



INTEGRITY TREE SERVICES

Proper Tree Planting

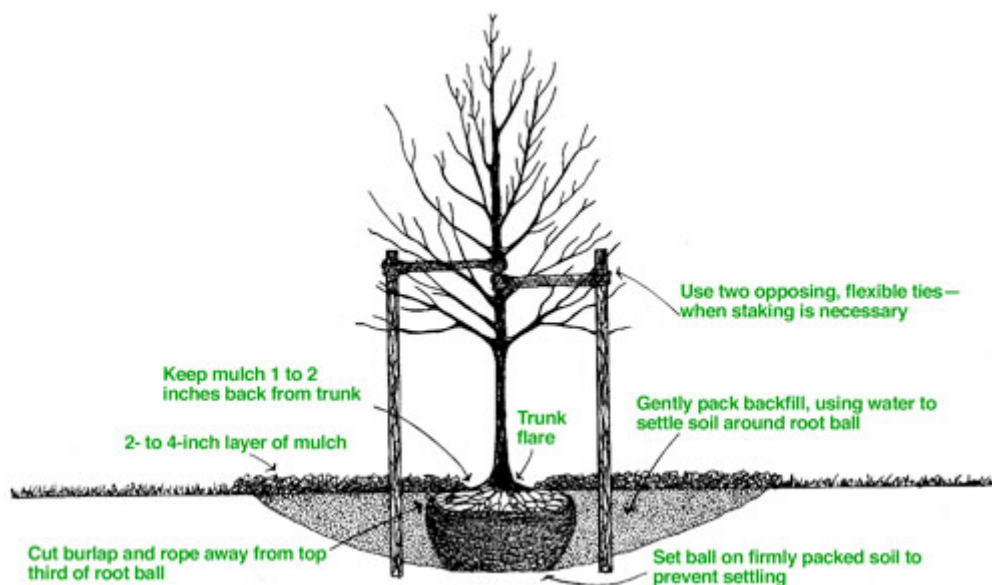
Think of the tree you just purchased as a lifetime investment. How well your tree and investment grows depends on the type of tree and location you select for planting, the care you provide when the tree is planted, and follow-up care the tree receives after planting.

Planting the Tree

Trees properly cared for in the nursery or garden center and given the appropriate care during transport, can be planted throughout the entire growing season. You will need to be very careful however during the hot months of summer. It is very easy to stress plants by allowing them to dry out/burn during this period. Before you begin planting your tree: (1) Be sure you have had all underground utilities located prior to digging. (2) Know the pH and soil conditions that your tree/plant is going into. (3) Be certain that the plant matches the sunlight, water, and soil conditions of the planting site. (4) Does the tree/plant fit in the space that it is being planted in?

Trees go through “transplant shock” during the process of digging, moving, and replanting them. Transplant shock is indicated by reduced vigor following transplanting. Proper site preparation before and during planting coupled with good follow-up care reduces the amount of time the plant experiences transplant shock and allows the tree to quickly establish in its new location.

Carefully follow these eight simple steps and you can significantly reduce the stress placed on the plant at the time of planting.



- 1. Identify the trunk flare.** The trunk flare is where the roots spread at the base of the tree. This point must be partially visible after the tree has been planted (see diagram). If the trunk flare is not partially visible, you may have to remove some soil from the top of the root ball. Find it so you can determine how deep the hole needs to be for proper planting.

2. **Dig a shallow, broad planting hole.** Make the hole wide but only as deep as the root ball. It is important to make the hole wide because the roots on the newly establishing tree must push through surrounding soil in order to establish. On most planting sites in new developments, the existing soils have been compacted and are unsuitable for healthy root growth. Breaking up the soil around the tree provides the newly emerging roots room to expand into loose soil to hasten establishment.
3. **Place the tree at the proper height.** Before placing the tree in the hole, check to see that the hole has been dug to the proper depth—and no more. The majority of the roots on the newly planted tree will develop in the top 12 inches of soil. If the tree is planted too deeply, new roots will have difficulty developing because of a lack of oxygen. It is better to plant the tree a little high, 2 to 3 inches above the base of the trunk flare, than to plant it at or below the original growing level. This planting level will allow for some settling (see diagram). To avoid damage when setting the tree in the hole, always lift the tree by the root ball and never by the trunk.
4. **Straighten the tree in the hole.** Before you begin backfilling, have someone view the tree from several directions to confirm that the tree is straight. Once you begin backfilling, it is difficult to reposition the tree.
5. **Fill the hole gently but firmly.** Fill the hole about one-third full and gently but firmly pack the soil around the base of the root ball. Then, if the tree is balled and burlapped, cut and remove the string and wire from around the trunk and top third of the root ball (see diagram). Be careful not to damage the trunk or roots in the process.

Fill the remainder of the hole, taking care to firmly pack soil to eliminate air pockets that may cause roots to dry out. To avoid this problem, add the soil a few inches at a time and settle with water. Continue this process until the hole is filled and the tree is firmly planted. Do not apply fertilizer at the time of planting! Fertilizer salts can dry out the roots. A Bio-Stimulant (Roots/Roots 2) is beneficial and often key to giving plants a boost to pull it out of transplant shock.

6. **Stake the tree, if necessary.** Typically staking is only necessary in windy locations. If staking is necessary for support, two-three stakes used in conjunction with a wide, flexible tie material will hold the tree upright, provide flexibility, and minimize injury to the trunk (see diagram). Remove support staking and ties after the first year of growth!
7. **Mulch the base of the tree.** Mulch (properly applied) is the best/least expensive way to minimize stresses to your trees. It acts as a blanket to hold moisture, it moderates soil temperature extremes (both hot and cold), it reduces competition from grass and weeds, and it builds organic matter in the soil as it breaks down. Do not use plastic or landscape paper as it will block gas exchange! A 2-4 inch layer is ideal; more than 4 inches will cause a problem with O₂/CO₂ exchange. A mulch-free area, 2-4 inches wide at the base of the tree, is necessary to avoid decaying organisms from attacking the trunk of the tree!
8. **Provide follow-up care.** Trees need an average of 1 inch of water every 7-10 days (dependant on planting location and soil type). Check your soil periodically to see how much moisture is in the soil. Too much or too little water can greatly stress your trees. Monitoring the soil is the only way to be certain that you are using the correct amount of water. Bio-Stimulants (NOT FERTILIZERS) are highly recommended for all new plantings for 2-3 years as they go through transplant shock. Monitoring for pests that may attack the tree is also important as the tree is already susceptible to attack due to transplant shock. Prune sparingly immediately after planting and wait to begin necessary structural pruning until after a full season of growth in the new location.

After you've completed these eight simple steps, routine care and monitoring will ensure that your new tree or shrub will grow and thrive. A valuable asset to any landscape, trees provide a long-lasting source of beauty and enjoyment for people of all ages. When questions arise about the care of your tree, be sure to consult Integrity Tree Services.