

# Chapter 16-442 WAC

## WINTER PEARS

### WAC

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### DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

16-442-010	Introduction. [Order 322, effective 7/29/40.] Repealed by WSR 09-01-094, filed 12/16/08, effective 1/16/09. Statutory Authority: Chapter 15.17 RCW, RCW 15.17-030, and chapter 34.05 RCW.
16-442-090	Definitions of terms. [Order 610, effective 8/21/51; Order 322, effective 7/29/40.] Amended and decodified by WSR 09-01-094, filed 12/16/08, effective 1/16/09. Statutory Authority: Chapter 15.17 RCW, RCW 15.17-030, and chapter 34.05 RCW. Recodified as § 16-442-006.
16-442-130	Tolerances for standard pack. [Order 322, effective 7/29/40.] Repealed by WSR 09-01-094, filed 12/16/08, effective 1/16/09. Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW.
16-442-140	Box packs. [Order 322, effective 7/29/40.] Repealed by WSR 09-01-094, filed 12/16/08, effective 1/16/09. Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW.

**WAC 16-442-005 Purpose.** This chapter establishes standards for D'Anjou, Bosc, Winter Nellis and all other varieties of winter pears that are packed or marketed within the state of Washington.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-005, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-006 Definitions.** In addition to the definitions found in RCW 15.17.020, the following definitions apply to this chapter:

**"Aggregate area"** means areas under consideration on a pear's surface that may be combined into one circular area with a diameter equal to the maximum diameter specified for the particular blemish.

**"Black end"** means a blemish that is evidenced by an abnormally deep green color around the calyx; or black spots usually occurring on one-third of the surface nearest to the calyx; or by an abnormally shallow calyx cavity.

**"Carefully picked"** means the pears do not show evidence of rough handling or of having been on the ground.

**"Clean"** means a pear free from excessive dirt, dust, spray residue or other foreign material.

**"Department"** means the Washington state department of agriculture.

**"Director"** means the director of the department or the director's representative.

**"Ground color"** means green, light green, yellowish green, and yellow.

**"Hard end"** means the pear shows an abnormally yellow color at the blossom end; or has a smooth, rounded base with little or no depression at the calyx; or there is dry, tough or woody flesh near the calyx. Hard end pears are defects of all grades.

**"Lot"** means any number of containers of fresh winter pears offered as a unit for inspection, sale, or shipment.

**"Mature"** means the pear has reached the stage of maturity which will ensure the proper completion of the ripening process.

Before a mature pear becomes overripe, it will show varying degrees of firmness depending upon the stage of the ripening process. Therefore, a statement of firmness should be given in order to indicate the state of the ripening process. A description of the ground color should also be given.

The following terms should be used for describing the firmness of pears:

**"Hard"** means the flesh of the pear is solid and does not yield appreciably even to considerable pressure. Hard pears are in suitable condition for long storage periods for the variety.

**"Firm"** means the flesh of the pear is fairly solid but yields somewhat to moderate pressure. The ripening process in firm pears is further advanced than in hard pears and they cannot be held in storage as long. Winter varieties at the firm stage may be held longer than the early varieties.

**"Firm ripe"** means the flesh of the pear yields readily to moderate pressure. A firm ripe pear is approaching the stage at which it is in prime eating condition but may be held for a brief period, although winter varieties can be held longer than the early varieties.

**"Ripe"** means the pear is at the stage where it is in its most desirable condition for eating.

**"Overripe"** means the pear is dead ripe, very mealy, soft, and has no commercial value.

**"Shape."** The following terms define the shapes of winter pears:

**"Well formed"** means pear is considered well formed when its shape is characteristic of the variety. Pears with slight irregularities of shape that do not appreciably detract from the general appearance of the fruit are considered well formed.

**"Fairly well formed"** means a pear is considered fairly well formed when its shape is slightly abnormal, but not to an extent that it materially detracts from the appearance of the

fruit. Winter Nellis pears with characteristic slight sutures or with slight flattening on one side and/or slight irregularities that do not materially detract from the general appearance of the pear are considered fairly well formed.

