



CONTAINER GROWN TREE GUIDE

The following information is intended to assist growers, buyers, and architects with selling, purchasing and design implementation of container grown trees. This publication does not in any respect prevent anyone – whether a member of the Association or not – from growing, marketing, distributing or buying plant material that does not conform to this guide as sizes may vary due to market availability. This guide is subject to periodic review and revision, and users are encouraged to visit the Arizona Nursery Association website at www.azna.org to download the most current copy.

This guide was prepared and published by the grower members of the Arizona Nursery Association. The growers appreciate and acknowledge the assistance and cooperation of the Arizona chapter of the American Society of Landscape Architects (ASLA) for their review and contribution to the original content.

This guide is limited to commonly available trees sold in container sizes from 15 gallon to 48 inch boxes that are grown under conditions typical of the southwestern United States by Arizona Nursery Association member growers. To obtain information for larger tree specimens or for field grown trees, buyers are encouraged to contact a number of reputable suppliers in their area to determine specifications and availability.

*****Any use of this document, and the information listed by any individual, corporation, municipality, state or federal agency for the purpose of regulating or restricting the sale or installation of the trees described is in direct contradiction to the expressed intent of the ANA and its members. The Arizona Nursery Association strongly disavows any such use.**

(Revised 2011)

BIGGER IS NOT NECESSARILY BETTER

The challenges of quality control, when applied to horticultural crops, are unique when compared to those used in traditional manufacturing. Quality is a fairly

subjective term and can be applied to appearance, reliability, health or simply consistency.

What makes horticultural "manufacturing" challenging is that the end products are living plants with each species produced having individual horticultural requirements and unique characteristics. Quality conscious growers employ an assortment of checks within a production process to insure that the trees they bring to market have sound horticultural qualities, are uniform in appearance, vigorous, long lived (with proper care following transplanting) and considered an asset to the landscape.

Trees in the desert Southwest are sold and priced by container size (15 gallon, 24-inch box, 36-inch box, etc) and specified or described based on their height, width and caliper. Of these criteria, tree caliper is a widely recognized indicator of root mass. It is the most visible way to determine if a tree is under or over grown in its current container or that the structure of the root system has been compromised in the process of growing the tree in the nursery.

In the pursuit of value, the motto "bigger is better" must be carefully applied when purchasing *container grown* landscape trees. The notion that a large tree growing in a smaller box is a bargain is usually incorrect in the long run. Longevity, growth and vigor of trees depend on a well developed and proportional root system.

"Bumping or Shifting" are terms commonly used in the nursery trade to describe the practice of transplanting plants or trees that have reached their optimal growth in their current sized container so they may continue to grow without compromising their root structure. Trees left too long in a container can become overgrown and develop circling or bound roots (root binding). Root binding is a horticultural time bomb that if allowed to develop, will severely shorten the life of maturing trees by causing crown girdling or by significantly increasing the risk of wind-throw. Quality control at this level of production involves taking steps to ensure that the root system is vigorous, appropriate to the container size and stage of development of the tree, and that the roots are well distributed without being overgrown.

In the current regulatory environment, some municipalities who have specified tree caliper alone, instead of appropriately matching caliper with box size, has created temptation to look for trees that satisfy caliper requirements at the lowest possible price, (i.e. smallest box size). Any short-term savings derived from purchasing trees overgrown for their containers will ultimately be lost through costs associated with tree replacement from death or die back caused by girdling roots or damage to the landscape and surrounding structures by wind throw.

Municipal regulations, emphasizing only a required caliper size, could contribute to a significant increase in the number of oversized trees in inappropriately small containers coming into the marketplace and thus planted in landscapes. The long

term impact of these poor quality trees on landscapes will be felt over a period of years. Quality and proportional root structure will always be an essential part of tree vigor, appearance and the long term durability of the landscape.

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DEFINITION

MULTIPLE TRUNK TREE (“MULTI”): Specifications for multiple trunk trees begin on page 10. To be considered a multiple trunk tree, multiple trunks must originate either from the soil line or at a distance no higher than 18 inches above the soil. The origination point is defined as the center of the trunk being considered at the soil line of the container.

Any tree which has scaffold branches higher than the measurements outlined above are not considered multiple trunked trees. Whether or not such trees are considered standards or low branching standards is at the discretion of the buyer. Unless otherwise indicated, the sizes listed are intended to represent standard trunked trees. Trunk height will vary due to species traits and/or the horticultural practices of growers.

CALIPER DETERMINATION

CALIPER FOR STANDARD TREES: Tree caliper will be measured at 6 inches above the soil line.

