

TRANSMITTAL OF RULES ADOPTED

FROM: Department of Agriculture
(Name of Agency)

TO: CODE REVISER
LEGISLATIVE BLDG (Southwest Corner, Ground Floor)
Olympia 98501

The enclosed Permanent rules , being order No. 1085
Emergency rules

relating to (Name of rules or description of subject matter)

Ornamental Deciduous Plants, Nursery Stock Standards

(ALTERNATIVE A. Use only for adoption of permanent rules)

pursuant to Notice No. 2014 ^① filed with the code reviser
on 3-19-68 ^② were regularly adopted as permanent rules of this
(date)
agency at Olympia on 4-17-68 and are herewith
(place) (date)
filed in the office of the code reviser pursuant to chapter 34.04
RCW. The effective date of such rules shall be 5-17-68 ^③

(ALTERNATIVE B. Use only for adoption of emergency rules)

pursuant to its finding that the immediate adoption of
these rules is necessary for the preservation of the public
health, safety, or general welfare and that observance of the
requirements of notice and opportunity to present views on
the proposed action would be contrary to the public interest,
were regularly adopted as emergency rules of this agency at
_____ on _____ and are herewith filed in
(place) (date)
the office of the code reviser pursuant to chapter 34.04 RCW.

Dated this 17th day of April 19 68
STATE OF WASHINGTON
FILED
APR 17 1968
CODE REVISER'S OFFICE
DOCKET # 2021 FILE # 19
Department of Agriculture
(AGENCY)
By *Donald W. Moos*
Donald W. Moos
Title Director

① NOTICE NUMBER AS APPEARS ON THE COPY OF NOTICE RETURNED TO YOU BY RE-
VISER'S OFFICE (IF PROCEEDINGS WERE CONTINUED, USE NO. OF LAST NOTICE)
② STAMPED DATE AS APPEARS ON THE COPY OF NOTICE RETURNED TO YOU BY RE-
VISER'S OFFICE (IF PROCEEDINGS WERE CONTINUED, USE DATE OF LAST NOTICE)
③ UNLESS A LATER DATE IS SPECIFIED IN THIS ORDER OR IS PRESCRIBED
IN ANOTHER STATUTE, RULES ARE EFFECTIVE 30 DAYS AFTER FILING:
RCW 34.04.040. LEAVE THIS SPACE BLANK EXCEPT IN SUCH SPECIAL CASES.

Chapter 16-427

ORNAMENTAL DECIDUOUS PLANTS, NURSERY STOCK STANDARDS

WAC 16-427-010 GRADES AND TOLERANCE. (1) Washington Grade No. 1 shall consist of live ornamental deciduous plants, which are vigorous, well developed, well formed, with well developed root systems, free from dead branches, lichens and free from damage caused by freezing, heat, cold, mechanical or other means. (See size and marking requirements.)

In order to allow for variations incident to proper grading and handling not more than five per cent (5%), by count, of any lot may be below the requirements of the grade.

(2) Shrubs. The growing of plant material cannot be rigidly standardized because of varying conditions of growth and methods of handling preferred or necessitated by climate, soil, and other conditions beyond the control of the grower. Judgment should therefore be exercised and allowances made in the above schedules to agree with definitions which are recognized by the trade as typical of acceptable plants in that region.

Quality definition which admits that a plant grown with fewer number of canes, yet well shaped and bushy and with sufficient side branching to give it weight equal to one with numerous canes should be equally acceptable. In any case, plants of a given grade shall average as in the following examples.

Grade of Plant	1½-2 ft.	2-3 ft.	3-4 ft.	4-5 ft.	etc.
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Average of Lot	21 in.	2½ ft.	3½ ft.	4½ ft.	
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The recommended grades apply to plants grown under average soil and climatic conditions, which have been transplanted, root pruned and trimmed according to regular nursery practice. Judgment must be exercised in interpreting and adapting these general classifications to any particular species or variety and consideration given to the normal growth habit under conditions peculiar to the region.

(3) Trees. The growing of plant material cannot be rigidly standardized because of varying conditions of growth and methods of handling preferred or necessitated by climate, soil, and other conditions beyond the control of the grower. Judgment should therefore be exercised and allowances made in the above schedules to agree with definitions which are recognized by the trade as typical of acceptable plants in that region.

