{(75 \text{ lbs of lime}) \times 100}{80} \\ &= 94 \text{ lb liming material/1000 square feet} \end{aligned}$$

2. If organic matter test was requested and organic matter recommended, thoroughly mix organic matter into a four to six inch soil depth. Sphagnum peat and peat humus typically contain high amounts of organic matter (> 80 %) and will usually meet organic matter requirements when incorporated at the rate recommended on the soil test report. A good quality compost can also be used as an organic amendment; however, most composts contain lower amounts of organic matter than peats. Therefore, you may need to add greater amounts of compost to meet soil test organic matter recommendations. For more information on using composts as organic amendments in new turf plantings, refer to the publication, "Using Composts to Improve Turf Performance". This publication is available from Penn State Cooperative Extension offices or the Publication Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Bldg., University Park, PA 16802.
4. Thoroughly mix phosphate and/or potash into a four to six inch soil depth.
5. Grade and finish rake for seeding. Apply starter fertilizer just prior to seeding.
6. Fertilizers that can be used to meet recommendations for phosphate (P_2O_5) include ordinary superphosphate (0-20-0) or triple (treble) superphosphate (0-46-0). Fertilizers that can be used to meet recommendations for potash (K_2O) include muriate of potash (0-0-60) or sulfate of potash (0-0-50).