CALIPER FOR MULTIPLE TRUNK TREES: Establishing the caliper of multiple trunk trees is complicated by: 1) the widely varying number of trunks per tree; 2) the differing rates of caliper growth between varieties within a single species and between species; 3) distance from the soil line where additional trunks originate and are measured and 4) the lack of consensus on how to properly calculate and report the caliper(s) of these specimens. For the purpose of this document, only height and width specifications are listed for multiple trunked specimens.

TREE LISTING BY BOTANICAL NAME

| BOTANICAL NAME | BOX SIZE | HEIGHT <i>(in feet)</i> | WIDTH | CALIPER <i>(in inches)</i> |
|----------------|----------|----------------------------|---------|-------------------------------|
| Acacia aneura | 15 | 4.0-5.0 | 1.0-2.0 | 0.5-0.75 |
| Acacia aneura | 24 | 5.0-7.0 | 2.0-3.0 | 0.75-1.25 |
| Acacia aneura | 36 | 7.0-9.0 | 4.0-6.0 | 1.5-2.0 |
| Acacia pendula | 15 | 4.0-5.0 | 1.5-2.5 | 0.5-1.0 |

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|----------------------------------------------------------|----|-----------|----------|-----------|
| Acacia pendula | 24 | 5.0-8.0 | 2.5-3.5 | 1.0-1.5 |
| Acacia pendula | 36 | 9.0-11.0 | 5.0-7.0 | 2.0-2.5 |
| Acacia rigidula | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Acacia rigidula | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Acacia rigidula | 36 | 7.0-9.0 | 5.0-6.0 | 1.75-2.25 |
| Acacia rigidula | 48 | 9.0-11.0 | 7.0-8.0 | 3.0-3.5 |
| Acacia salicina | 15 | 5.0-6.0 | 1.5-2.5 | 0.5-1.0 |
| Acacia salicina | 24 | 7.0-8.0 | 2.5-3.5 | 1.25-1.5 |
| Acacia salicina | 36 | 9.0-11.0 | 5.0-7.0 | 2.0-2.5 |
| Acacia saligna | 15 | 5.0-6.0 | 1.5-2.5 | 0.5-1.5 |
| Acacia saligna | 24 | 7.0-8.0 | 2.5-3.5 | 1.25-1.5 |
| Acacia saligna | 36 | 9.0-11.0 | 5.0-7.0 | 2.0-2.5 |
| Acacia schaffneri | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Acacia schaffneri | 24 | 5.0-8.0 | 3.0-4.0 | 1.0-1.75 |
| Acacia schaffneri | 36 | 9.0-10.0 | 5.0-7.0 | 1.75-2.5 |
| Acacia schaffneri | 48 | 12.0-14.0 | 8.0-10.0 | 3.0-4.0 |
| Acacia smallii (<i>Also for minuta and farmesiana</i>) | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Acacia smallii | 24 | 5.0-8.0 | 3.0-4.0 | 1.0-1.75 |
| Acacia smallii | 36 | 8.0-10.0 | 5.0-7.0 | 1.75-2.5 |
| Acacia smallii | 48 | 12.0-14.0 | 8.0-10.0 | 3.0-4.0 |
| Acacia stenophylla | 15 | 6.0-7.0 | 1.5-2.0 | 0.5-1.0 |
| Acacia stenophylla | 24 | 8.0-10.0 | 3.0-4.0 | 1.0-1.5 |
| Acacia stenophylla | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.5 |
| Acacia stenophylla | 48 | 12.0-15.0 | 7.0-8.0 | 3.0-4.0 |
| Acacia willardiana | 15 | 4.0-5.0 | 1.5-2.5 | 0.5-1.0 |
| Acacia willardiana | 24 | 5.0-8.0 | 2.5-3.5 | 1.0-1.5 |
| Acacia willardiana | 36 | 9.0-11.0 | 5.0-7.0 | 2.0-2.5 |
| Albizia julibrissin | 15 | 6.0-8.0 | 1.5-2.5 | 0.5-1.0 |
| Albizia julibrissin | 24 | 7.0-9.0 | 3.0-4.0 | 1.25-1.75 |
| Albizia julibrissin | 36 | 10.0-12.0 | 4.0-5.0 | 2.0-2.5 |
| Bauhinia HongKong | 15 | 5.0-6.0 | 1.5-2.0 | 0.75-1.0 |
| Bauhinia HongKong | 24 | 7.0-9.0 | 2.5-3.0 | 1.25-1.5 |
| Bauhinia HongKong | 36 | 11.0-13.0 | 6.0-7.0 | 2.0-2.5 |
| Bauhinia macranthera | 15 | 2.0-3.0 | 1.0-2.0 | 0.5-0.75 |
| Bauhinia macranthera | 24 | 3.0-4.0 | 2.0-3.0 | 0.75-1.0 |
| Bauhinia macranthera | 36 | 5.0-6.0 | 3.0-4.0 | 1.25-2.0 |