Where a minimum and maximum size, or size range is specified, an average size is required.

WAC 16-427-020 SIZE TERMS. (Shrubs) (1) Height Measurement. Dwarf and Semi-dwarf shrubs: State height in inches up to 24 inches; usually in 3-inch series; examples: 3-6 in.; 6-9 in. Larger than 24 inches state height in feet with ½ foot series; examples: 2 to 2½ ft.; 2½ to 3 ft.

Strong Growing Shrubs: Grade in a 6-inch series up to 24 inches; example: 12-18 in.; over 24 inches by single feet up to 6 feet; then in double feet above 6 feet; example: 8-10 ft.

(2) Root Spread - Bare Root Nursery Grown. Roots of deciduous shrubs shall be well branched and fibrous, and bare root shrubs shall have minimum root spreads as follows:

		<u>Up to</u>				
Size of Plant	-	18-24 in.	2-3 ft.	3-4 ft.	4-5 ft.	5-6 ft.
Min. Root Spread	-	10 in.	11 in.	14 in.	16 in.	18 in.

6-8 ft.
20 in.

(3) Root Spread - Bare Root Collected. Shrubs collected from native stands or established plantings must be so designated. The spread of roots, bare root collected, shall be 1/3

greater than the spread of roots of nursery grown shrubs as tabulated above.

(a) Type 1.- Shrubs: Dwarf and Semi-Dwarf

- 12-15 in. shrubs should have not less than 4 canes, 12 in. & up
15-18 in. shrubs should have not less than 4 canes, 15 in. & up
18-24 in. shrubs should have not less than 5 canes, 18 in. & up
2-2½ ft. shrubs should have not less than 6 canes, 2 ft. & up
2½-3 ft. shrubs should have not less than 7 canes, 2½ ft. & up

Examples:

Berberis thunbergii minor
Chaenomeles maulei
Deutzia gracilis, *gracilis rosea*, *lemoinei*
Gaylussacia (dwarf types)
Hypericum frondosum, *densiflorum*, *kalmianum*
Philadelphus coronarius aureus
Potentilla fruticosa
Ribes aopinum
Rosa rugosa
Rosa virginiana, *nitida*
Spiraea Anthony Waterer, *japonica fortunei*, *japonica ovalifolia*

(b) Type 2.

- 1½-2 ft. shrubs should have not less than 3 canes, 1½ ft. & up
2-3 ft. shrubs should have not less than 4 canes, 2 ft. & up
3-4 ft. shrubs should have not less than 5 canes, 3 ft. & up
4-5 ft. shrubs should have not less than 6 canes, 4 ft. & up

Examples:

Azalea (deciduous species)
Callicarpa dichotoma
Cephalanthus occidentalis
Cornus alba, *sibirica*, *racemosa*, *stolonifera*
Deutzia tall growing varieties
Diervilla sessilifolia
Itea virginica
Kolkwitzia
Lespedeza thunbergii
Ligustrum amurense, *ibolium*, *ibota*, *vulgare*
Philadelphus lemoinei
Rhodotypes scandens
Rosa multiflora, *setigera*
Spiraea, tall growing varieties
Stephanandra incisa
Weigela Eva Rathke

(c) Type 3.

- 1½-2 ft. shrubs should have not less than 3 canes, 1½ ft. & up
2-3 ft. shrubs should have not less than 3 canes, 2 ft. & up
3-4 ft. shrubs should have not less than 4 canes, 3 ft. & up
4-5 ft. shrubs should have not less than 5 canes, 4 ft. & up

Examples:

<i>Acanthopanax sieboldianus</i>	<i>Hamamelis</i>
<i>Alnus rugosa</i>	<i>Hibiscus</i> , bush form
<i>Amelanchier</i>	<i>Hydrangea arborescens</i>
<i>Aronia arbutifolia</i> , <i>melanocarpa</i>	<i>grandiflora</i> Snowhill
<i>Calycanthus floridus</i>	<i>Hydrangea paniculata</i>
<i>Chaenomeles lagenaria</i>	<i>grandiflora</i> (Peegee H)
<i>Clethra alnifolia</i>	<i>Ilex laevigata</i> , <i>verticillata</i>
<i>Cornus amomum</i>	
<i>Cornus sanguinea</i>	<i>Kerria japonica</i> (single and double)
<i>Corylus americana</i> , <i>avellana</i>	
<i>Cotoneaster acutifolia</i>	<i>Lonicera</i> , bush form
<i>Euonymus americanus</i>	<i>Myrica pensylvanica</i>
<i>Forsythia</i> , all varieties	

Philadelphus, all standard varieties
Prunus, triloba, bush form
Prunus amygdalus, cistena, cerasifera, bush form
Rhamnus cathartica, frangula
Rhus canadensis
Rosa blanda
Sambucus canadensis cutleaf, Golden; nigra, Golden, variegated forms
Sorbaria aitchisoni, arborea, sorbifolia
Symphoricarpos chenaulti, mollis, occidentalis, albus, orbiculatus
Syringa chinensis, amurensis, japonica, josikaea, persica, villosa
Vaccinium corymbosum, stamineum
Viburnum cassinoides, dentatum, lantana, molle, opulus, plicatum, tomentosum, t. sterile, trilobum
Vitex macrophylla
Weigela floribunda, florida, florida variegata

(d) Type 4.

1½-2 ft. shrubs should have not less than 2 canes, 1½ ft. & up
2-3 ft. shrubs should have not less than 2 canes, 2 ft. & up
3-4 ft. shrubs should have not less than 3 canes, 3 ft. & up
4-5 ft. shrubs should have not less than 4 canes, 4 ft. & up

Examples:

Amorpha fruticosa	Exochorda racemosa
Baccharis halimifolia	Halesia carolina
Caragana arborescens	Lespedeza bicolor
Chionanthus virginica	Lindera benzoin
Colutea arborescens	Rhamnus cathartica,
Cotinus americanus, coggygia	frangula
Cornus alternifolia, mas	Rubus odoratus
Elaeagnus angustifolia, commutata, unbellata	Sambucus pubens
Euonymus alatus, atropurpureus, bungeanus, europaeus, yedoensis	Syringa vulgaris, vulgaris alba
	Tamarix
	Viburnum lentago, prunifolium

(e) Type 5.

1½-2 ft. shrubs with 1 or more canes 1½ ft. and up in height
5/16 in. cal.
2-3 ft. shrubs with 1 or more canes 2 ft. and up in height
3/8 in. cal.
3-4 ft. shrubs with 1 or more canes 3 ft. and up in height
1/2 in. cal.
4-5 ft. shrubs with 1 or more canes 4 ft. and up in height
5/8 in. cal.
5-6 ft. shrubs with 1 or more canes 5 ft. and up in height
7/8 in. cal.

Examples:

Rhus copallina	typhina
glabra	typhina laciniata
glabra laciniata	

(f) Type 6 - Barberry

12-15 in. Berberis thunbergi, 3 canes or more, 12 in. and up
15-18 in. Berberis thunbergi, 3 canes or more, 15 in. and up
1½-2 ft. Berberis thunbergi, 4 canes or more, 1½ ft. and up
2-2½ ft. Berberis thunbergi, 4 canes or more, 2 ft. and up
2½-3 ft. Berberis thunbergi, 5 canes or more, 2½ ft. and up
3 ft. size Berberis thunbergi, 6 canes or more, 3 ft. and up

(g) Type 7. - Privet (Hedging)

1½-2 ft. Ligustrum in variety shall have 3 canes or more 1½ ft.
and up
2-3 ft. Ligustrum in variety shall have 4 canes or more 2 ft.
and up
3-4 ft. Ligustrum in variety shall have 5 canes or more 3 ft.
and up
4-5 ft. Ligustrum in variety shall have 6 canes or more 4 ft.
and up

Note: For other species see Type 2 and 3.

(Trees) (1) Height Measurement. Height shall be given in single foot units up to 6 ft.; example: 5-6 ft. Over 6 ft. height shall be given in double foot units; example, 6-8 ft., 12-14 ft.

