

*Quercus rubra* 3½ in. cal., 14 to 16 ft., trunk free of branches 7 to 9 ft.

Trees with ascending branches (Examples - *Ulmus americana* and *Zelkova serrata*) may be branched 1 foot or more below the standard height and still provide proper clearance, which is the purpose of this specification.

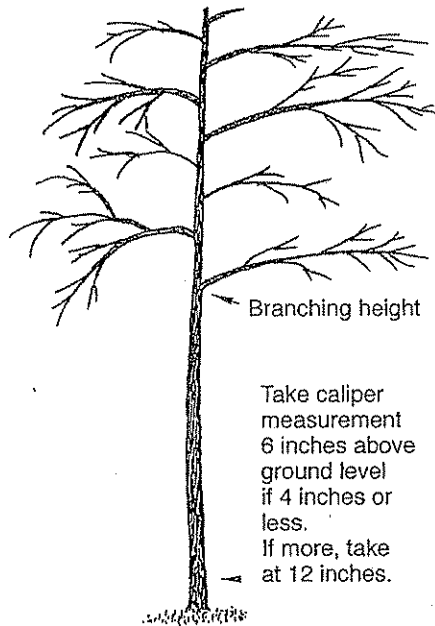


FIGURE 1 – Caliper and branching height

#### 1.1.2.5 Trees for other uses

Where a certain form of growth is desired which is not in accordance with a natural growth habit, this form should be so specified.

##### Examples:

**Cut back or sheared** - trees that have been pruned back so as to multiply the branching structure and to develop a more formal effect.

**Topiary** – sheared or trimmed closely in a formal geometric pattern.

**Espaliered** – trained on a structure of a specified shape and style.

**Street tree** – trunk clear of branches up to a certain height on the trunk. See Section 1.1.2.4

## 1.2 Types of trees

### 1.2.1 Type 1 shade trees

**Definition:** The height relationship to caliper, for most standard shade trees, is shown in Table 1, below.

It is recognized that climatic conditions in different sections of the country produce trees of different caliper-height proportions. Trees from one region of the country may have less caliper in proportion to height while trees from another region may have greater caliper in proportion to height than shown in the following table. The table below shows the average height range and the typical maximum heights.

Woods \*

**Table 1 - Height/caliper relationship for Type 1 shade trees**

Caliper	Average height range	Typical maximum height
½ in.	4 to 5 ft.	6 ft.
5/8 in.	5 to 6 ft.	8 ft.
¾ in.	6 to 8 ft.	10 ft.
1 in.	8 to 10 ft.	11 ft.
1 ¼ in.	8 to 10 ft.	12 ft.
1 ½ in.	10 to 12 ft.	14 ft.
1 ¾ in.	10 to 12 ft.	14 ft.
2 in.	12 to 14 ft.	16 ft.
2 ½ in.	12 to 14 ft.	16 ft.
3 in.	14 to 16 ft.	18 ft.
3 ½ in.	14 to 16 ft.	18 ft.
4 in.	16 to 18 ft.	22 ft.
4 ½ in.	16 to 18 ft.	22 ft.
5 in.	18 ft. and up	26 ft.

**Examples:** *Acacia stenophylla*, *Acer rubrum*, *A. saccharinum*, *Betula nigra*, *Bucida bucerus*, *Cinnamomum camphora*, *Eucalyptus microtheca*, *Fraxinus pennsylvanica*, *Ginkgo*, *Gleditsia triacanthos*, *Liriodendron tulipifera*, *Platanus occidentalis*, *Populus fremontii*, *Quercus macrocarpa*, *Q. palustris*, *Q. phellos*, *Q. virginiana*, *Salix*, *Swietenia mahogany*, *Tilia americana*, *Zelkova serrata*