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|--------------------------------------|----|-----------|-----------|-----------|
| Bauhinia purpurea | 15 | 5.0-6.0 | 1.5-2.0 | 0.75-1.0 |
| Bauhinia purpurea | 24 | 7.0-9.0 | 2.5-3.0 | 1.25-1.5 |
| Bauhinia purpurea | 36 | 11.0-13.0 | 6.0-7.0 | 2.0-2.5 |
| Bauhinia lunarioides (B. congesta) | 15 | 3.0-4.0 | 1.5-2.0 | 0.5-0.75 |
| Bauhinia lunarioides (B. congesta) | 24 | 4.0-5.0 | 3.0-4.0 | 0.75-1.0 |
| Caesalpinia mexicana | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Caesalpinia mexicana | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Caesalpinia mexicana | 36 | 7.0-8.0 | 4.0-5.0 | 1.5-2.0 |
| Caesalpinia cacalaco | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Caesalpinia cacalaco | 24 | 5.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Caesalpinia cacalaco | 36 | 8.0-10.0 | 5.0-6.0 | 1.5-2.0 |
| Callistemon viminalis | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-1.0 |
| Callistemon viminalis | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Celtis reticulata | 15 | 5.0-6.0 | 2.0-3.0 | 0.5-1.0 |
| Celtis reticulata | 24 | 6.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Celtis reticulata | 36 | 8.0-10.0 | 5.0-6.0 | 1.5-2.0 |
| Cercidium Hybrids | 15 | 4.0-5.0 | 2.0-3.0 | 0.75-1.0 |
| Cercidium Hybrids | 24 | 5.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Cercidium Hybrids | 36 | 8.0-10.0 | 5.0-7.0 | 1.75-2.25 |
| Cercidium Hybrids | 48 | 10.0-14.0 | 8.0-10.0 | 3.0-4.0 |
| Cercidium floridum (Parkinsonia) | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Cercidium floridum | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Cercidium floridum | 36 | 8.0-10.0 | 5.0-6.0 | 1.75-2.25 |
| Cercidium floridum | 48 | 10.0-12.0 | 8.0-10.0 | 2.75-3.75 |
| Cercidium microphyllum (Parkinsonia) | 15 | 2.0-3.0 | 2.0-3.0 | 0.5-0.75 |
| Cercidium microphyllum | 24 | 3.0-5.0 | 3.0-4.0 | 0.75-1.25 |
| Cercidium microphyllum | 36 | 5.0-8.0 | 4.0-5.0 | 1.5-2.0 |
| Cercidium praecox (Parkinsonia) | 15 | 4.0-5.0 | 1.5-2.5 | 0.5-1.0 |
| Cercidium praecox | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Cercidium praecox | 36 | 8.0-9.0 | 6.0-7.0 | 1.75-2.25 |
| Cercidium praecox | 48 | 10.0-12.0 | 10.0-12.0 | 3.0-4.0 |
| Ceris reniformis 'Oklahoma' | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| Ceris reniformis 'Oklahoma' | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |

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|----------------------------------------|----|-----------|---------|-----------|
| <i>Ceris reniformis</i> 'Oklahoma' | 36 | 7.0-8.0 | 4.0-5.0 | 1.5-2.0 |
| <i>Chamaerops humilis</i> | 15 | 1.5-2.0 | 1.5-2.0 | n/a |
| <i>Chamaerops humilis</i> | 24 | 2.0-3.0 | 2.0-3.0 | n/a |
| <i>Chamaerops humilis</i> | 36 | 5.0-6.0 | 5.0-6.0 | n/a |
| <i>Chilopsis linearis</i> (v. hybrids) | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-1.0 |
| <i>Chilopsis linearis</i> | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| <i>Chilopsis linearis</i> | 36 | 8.0-10.0 | 5.0-7.0 | 1.75-2.25 |
| <i>Chitalpa</i> | 15 | 4.0-5.0 | 2.0-3.0 | 0.75-1.0 |
| <i>Chitalpa</i> | 24 | 6.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| <i>Chitalpa</i> | 36 | 8.0-10.0 | 5.0-7.0 | 2.0-2.5 |
| <i>Cupressus arizonica</i> | 15 | 5.0-6.0 | 1.5-2.0 | 0.5-0.75 |
| <i>Cupressus arizonica</i> | 24 | 6.0-7.0 | 2.0-3.0 | 0.75-1.25 |
| <i>Cupressus arizonica</i> | 36 | 7.0-8.0 | 5.0-6.0 | 1.75-2.25 |
| <i>Dalbergia sissoo</i> | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| <i>Dalbergia sissoo</i> | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| <i>Dalbergia sissoo</i> | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.25 |
| <i>Dalbergia sissoo</i> | 48 | 13.0-15.0 | 7.0-8.0 | 2.75-3.25 |
| <i>Ebenopsis ebano</i> | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| <i>Ebenopsis ebano</i> | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| <i>Ebenopsis ebano</i> | 36 | 7.0-9.0 | 5.0-6.0 | 0.75-2.25 |
| <i>Ebenopsis ebano</i> | 48 | 9.0-11.0 | 7.0-8.0 | 3.0-3.5 |
| <i>Eucalyptus microtheca</i> | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-1.0 |
| <i>Eucalyptus microtheca</i> | 24 | 8.0-10.0 | 3.0-4.0 | 1.0-1.50 |
| <i>Eucalyptus microtheca</i> | 36 | 10.0-12.0 | 5.0-6.0 | 1.75-2.25 |
| <i>Eucalyptus rudis</i> | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-1.0 |
| <i>Eucalyptus rudis</i> | 24 | 7.0-9.0 | 3.0-4.0 | 1.25-1.5 |
| <i>Eucalyptus torquata</i> | 15 | 5.0-6.0 | 2.0-3.0 | 0.5-1.0 |
| <i>Eucalyptus torquata</i> | 24 | 7.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| <i>Ficus nitida</i> | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| <i>Ficus nitida</i> | 24 | 8.0-9.0 | 3.0-4.0 | 1.0- 1.5 |
| <i>Ficus nitida</i> | 36 | 10.0-12.0 | 5.0-6.0 | 2.0- 2.5 |
| <i>Ficus nitida</i> | 48 | 13.0-15.0 | 8.0-9.0 | 2.75-3.50 |
| <i>Fraxinus v. Fanwest</i> | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |

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|-----------------------|----|-----------|----------|-----------|
| Fraxinus v. Fanwest | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Fraxinus v. Fanwest | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.5 |
| Fraxinus v. Fanwest | 48 | 12.0-14.0 | 7.0-9.0 | 2.75-3.5 |
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| Fraxinus o. raywoodii | 15 | 6.0-7.0 | 1.5-2.0 | 0.5-1.0 |
| Fraxinus o. raywoodii | 24 | 8.0-9.0 | 2.0-3.0 | 1.0-1.5 |
| Fraxinus o. raywoodii | 36 | 9.0-10.0 | 4.0-5.0 | 1.75-2.5 |
| Fraxinus o. raywoodii | 48 | 12.0-14.0 | 6.0-7.0 | 2.75-3.5 |
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| Fraxinus uhdei | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Fraxinus uhdei | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Fraxinus uhdei | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.5 |
| Fraxinus uhdei | 48 | 12.0-14.0 | 7.0-9.0 | 2.75-3.5 |
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| Fraxinus velutina | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Fraxinus velutina | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Fraxinus velutina | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.5 |
| Fraxinus velutina | 48 | 12.0-14.0 | 7.0-9.0 | 2.75-3.5 |
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| Fraxinus v. fantex | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Fraxinus v. fantex | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Fraxinus v. fantex | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.5 |
| Fraxinus v. fantex | 48 | 12.0-14.0 | 7.0-9.0 | 2.75-3.5 |
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| Fraxinus v. modesto | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Fraxinus v. modesto | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Fraxinus v. modesto | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.5 |
| Fraxinus v. modesto | 48 | 12.0-14.0 | 7.0-9.0 | 2.75-3.5 |
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| Geijera parviflora | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Geijera parviflora | 24 | 6.0-7.0 | 3.0-4.0 | 1.0-1.25 |
| <hr/> | | | | |
| Harvardia pallens | 15 | 5.0-6.0 | 2.0-3.0 | 0.5-1.0 |
| Harvardia pallens | 24 | 6.0-8.0 | 3.0-4.0 | 1.25-1.75 |
| Harvardia pallens | 36 | 9.0-10.0 | 5.0-7.0 | 1.75-2.5 |
| Harvardia pallens | 48 | 12.0-14.0 | 8.0-10.0 | 3.0-4.0 |
| <hr/> | | | | |
| Jacaranda mimosifolia | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| Jacaranda mimosifolia | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Jacaranda mimosifolia | 36 | 10.0-12.0 | 5.0-6.0 | 1.75-2.25 |
| Jacaranda mimosifolia | 48 | 13.0-15.0 | 7.0-8.0 | 2.75-3.5 |
| <hr/> | | | | |
| Lysiloma thornberi | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Lysiloma thornberi | 24 | 5.0-6.0 | 3.0-4.0 | 0.75-1.25 |
| Lysiloma thornberi | 36 | 7.0-8.0 | 5.0-6.0 | 1.5-2.0 |