(2) Height of Branching - Street Trees. Unless otherwise specified trees are to be suitable for planting as street trees and are to be free of branches to a point not more nor less than about 60% of their height. Height of branching should bear a relationship to the size and kind of tree also so that the crown of the tree will be in good balance with the trunk as the tree grows.

Examples:

Acer platanoides, 2 to 2½ in. cal., 12 to 14 ft., branched 6 to 7 ft.

Quercus borealis maxima 3½ to 4 in. cal., 14 to 16 ft., branched 7 to 9 ft.

Branching height of trees 11 feet and up may exceed the 60% relationship by as much as one foot and the tree will still be in proper balance. Higher branching is often desired and may be specified on larger sized trees, those to be planted close to a pavement, and those kinds with descending branches. Trees with ascending branches (example - Ulmus americana and Tilia tomentosa) may be branched one foot or even more below the standard height and still provide proper clearance.

Trees may exceed the height range specified by no more than 2 feet, except for trees over 16 feet which may exceed the height range by 4 feet.

Examples:

Quercus palustris, 2 to 2½ in. cal., 12 to 14 ft., 16 ft. max.

Gleditsia triacanthos, 4 to 5 in. cal., 16 to 18 ft., 22 ft. max.

(3) Caliber Measurement. Caliber of the trunk shall be taken 6 inches above the ground level up to and including 4 inch caliber size and 12 inches above the ground level for larger sizes.

Caliber shall be the determining measurement in grading.

(4) Height Relationship to Caliber. Height measurement should be expressed as approved height range. The table in Type 1 shows the approved range and also the maximum heights permitted. The grades specified and minimum heights only, for general varieties.

(a) Type 1 - Standard Shade Trees

<u>Caliber</u>	<u>Height Range</u>	<u>Maximum Height</u>
5/8" to 3/4"	5' to 6'	8'
3/4" to 1 "	6' to 8'	10'
1 " to 1¼"	8' to 10'	12'
1¼ " to 1½"	10' to 12'	14'
1½ " to 2 "	12' to 14'	16'

Caliber should be taken 2" to 3" above bud collar.

Examples:

Acer negundo	*Fagus	Populus
Acer platanoides	Fraxinus	Quercus
Acer pseudoplatanus	Ginkgo biloba	*Quercus palustris
Acer rubrum	Gleditsia	*Salix
Acer Saccharinum	Liquidambar	Sophora
*Acer Saccharum	Liriodendron	Sorbus
Betula	Nyssa sylvatica	Tilia
*Betula lacinata	Platanus	Ulmus
Catalpa		Zelkova

*These trees may be graded in lighter caliber and 1' height intervals.

(b) Type 2 - Slower Growing Shade Trees. Trees of slower growth which will not usually attain the height measurement in relation to caliber as in Type 1. The height should, however, be not less than two-thirds the height relationship given for Type 1.

Examples:

Aesculus	Nyssa sylvatica
Betula	Ostrya virginica
Celtis occidentalis	Quercus alba, bicolor
Cladrastis lutea	Sorbus
Fagus grandifolia, sylvatica	Tilia cordata, euchlora, europaea
Gymnocladus dioica	
Liquidambar styraciflua	

(c) Type 3 - Small Upright and Flowering Trees. This is a broad group including small trees as well as "standard" forms of plants which may be grown as a clump or shrub. Height shall be the governing measurement. For single stem plants the minimum relationship of caliber and height will be as follows:

<u>Caliber</u>	<u>Height Range</u>
3/8" to 1/2"	3' to 4'
1/2" to 5/8"	4' to 5'
5/8" to 3/4"	5' to 6'
3/4" to 7/8"	6' to 7'
3/4" to 1"	6' to 8'
7/8" to 1"	7' to 8'

Caliber should be taken 2" to 3" above the bud or collar.

Examples:

Cercis canadensis	Malus (crabapple)
Cornus florida	Oxydendron
Crataegus (upright types)	Prunus persica
Koelruteria paniculata	Prunus Serrulata varieties
Laburnum	Prunus subhirtella varieties
Magnolia	

Many of the above trees classified as single stem or tree form may be grown with 2 or more stems. Such material should be listed and specified according to type.