**"Seriously misshapen"** means the pear is excessively flattened or elongated for the variety or constricted or deformed so that it cannot be cut into three fairly uniform good quarters or is so badly misshapen that the appearance is seriously affected.

**"Very seriously misshapen"** means the pear is excessively flattened or elongated for the variety or is constricted or deformed so that it cannot be cut into one good half or two fairly uniform quarters.

**"Size"** means the greatest transverse diameter of the pear taken at right angles to a line running from the stem to the blossom end.

**"Sound"** means pears, at the time of packing, are free from visible defects such as decay, breakdown, scald, bitter pit, or free from physical injury affecting keeping quality.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, amended and recodified as § 16-442-006, filed 12/16/08, effective 1/16/09; Order 610, effective 8/21/51; Order 322, effective 7/29/40.]

**WAC 16-442-008 Adoption of United States standards for winter pears.** (1) In addition to the standards contained in this chapter, the Washington state department of agriculture adopts the United States Department of Agriculture United States Standards for Grades of Winter Pears, 7 C.F.R. § 51.1300 et seq., effective September 10, 1955.

(2) The department maintains a copy of this document for public inspection. The standards may be found on the internet at: <http://www.ams.usda.gov/standards/pearswin.pdf>.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-008, filed 12/16/08, effective 1/16/09.]

**WAC 16-442-020 Washington extra fancy or U.S. extra No. 1.** Washington extra fancy or U.S. extra No. 1 are pears that are mature, but not overripe, carefully picked, clean, well formed, free from decay, internal breakdown, scald, freezing injury, worm holes, black end, hard end, and drought spot; and free from injury caused by russetting, limb rubs, hail, scars, cork spot, sunburn, sprayburn, stings or other insect injury, or injury from mechanical or other means. Washington extra fancy or U.S. extra No. 1 pears must be free from damage caused by bruises, broken skins, or disease.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-020, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-030 U.S. No. 1.** U.S. No. 1 are pears that are mature but not overripe, carefully picked, clean, fairly well formed, free from decay, internal breakdown, scald, freezing injury, worm holes, black end; and free from damage caused by hard end, bruises, broken skins, russetting, limb rubs, hail, scars, cork spot, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or damage from mechanical or other means.

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[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-030, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-040 Washington fancy or U.S. No. 2.** Washington fancy or U.S. No. 2 are pears that are mature but not overripe, carefully picked, clean, not seriously misshapen, free from decay, internal breakdown, scald, freezing injury, worm holes, black end; and free from damage caused by hard end, or broken skins. The pears must also be free from serious damage, caused by bruises, russetting, limb rubs, hail, scars, cork spot, drought spot, sunburn, sprayburn, stings or other insect injury, disease, or serious damage caused by mechanical or other means.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-040, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-050 Washington combination or U.S. combination grade.** A combination of U.S. No. 1 and U.S. No. 2 may be packed. When such a combination is packed, at least fifty percent of the pears in any container must meet the requirements of U.S. No. 1.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-050, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-060 Washington commercial.** A combination of extra fancy and fancy may be packed together as "Washington commercial grade" when at least fifty percent of the pears in any container meet the requirements of Washington extra fancy and the remainder meet the requirements of Washington fancy. Broken skins or skin punctures not to exceed three-sixteenths of an inch in diameter are not considered a defect for this grade.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-060, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-070 Washington third grade.** Washington third grade shall consist of pears that are mature, carefully picked, clean, sound, not very seriously misshapen, free from black end, free from damage caused by hard end, broken skins, and from serious damage caused by cork spot or bruises.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-070, filed 12/16/08, effective 1/16/09; This paragraph—Order 610, effective 8/21/51.]

**WAC 16-442-080 Culls.** Pears, which are not graded in conformity with the foregoing grades, must be designated as culls.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-080, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-082 Injury defects.** The following specific defects, or any combination of them when the combined seriousness exceeds the maximum allowed for any one defect, are considered injury to winter pears.

(1) **Russetting:** On any winter pear varieties, any amount of characteristic russetting is permitted, whether caused by

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natural or by artificial means. Leaf whips or light limb rubs that resemble and blend into russet areas are considered russet.

