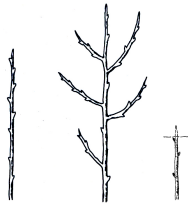


# Tree Quality Cue Card

Shade trees that grow to be large should have one relatively straight central leader. Heading the tree is acceptable provided the central leader is retrained.

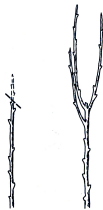
Desirable



Desirable



Not desirable



Main branches should be well distributed along the central leader, not clustered together. They should form a balanced crown appropriate for the cultivar or species.

Desirable



Not desirable



The diameter of branches that grow from the central leader, or trunk, should be no larger than two-thirds (one-half is preferred) the diameter of the trunk measured just above the branch.

Desirable



Not desirable

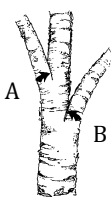


The largest branches should be free of bark that extends into the branch union, known as included bark (see A and B).

Desirable



Not desirable



Temporary branches particularly on trees less than 1 inch caliper should be present along the lower trunk below the lowest main branch. These branches should be no larger than 3/8 inch in diameter.

Desirable



Not desirable



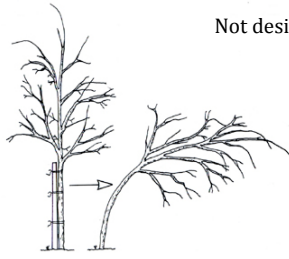
The trunk should be free of wounds, sunburned areas, conks (fungal fruiting bodies), wood cracks, bleeding areas, signs of boring insects, cankers, or lesions. Properly made recent pruning cuts are acceptable.

The trunk caliper (thickness) and taper should be sufficient so that the tree remains vertical without a stake.

Desirable

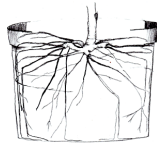


Not desirable

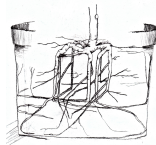


The root collar (the uppermost roots) should be within the upper 2 inches of the soil media (substrate). The root collar and the inside portion of the root ball should be free of defects, including circling, kinked, and stem girdling roots. You may need to remove soil near the root collar to inspect for root defects.

Desirable



Not desirable



The tree should be well rooted in the soil media. Roots should be uniformly distributed throughout the container. The tree's structure and growth should be appropriate for the species or cultivar. When the container is removed, the root ball should remain intact. When the trunk is lifted, both the trunk and root system should move as one.

The root ball should be moist throughout at the time of inspection and delivery. The roots should show no signs of excess soil moisture as indicated by poor root growth, root discoloration, distortion, death, or foul odor. The crown should show no signs of moisture stress as indicated by wilted, shriveled, or dead leaves or branch dieback.

Copyright © 2010 Edward F. Gilman and Brian Kempf [www.urbantree.org](http://www.urbantree.org)