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| Nerium oleander | 15 | 6.0-7.0 | 1.5-2.0 | 0.5-0.75 |
| Nerium oleander | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Nerium oleander | 36 | 9.0-11.0 | 5.0-6.0 | 1.75-2.25 |
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| Pinus canariensis | 15 | 5.0-6.0 | 1.5-2.0 | 0.75-1.0 |
| Pinus canariensis | 24 | 7.0-8.0 | 3.0-4.0 | 1.5-2.0 |
| Pinus canariensis | 36 | 9.0-11.0 | 5.0-6.0 | 2.0-3.0 |
| Pinus canariensis | 48 | 12.0-15.0 | 6.0-8.0 | 4.0-5.0 |
| <hr/> | | | | |
| Pinus eldarica | 15 | 5.0-6.0 | 2.0-3.0 | 1.0-1.5 |
| Pinus eldarica | 24 | 7.0-9.0 | 3.0-4.0 | 1.5-2.5 |
| Pinus eldarica | 36 | 10.0-12.0 | 5.0-7.0 | 3.0-4.0 |
| Pinus eldarica | 48 | 15.0-17.0 | 9.0-10.0 | 5.0-6.0 |
| <hr/> | | | | |
| Pinus halepensis | 15 | 5.0-6.0 | 2.0-3.0 | 0.75-1.0 |
| Pinus halepensis | 24 | 7.0-9.0 | 3.0-4.0 | 1.5-2.0 |
| Pinus halepensis | 36 | 9.0-11.0 | 7.0-8.0 | 2.75-3.5 |
| Pinus halepensis | 48 | 14.0-16.0 | 9.0-11.0 | 4.0-5.0 |
| <hr/> | | | | |
| Pistacia chinensis | 15 | 6.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Pistacia chinensis | 24 | 7.0-9.0 | 2.5-3.5 | 1.0-1.5 |
| Pistacia chinensis | 36 | 12.0-14.0 | 6.0-8.0 | 3.0-4.0 |
| <hr/> | | | | |
| Pistacia lentiscus | 15 | 6.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Pistacia lentiscus | 24 | 7.0-9.0 | 2.5-3.5 | 1.0-1.5 |
| Pistacia lentiscus | 36 | 9.0-11.0 | 4.0-5.0 | 1.75-2.25 |
| Pistacia lentiscus | 48 | 12.0-14.0 | 6.0-8.0 | 3.0-4.0 |
| <hr/> | | | | |
| Pistacia x Red Push | 15 | 6.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Pistacia x Red Push | 24 | 7.0-9.0 | 2.5-3.5 | 1.0-1.5 |
| Pistacia x Red Push | 36 | 9.0-11.0 | 4.0-5.0 | 1.75-2.25 |
| Pistacia x Red Push | 48 | 12.0-14.0 | 6.0-8.0 | 3.0-4.0 |
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| Pithecellobium flexicaule | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Pithecellobium flexicaule | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Pithecellobium flexicaule | 36 | 7.0-9.0 | 5.0-6.0 | 0.75-2.25 |
| Pithecellobium flexicaule | 48 | 9.0-11.0 | 7.0-8.0 | 3.0-3.5 |
| <hr/> | | | | |
| Platanus mexicana | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| Platanus mexicana | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Platanus mexicana | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.25 |
| Platanus mexicana | 48 | 13.0-15.0 | 7.0-8.0 | 2.75-3.25 |
| <hr/> | | | | |
| Platanus wrightii | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| Platanus wrightii | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |

| | | | | |
|------------------------------------------------|----|-----------|----------|-----------|
| Platanus wrightii | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.25 |
| Platanus wrightii | 48 | 13.0-15.0 | 7.0-8.0 | 2.75-3.25 |
| <hr/> | | | | |
| Prosopis velutina/juliflora | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Prosopis velutina/juliflora | 24 | 5.0-7.0 | 3.0-4.0 | 1.0-1.5 |
| Prosopis velutina/juliflora | 36 | 8.0-10.0 | 5.0-6.0 | 1.75-2.5 |
| Prosopis velutina/juliflora | 48 | 10.0-14.0 | 7.0-9.0 | 2.75-3.5 |
| <hr/> | | | | |
| Prosopis hybrid (<i>thornless varieties</i>) | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Prosopis hybrid (<i>thornless varieties</i>) | 24 | 5.0-7.0 | 6.0-7.0 | 1.25-1.5 |
| Prosopis hybrid (<i>thornless varieties</i>) | 36 | 8.0-10.0 | 7.0-8.0 | 1.75-2.5 |
| Prosopis hybrid (<i>thornless varieties</i>) | 48 | 10.0-14.0 | 9.0-11.0 | 2.75-3.5 |
| <hr/> | | | | |
| Prosopis glandulosa | 15 | 4.0-5.0 | 2.0-3.0 | 0.5-0.75 |
| Prosopis glandulosa | 24 | 5.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Prosopis glandulosa | 36 | 8.0-10.0 | 6.0-8.0 | 1.75-2.25 |
| Prosopis glandulosa | 48 | 10.0-12.0 | 8.0-10.0 | 2.5-3.5 |
| <hr/> | | | | |
| Prunus varieties | 15 | 5.0-6.0 | 2.0-2.5 | 0.5-0.75 |
| Prunus varieties | 24 | 6.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Prunus varieties | 36 | 8.0-10.0 | 4.0-6.0 | 2.0-2.5 |
| <hr/> | | | | |
| Pyrus calleryana | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Pyrus calleryana | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Pyrus calleryana | 36 | 10.0-12.0 | 6.0-8.0 | 2.0-2.5 |
| <hr/> | | | | |
| Pyrus kawakami | 15 | 6.0-7.0 | 1.5-2.0 | 0.75-1.0 |
| Pyrus kawakami | 24 | 8.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Pyrus kawakami | 36 | 10.0-12.0 | 6.0-8.0 | 2.0-2.5 |
| <hr/> | | | | |
| Quercus buckleyi (syn. Texana) | 15 | 5.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Quercus buckleyi (syn. Texana) | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Quercus buckleyi (syn. Texana) | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.5 |
| Quercus buckleyi (syn. Texana) | 48 | 13.0-15.0 | 7.0-9.0 | 2.75-4.0 |
| <hr/> | | | | |
| Quercus muhlenbergii | 15 | 5.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Quercus muhlenbergii | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Quercus muhlenbergii | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.5 |
| Quercus muhlenbergii | 48 | 13.0-15.0 | 7.0-9.0 | 2.75-4.0 |
| <hr/> | | | | |
| Quercus polymorpha | 15 | 5.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Quercus polymorpha | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Quercus polymorpha | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.5 |
| Quercus polymorpha | 48 | 13.0-15.0 | 7.0-9.0 | 2.75-4.0 |

| | | | | |
|-------------------------|----|-----------|----------|-----------|
| Quercus virginiana | 15 | 5.0-7.0 | 1.5-2.5 | 0.5-0.75 |
| Quercus vifginiana | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Quercus virginiana | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.5 |
| Quercus virginiana | 48 | 13.0-15.0 | 7.0-9.0 | 2.75-4.0 |
| <hr/> | | | | |
| Schinus molle | 15 | 4.0-6.0 | 2.0-3.0 | 0.5-0.75 |
| Schinus molle | 24 | 6.0-8.0 | 4.0-5.0 | 1.25-1.5 |
| Schinus molle | 36 | 9.0-11.0 | 6.0-8.0 | 1.75-2.25 |
| <hr/> | | | | |
| Schinus terebinthifolia | 15 | 6.0-8.0 | 2.0-3.0 | 0.5-1.0 |
| Schinus terebinthifolia | 24 | 8.0-10.0 | 3.0-4.0 | 1.25 -1.5 |
| Schinus terebinthifolia | 36 | 10.0-12.0 | 5.0-7.0 | 1.75-2.25 |
| <hr/> | | | | |
| Sophora secundiflora | 15 | 2.0-3.0 | 1.0-2.0 | 0.5-0.75 |
| Sophora secundiflora | 24 | 3.0-4.0 | 2.0-3.0 | 0.75-1.0 |
| Sophora secundiflora | 36 | 5.0-6.0 | 3.0-4.0 | 1.25-2.0 |
| <hr/> | | | | |
| Tipuana tipu | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| Tipuana tipu | 24 | 7.0-8.0 | 3.0-4.0 | 1.0-1.5 |
| Tipuana tipu | 36 | 9.0-11.0 | 5.0-7.0 | 1.75-2.25 |
| <hr/> | | | | |
| Thevetia peruviana | 15 | 6.0-7.0 | 2.0-3.0 | 0.50-1.0 |
| Thevetia peruviana | 24 | 7.0-9.0 | 4.0-5.0 | 1.0-1.5 |
| <hr/> | | | | |
| Ulmus parvifolia | 15 | 6.0-7.0 | 2.0-3.0 | 0.5-0.75 |
| Ulmus parvifolia | 24 | 7.0-9.0 | 3.0-4.0 | 1.0-1.5 |
| Ulmus parvifolia | 36 | 10.0-12.0 | 6.0-8.0 | 1.75-2.5 |
| Ulmus parvifolia | 48 | 13.0-15.0 | 8.0-10.0 | 2.5-3.5 |