(a) **Slightly rough russetting or thick russetting** characteristic of frost injury is considered injury when the aggregate area exceeds one-half inch in diameter on Comice, Anjou, and other smooth-skinned varieties.

(b) **Smooth solid russetting** is considered injury when the aggregate area exceeds one-half inch in diameter on Anjou or other smooth-skinned varieties or when smooth netlike russetting exceeds fifteen percent of the pear's surface.

(c) **Smooth solid or smooth netlike russetting** is considered injury when the aggregate area exceeds one-third of the surface on Comice pears. On Anjou, Comice, and other smooth-skinned varieties, any amount of characteristic smooth russetting is permitted on the portion of the calyx end that is invisible for more than one-half inch along the contour of the pear when the pear is placed calyx end down on a flat surface.

(d) **Rough or thick russetting**, none allowed, except russetting characteristic of frost injury is considered damage when the aggregate area exceeds one-half inch in diameter for Bosc, Seckel, and other similar varieties.

(2) **Limb rubs** are considered injury when they are cracked or softened or more than very slightly depressed or not light in color or exceed an aggregate area of three-fourths inch in diameter.

(3) **Hail marks** or other similar depressions or scars are considered injury when they are not very shallow or superficial or when they affect an aggregate area of more than one-fourth inch in diameter.

(4) **Cork spots** are considered injury when a pear shows depressions or other external evidence of the disease.

(5) **Sunburn or sprayburn** is considered injury when the normal color of the pear has been materially changed or the skin is blistered or cracked or the flesh is softened or discolored.

(6) **Insect stings** are considered injury when there are more than two healed slight stings or depressions or the stings materially affect the general appearance of a pear.

(7) **Blister mite or canker worm injury** is considered injury when it is not shallow and superficial or when it affects an aggregate area of more than one-fourth inch in diameter.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-082, filed 12/16/08, effective 1/16/09.]

**WAC 16-442-085 Damage defects.** The following specific defects or any combination of them, when the combined seriousness exceeds the maximum allowed for any one defect, are considered damage to winter pears:

(1) **Russetting:**

(a) **Excessively rough russetting** that shows "frogging" or slight cracking on all pear varieties when the russetting exceeds one-half inch in diameter and is excessively rough.

(b) **Slightly rough or thick russetting** that is characteristic of frost injury on Anjou and other smooth-skinned varieties when it exceeds three-fourths inch in diameter.

(c)(i) **Smooth solid or smooth netlike russetting** that exceeds one-third of the surface on Anjou pears or covers

more than fifteen percent of the surface on other smooth-skinned varieties.

(ii) On Anjou and other smooth-skinned varieties, any amount of characteristic smooth russetting is permitted on the portion of the calyx end that is invisible for more than one-half inch along the contour of the pear when the pear is placed calyx end down on a flat surface.

(d)(i) **Rough or thick russetting** that is characteristic of frost injury when it exceeds three-fourths inch in diameter on Bosc, Seckel, and other similar varieties.

(ii) On Bosc, Seckel, and similar varieties, any amount of characteristic russetting is permitted, whether caused by natural or artificial means.

(iii) Light limb rubs that resemble and blend into russet areas are considered russet.

(2) **Hard end** pears are considered defects of all grades.

(3) **Skin breaks** when the pear has one skin break that is more than three-sixteenths inch in diameter or deeper than three-sixteenths inch or has more than one skin break that is at least one-eighth inch in diameter or at least one-eighth inch deep.

(a) Small inconspicuous skin breaks that are less than one-eighth inch in diameter or less than one-eighth inch deep are not considered damage.

(b) At a maximum, fifteen percent of the pears in any container may have no more than one skin break per pear ranging in size from one-eighth inch to three-sixteenths inch in diameter or depth.

(4) **Limb rubs** when they cause:

(a) Cracks, softening, or more than slight depressions; or

(b) Black discoloration that exceeds an aggregate area of three-eighths inch in diameter; or

(c) Dark brown discoloration or excessive roughness that exceeds an aggregate area of one-half inch in diameter; or

(d) A slightly rough, light colored discoloration that exceeds an aggregate area of three-fourths inch in diameter; or

(e) Smooth, light colored discoloration that exceeds an aggregate area of one inch in diameter.