(d) Type 4 - Small Spreading Trees. This is a broad group including small spreading trees of a dwarf habit of growth and certain large shrubs grown in tree or multiple stem form. For single stem plants the minimum relationship of caliber and branching will be as follows:

2 to 3 ft.,	5/16 in. caliber,	4 or more branches
3 to 4 ft.,	7/16 in. caliber,	5 or more branches
4 to 5 ft.,	9/16 in. caliber,	7 or more branches
5 to 6 ft.,	11/16 in. caliber,	8 or more branches
6 to 8 ft.,	7/8 in. caliber,	8 or more branches

Examples: Acer palmatum and varieties, Cercis chinensis, Crataegus crusgalli (and other spreading types), Magnolia stellata, Photinia villosa, Viburnum prunifolium.

(5) Spread of Roots - Bare Root Nursery Grown Trees. All bare root trees shall have a heavy fibrous root system which has been developed by proper cultural treatment, transplanting, root pruning, etc. The following table represents the approved minimum root spread for nursery grown shade trees.

	<u>Caliber</u>	<u>Height Range</u>	<u>Minimum Root Spread</u>
	1/2 to 3/4 in.	5 to 6 ft.	12 in.
	3/4 to 1 in.	6 to 8 ft.	16 in.
	1 to 1 1/4 in.	7 to 9 ft.	18 in.
	1 1/4 to 1 1/2 in.	8 to 10 ft.	20 in.
	1 1/2 to 1-3/4 in.	10 to 12 ft.	22 in.
1-3/4 to	2 in.	10 to 12 ft.	24 in.
	2 to 2 1/2 in.	12 to 14 ft.	28 in.
	2 1/2 to 3 in.	12 to 14 ft.	32 in.
	3 to 3 1/2 in.	14 to 16 ft.	38 in.

WAC 16-427-030 MARKING REQUIREMENTS. In addition to the statement of size all ornamental deciduous plants shall be plainly and legibly labeled with stamped, printed, typewritten or hand printed letters not less than 1/4 inch in height, as to variety and age.

All collected plants shall be labeled "collected" unless grown in the nursery for at least one year.

AMD WAC 16-427-040 DEFINITION OF TERMS. (1) General Definitions.

(a) "Deciduous plants" means plants which lose their leaves at the end of the growing season.

(b) "Damage" means any injury from causes mentioned which materially affect the appearance, or the shipping or growing quality of individual plants.

(c) "Dryness" means the drying out of the plant or roots.

(d) "Height" means the distance from ground line to the highest contour point on the main axis.

(2) Quality Definitions.

(a) Density, and condition of the shrub are more important qualities than the physical measurements of height, number of canes and root development. If a plant is well grown with single stem, well shaped and bushy and has sufficient well spaced side branches to give it weight and good bud qualities, it should be an acceptable plant.

(b) A cane shall be considered a primary stem which starts from the ground or close to the ground at a point not higher than one-fourth the height of the plant.

(c) Clumps indicate plants with at least double the number of canes required for standard material.

(3) Deciduous Trees for Other Uses.

(a) Trees for special uses should be branched or pruned naturally according to type. Where a form of growth is desired which is not in accordance with a natural growth habit, this form should be so specified. Examples:

(i) Bush form - trees which start to branch close to the ground in the manner of a shrub.

(ii) Clumps - trees with three or more main stems starting from the ground.

(iii) Cut back or Sheared - trees that have been pruned back so as to multiply the branching structure and to develop a more formal effect.

(iiii) Topiary - trees sheared or trimmed closely in a formal geometric pattern.

(iiiiii) Top Worked Trees - the height of stem and age of top should be specified.

AMD

WAC 16-427-050 COMPLIANCE WITH FEDERAL AND STATE LAW.

Ornamental deciduous plants regardless of certification as to grade must comply with the requirements and regulations of the U. S. Department of Agriculture, Agricultural Research Service, Plant Quarantine Division and state nursery laws.

NEW

WAC 16-427-060 COLLECTED PLANTS. Trees collected from

native stands or established plantings must be so designated. The spread of roots, bare root trees, shall be 1/3 greater than the spread of roots, bare root nursery grown.