MULTIPLE TRUNK TREE SPECIFICATIONS

| | | | | |
|------------------------------------------------------------|----|-----------|----------|--|
| Acacia smallii M (<i>Also for minuta and farmesiana</i>) | 15 | 4.0-5.0 | 2.0-3.0 | |
| Acacia smallii M | 24 | 6.0-7.0 | 4.0-5.0 | |
| Acacia smallii M | 36 | 8.0-10.0 | 6.0-8.0 | |
| Acacia smallii M | 48 | 12.0-14.0 | 8.0-10.0 | |
| <hr/> | | | | |
| Albizia julibrissin M | 15 | 5.0-6.0 | 2.0-3.0 | |
| Albizia julibrissin M | 24 | 6.0-7.0 | 4.0-5.0 | |
| Albizia julibrissin M | 36 | 8.0-9.0 | 5.0-6.0 | |
| <hr/> | | | | |
| Bauhinia HongKong M | 15 | 5.0-6.0 | 2.0-3.0 | |
| Bauhinia HongKong M | 24 | 6.0-8.0 | 3.0-4.0 | |

| | | | |
|----------------------------------------|----|-----------|-----------|
| Bauhinia HongKong M | 36 | 8.0-10.0 | 5.0-7.0 |
| Bauhinia lunarioides M | 15 | 3.0-4.0 | 1.5-2.0 |
| Bauhinia lunarioides M | 24 | 4.0-5.0 | 3.0-4.0 |
| Bauhinia purpurea M | 15 | 5.0-6.0 | 2.0-3.0 |
| Bauhinia purpurea M | 24 | 6.0-8.0 | 3.0-4.0 |
| Bauhinia purpurea M | 36 | 8.0-10.0 | 5.0-7.0 |
| Caesalpinia mexicana M | 15 | 4.0-5.0 | 2.0-3.0 |
| Caesalpinia mexicana M | 24 | 5.0-7.0 | 3.0-4.0 |
| Caesalpinia mexicana M | 36 | 7.0-8.0 | 4.0-5.0 |
| Caesalpinia cacalaco M | 15 | 4.0-5.0 | 2.0-3.0 |
| Caesalpinia cacalaco M | 24 | 5.0-7.0 | 3.0-4.0 |
| Caesalpinia cacalaco M | 36 | 8.0-10.0 | 5.0-6.0 |
| Caesalpinia paraguariensis M | 15 | 4.0-5.0 | 2.0-3.0 |
| Caesalpinia paraguariensis M | 24 | 5.0-7.0 | 3.0-4.0 |
| Caesalpinia paraguariensis M | 36 | 8.0-10.0 | 5.0-6.0 |
| Cercidium Hybrids M (Parkinsonia) | 15 | 4.0-5.0 | 2.0-3.0 |
| Cercidium Hybrids M | 24 | 5.0-8.0 | 3.0-4.0 |
| Cercidium Hybrids M | 36 | 8.0-10.0 | 5.0-7.0 |
| Cercidium Hybrids M | 48 | 10.0-14.0 | 8.0-10.0 |
| Cercidium floridum M (Parkinsonia) | 15 | 3.0-4.0 | 2.0-3.0 |
| Cercidium floridum M | 24 | 5.0-7.0 | 3.0-4.0 |
| Cercidium floridum M | 36 | 7.0-9.0 | 6.0-8.0 |
| Cercidium floridum M | 48 | 10.0-13.0 | 10.0-12.0 |
| Cercidium microphyllum M (Parkinsonia) | 15 | 2.0-3.0 | 2.0-3.0 |
| Cercidium microphyllum M | 24 | 3.0-5.0 | 3.0-4.0 |
| Cercidium microphyllum M | 36 | 5.0-8.0 | 4.0-5.0 |
| Cercidium praecox M | 15 | 4.0-5.0 | 1.5-2.5 |
| Cercidium praecox M | 24 | 5.0-7.0 | 3.0-4.0 |
| Cercidium praecox M | 36 | 8.0-9.0 | 6.0-7.0 |
| Cercidium praecox M | 48 | 10.0-12.0 | 8.0-10.0 |
| Chilopsis linearis M (v. hybrids) | 15 | 4.0-5.0 | 2.0-3.0 |
| Chilopsis linearis M | 24 | 5.0-7.0 | 3.0-4.0 |
| Chilopsis linearis M | 36 | 7.0-9.0 | 5.0-7.0 |