(5) **Hail marks** or other similar depressions or scars that are not shallow or superficial or when they affect an aggregate area of more than three-eighths inch in diameter.

(6) **Cork spot** when more than one spot is externally visible or when the externally visible injury affects an aggregate area of more than three-eighths inch in diameter.

(7) **Drought spot** when there is more than one spot or the external injury exceeds an aggregate area of three-eighths inch in diameter or the appearance of the flesh is materially affected by corky tissue or brownish discoloration.

(8)(a) **Sunburn or sprayburn** when the skin is blistered, cracked, or shows any light tan or brownish color or the shape is appreciably flattened or the flesh is appreciably softened or changed in color.

(b) Sprayburn of a russet character must be considered under the definition of russetting in subsection (1) of this section.

(9) **Insect stings** when there are more than two healed codling moth stings or a sting is over three thirty-seconds of an inch in diameter or when other insect stings affect the pear's appearance.

(10) **Blister mite or canker worm injury** that is not shallow or superficial or when it affects an aggregate area of more than three-eighths inch in diameter.

(11)(a) **Scab spots** when they are black and cover an aggregate area of more than one-eighth inch in diameter.

(b) Scab spots of a russet character must be considered under the definition of russetting in subsection (1) of this section.

(12) **Sooty blotch** when it is thinly scattered over more than five percent of the pear's surface or when it appears as dark, heavily concentrated spots affecting an aggregate area of more than three-eighths inch in diameter.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-085, filed 12/16/08, effective 1/16/09.]

**WAC 16-442-095 Serious damage.** The following defects, or any combination of them when the combined seriousness exceeds the maximum allowed for any one defect, are considered serious damage to winter pears:

(1) **Russetting:**

(a) **Excessively rough russetting** that shows "frogging" or slight cracking and exceeds three-fourths inch in diameter on all winter pear varieties.

(b) **Thick russetting** characteristic of frost injury that covers fifteen percent of the pear's surface on all varieties.

(c)(i) **Smooth solid or smooth netlike russetting** that exceeds two-thirds of the surface of Anjou pears.

(ii) On Anjou, any amount of characteristic smooth russetting is permitted on the portion of the calyx end that is invisible for more than one-half inch along the contour of the pear when the pear is placed calyx end down on a flat surface.

(2) **Limb rubs** when they are:

(a) More than slightly cracked or excessively rough; or

(b) Dark brown or black in color and exceed an aggregate area of three-fourths inch in diameter.

(c) Other limb rubs when they exceed an aggregate area of one-tenth of the surface of the pear.

(3) **Hail marks** or other similar depressions or scars when they affect an aggregate area of more than three-fourths inch in diameter or materially deform or disfigure the pear.

(4) **Cork spot** when more than two spots are externally visible or the externally visible injury affects an aggregate area of more than one-half inch in diameter.

(5) **Drought spot** when:

(a) There are more than two or the external injury affects an aggregate area of more than three-fourths inch in diameter; or

(b) The appearance of the flesh is seriously affected by corky tissue or brownish discoloration.

(6)(a) **Sunburn or sprayburn** when the skin is blistered, cracked, or shows any brownish color or the shape is materially flattened or the flesh is softened or materially changed in color.

(b) Sprayburn of a russet character must be considered under the definition of russetting in subsection (1) of this section.

(7) **Worm holes** when any worm holes are evident.

(8) **Insect stings** when there are more than three healed codling moth stings, of which not more than two may be over

three thirty-seconds inch in diameter or when other insect stings affect the pear's appearance.

(9) **Blister mite or canker worm injury** when it affects an aggregate area of more than three-fourths inch in diameter or materially deforms or disfigures the pear.

(10)(a) **Scab spots** when they are black and cover an aggregate area of more than one-fourth inch in diameter.

(b) Scab spots of a russet character must be considered under the definition of russetting in subsection (1) of this section.

(11) **Sooty blotch** when it is thinly scattered over more than fifteen percent of the surface of the pear or appears as dark, heavily concentrated spots affecting an aggregate area of more than three-fourths inch in diameter.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-095, filed 12/16/08, effective 1/16/09.]

**WAC 16-442-100 Tolerances for winter pears.** (1)(a) For all grades, no more than ten percent of the pears in any container may be below the grade requirements of this chapter, including no more than five percent may be seriously damaged by insects, and not more than one percent may be allowed for decay or internal breakdown.

(b) No more than five percent of the pears in any container may be out of compliance with the size requirements of this chapter, except when both maximum and minimum sizes are stated on the container.

(c) When both maximum and minimum sizes are stated on the container, an additional ten percent tolerance is allowed for pears that are larger than the maximum stated size.

(d) No more than ten percent of the containers in any lot may be out of compliance with the packing requirements of this chapter.

(2) When applying the tolerances in subsection (1) of this section to the U.S. combination grade, tolerances may not be used to reduce the percentage of U.S. No. 1 pears required in the combination. However, if the entire lot averages within the specified percentage, individual containers may contain up to ten percent less than the percentage of U.S. No. 1 pears required.

(3) The tolerances for the standards are on a container basis. However, individual packages in any lot may vary from the specified tolerances if the averages for the entire lot, based on sample inspection, are within the tolerances specified.

(a) For a tolerance of ten percent or more, individual packages in any lot may contain not more than one and one-half times the tolerance specified. When the package contains fifteen specimens or less, individual packages may contain not more than double the tolerance specified.

(b) For a tolerance of less than ten percent, individual packages in any lot may contain not more than double the tolerance specified. At least one specimen that does not meet the requirements is allowed in any one package.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-100, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-110 Condition after storage or transit.**

Decay, scald or other deterioration, which may have developed on pears after they have been in storage or transit, shall be considered as affecting condition and not the grade.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-110, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-120 Standard pack.** (1) Except when jumbled, all packed pears must be arranged in clean cartons according to industry approved and recognized methods.

(2) When packed, pears in any container must be tightly packed and all packages must be well filled. The pears must not show excessive or unnecessary bruising because of over-filling. Any wrapped pear must be well wrapped.

(3) The pears in the top layer of each package must be reasonably representative of the size and quality of the pears in the package.

(4) When the numerical count is marked on the container, percentages must be calculated on the basis of count.

(5) When the minimum diameter or minimum and maximum diameters are marked on the container, percentages must be calculated on the basis of weight or an equivalent basis.

(6) When the pears are in bulk, percentages must be calculated on the basis of weight or an equivalent basis.

(7) The numerical count or the minimum size of the pears packed in closed containers must be indicated on the container. The number of pears in a carton must not vary more than three from the number indicated on the carton.

(8) When the numerical count is not shown, the minimum size must be plainly stamped, stenciled or otherwise marked on the container in terms of:

- (a) Whole inches (such as 2 inches);
- (b) Whole and half inches (2 1/2 inches);
- (c) Whole and quarter inches (2 1/4 inches); or
- (d) Whole and eighth inches (2 3/8 inches).

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-120, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

**WAC 16-442-150 Container marking requirements.**

(1) When pears are shipped, the container must bear the:

(a) Correct name of the variety or marked "variety unknown," or, when more than one variety and/or commodity is in the container, the name of each variety and/or commodity;

(b) The name and address of the grower, packer, or shipper; and

(c) The grade and the number of pears or the net contents either in terms of dry measure or weight.

(2) Consumer packages and jumbled packs must be marked with minimum diameter. Count may be used if pears can be readily counted.

(3) Any marking requirements of subsections (1) and (2) of this section may be printed on the container label, but if they are not, they must be shown on the principal display panel.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-150, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]

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**WAC 16-442-160 Other grades and brands.**

(1) Any person, firm, or organization wishing to pack pears under a grade or brand not covered by this chapter, must file with the director a certified copy of the description of the private grade or brand before the first day of August of the year in which the pears are grown.

(2) If the director approves the private grade or brand, pears may be packed under the private grade or brand instead of the official state grading rules. All boxes of pears packed under the private grade or brand must be marked with that grade or brand.

[Statutory Authority: Chapter 15.17 RCW, RCW 15.17.030, and chapter 34.05 RCW. WSR 09-01-094, § 16-442-160, filed 12/16/08, effective 1/16/09; Order 322, effective 7/29/40.]