| | | | |
|-------------------------------|----|-----------|----------|
| Chitalpa M | 15 | 4.0-5.0 | 2.0-3.0 |
| Chitalpa M | 24 | 6.0-7.0 | 3.0-4.0 |
| Chitalpa M | 36 | 8.0-10.0 | 5.0-7.0 |
| <hr/> | | | |
| Ficus nitida M | 15 | 5.0-6.0 | 2.0-3.0 |
| Ficus nitida M | 24 | 7.0-8.0 | 3.0-4.0 |
| Ficus nitida M | 36 | 9.0-11.0 | 6.0-7.0 |
| Ficus nitida M | 48 | 12.0-14.0 | 8.0-9.0 |
| <hr/> | | | |
| Jacaranda acutifolia M | 15 | 5.0-6.0 | 2.0-3.0 |
| Jacaranda acutifolia M | 24 | 6.0-8.0 | 3.0-4.0 |
| Jacaranda acutifolia M | 36 | 9.0-11.0 | 6.0-7.0 |
| Jacaranda acutifolia M | 48 | 13.0-15.0 | 8.0-10.0 |
| <hr/> | | | |
| Lysiloma thornberi M | 15 | 4.0-5.0 | 2.0-3.0 |
| Lysiloma thornberi M | 24 | 5.0-6.0 | 3.0-4.0 |
| Lysiloma thornberi M | 36 | 7.0-8.0 | 5.0-6.0 |
| <hr/> | | | |
| Olea europaea hybrids M | 15 | 4.0-5.0 | 2.0-3.0 |
| Olea europaea hybrids M | 24 | 6.0-8.0 | 3.0-5.0 |
| Olea europaea hybrids M | 36 | 8.0-10.0 | 5.0-7.0 |
| Olea europaea hybrids M | 48 | 10.0-12.0 | 8.0-10.0 |
| <hr/> | | | |
| Olneya tesota M | 15 | 2.5-3.5 | 2.0-3.0 |
| Olneya tesota M | 24 | 4.0-6.0 | 2.5-3.5 |
| Olneya tesota M | 36 | 7.0-8.0 | 5.0-6.0 |
| Olneya tesota M | 48 | 8.0-10.0 | 7.0-9.0 |
| <hr/> | | | |
| Pistacia Lentiscus M | 15 | 5.0-6.0 | 1.5-2.0 |
| Pistacia Lentiscus M | 24 | 6.0-7.0 | 2.0-3.0 |
| Pistacia Lentiscus M | 36 | 7.0-8.0 | 5.0-6.0 |
| <hr/> | | | |
| Pithecellubium flexicaule M | 15 | 3.0-4.0 | 2.0-3.0 |
| Pithecellubium flexicaule M | 24 | 4.0-6.0 | 3.0-4.0 |
| Pithecellubium flexicaule M | 36 | 7.0-9.0 | 5.0-6.0 |
| Pithecellubium flexicaule M | 48 | 9.0-11.0 | 7.0-9.0 |
| <hr/> | | | |
| Prosopis velutina/juliflora M | 15 | 4.0-5.0 | 2.0-3.0 |
| Prosopis velutina/juliflora M | 24 | 5.0-6.5 | 3.0-4.0 |
| Prosopis velutina/juliflora M | 36 | 8.0-10.0 | 5.0-7.0 |
| Prosopis velutina/juliflora M | 48 | 10.0-13.0 | 7.0-9.0 |
| <hr/> | | | |
| Prosopis hybrid M | 15 | 4.0-5.0 | 2.0-3.0 |
| Prosopis hybrid M | 24 | 5.0-7.0 | 4.0-6.0 |
| Prosopis hybrid M | 36 | 8.0-10.0 | 6.0-8.0 |
| Prosopis hybrid M | 48 | 10.0-12.0 | 9.0-11.0 |

| | | | |
|-----------------------|----|-----------|----------|
| Prosopis glandulosa M | 15 | 4.0-5.0 | 2.0-3.0 |
| Prosopis glandulosa M | 24 | 5.0-8.0 | 3.0-4.0 |
| Prosopis glandulosa M | 36 | 8.0-10.0 | 5.0-6.0 |
| Prosopis glandulosa M | 48 | 10.0-12.0 | 9.0-11.0 |

| | | | |
|------------------------|----|---------|---------|
| Sophora secundiflora M | 15 | 1.5-2.5 | 1.0-2.0 |
| Sophora secundiflora M | 24 | 2.5-4.0 | 2.0-3.0 |
| Sophora secundiflora M | 36 | 5.0-6.0 | 3.0-4.0 |

| | | | |
|----------------------|----|---------|---------|
| Thevetia peruviana M | 15 | 4.0-5.0 | 2.0-3.0 |
| Thevetia peruviana M | 24 | 5.0-7.0 | 3.0-4.0 |

| | | | |
|----------------------|----|---------|---------|
| Vitex angus-castus M | 15 | 4.0-5.0 | 2.0-3.0 |
| Vitex angus-castus M | 24 | 5.0-7.0 | 3.0-4.0 |
| Vitex angus-castus M | 36 | 7.0-9.0 | 5.0-7.0 |

FOR FURTHER INFORMATION
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 or email info@azna.org
