

§ 4-41-62

STANDARDS FOR HAWAII GROWN TOMATOES *

This UNOFFICIAL COPY of standards for tomatoes, rewritten for easy interpretation, is based on Chapter 4-41, Hawaii Administrative Rules, Standards for Fresh Fruits and Vegetables. The general provisions of this Chapter, summaries of standards for other fruits and vegetables, and official copies of the complete chapter are available in each county.

<u>HAWAII FANCY (GRADE AA)</u>	<u>HAWAII NO. 1 (GRADE A)</u>	<u>HAWAII NO. 2 (GRADE B)</u>
<u>Basic Requirements</u>	<u>Basic Requirements</u>	<u>Basic Requirements</u>
Similar varietal characteristics (1)	Similar varietal characteristics (1)	Similar varietal characteristics (1)
Mature (2)	Mature (2)	Mature (2)
Not overripe or soft	Not overripe or soft	Not overripe or soft
Clean (3)	Clean (3)	Clean (3)
Well developed (4)	Well developed (4)	
Well formed (5)	Fairly well formed (9)	Not badly misshapen (12)
Smooth (6)	Fairly smooth (10)	
<u>Free From</u>	<u>Free From</u>	<u>Free From</u>
Decay	Decay	Decay
Freezing injury	Freezing injury	Freezing injury
Uneven ripening (7)	Uneven ripening (7)	
Sunscald	Sunscald	
Sunburn		
Cuts	<u>Free From Damage (11)</u>	<u>Free From Serious</u>
Puffiness	<u>Caused By</u>	<u>Damage (13) Caused By</u>
Growth cracks	Bruises	Bruises
Shriveling	Catfaces	Catfaces
	Scars	Scars
	Diseases	Diseases
<u>Free From Injury (8)</u>	Insects	Insects
<u>Caused By</u>	Sunburn	Sunburn
Bruises	Puffiness	Puffiness
Catfaces	Growth cracks	Growth cracks
Scars	Shriveling	Shriveling
Diseases	Cuts	Cuts
Insects	Mechanical or other means	Sunscald
Mechanical or other means		Mechanical or other means
<u>Size Requirement</u>	<u>Size Requirement</u>	<u>Size Requirement</u>
2-3/4 inches minimum diameter, unless otherwise specified.	2-1/2 inches minimum diameter, unless otherwise specified.	2-1/4 minimum diameter, unless otherwise specified.

*Numbers in parentheses following grade terms indicate where such terms are defined under "Definitions".

Tolerances (count basis)
Defects: Total 10%;
provided not more than
5% damage, including
1% soft ripe or decay.

Tolerances (count basis)
Defects: Total 10%;
provided not more than
5% serious damage,
including 1% soft ripe
or decay.

Tolerances (count basis)
Defects: Total 10%;
including 1% soft ripe
or decay.

Off-size: Total 10%.

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Off-size: Total 10%.

OFF-GRADE. "Off-grade" is not a grade within the meaning of these standards, but is a descriptive term applicable to tomatoes which have a market value, and designates a quality lower than the lowest applicable Hawaii, other states or the United States grade for tomatoes.

OPTIONAL SIZE CLASSIFICATIONS. The size of tomatoes packed in any type container, when specified according to the size designations set forth below, shall be within the ranges of diameters specified for the respective designations:

<u>Size Designations</u>	<u>Minimum Diameter</u> (Inches)	<u>Maximum Diameter</u> (Inches)
4 x 5 and larger	3 - 15/32	
5 x 5 and 5 x 6	2 - 28/32	3 - 15/32
6 x 6	2 - 17/32	2 - 28/32
6 x 7	2 - 9/32	2 - 17/32
7 x 7	2 - 4/32	2 - 9/32
7 x 8	1 - 28/32	2 - 4/32

In determining compliance with the above size designations, the measurement for minimum diameter shall be the largest diameter of the tomato measured at right angles to a line from the stem end to the blossom end. The measurement for maximum diameter shall be the smallest dimension of the tomato determined by passing the tomato through a round opening in any position.

In lieu of specifying size according to the above size designations, the size of tomatoes in any type of container may be specified by giving the range in size in terms of whole inches or whole inches and not less than sixteenth inch fractions thereof, or according to the size terms designated below, in accordance with the facts:

Medium	2-1/2 to 3 inches in diameter
Large	Over 3 inches in diameter

The measurement for diameter shall be the largest diameter of the tomato taken at right angles to a line from the stem end to the blossom end.

APPLICATION OF TOLERANCES. Averages for the entire lot, based on examination of representative samples, shall be within the tolerances specified, but the contents of individual containers in any lot may vary from the specified tolerances subject to the following limitations:

When the tolerance specified is more than 5 percent, individual packages in any lot may contain not more than 1-1/2 times the tolerance, provided that at least one specimen which fails to meet the requirements shall be permitted in any container.

When the tolerance specified is 5 percent or less, individual packages in any lot may contain not more than double the tolerance, provided that at least one specimen which fails to meet the requirements shall be permitted in any container.

APPLICABLE GRADE TERMS. Tomatoes shall be classified in accordance with the grading system designated below:

Wholesale Quantities - HAWAII FANCY, HAWAII NO. 1 or HAWAII NO. 2,
whichever is applicable.

Consumer Packages
and Bulk Displays - HAWAII GRADE AA, HAWAII GRADE A or HAWAII GRADE B
whichever is applicable.

MINIMUM EXPORT GRADE. Tomatoes for export shall at least meet the requirements of Hawaii No. 2 tomatoes.

DEFINITIONS

(1) "Similar varietal characteristics" means the tomatoes are alike as to shape, firmness of flesh, and shade of color; e.g., soft fleshed, early maturing varieties shall not be mixed with firm-fleshed, mid-season or late varieties, or bright red varieties shall not be mixed with varieties having a purplish tinge.

(2) "Mature" means the contents of one or more seed cavities have developed a jelly or glue-like consistency and the seeds are well developed.

(3) "Clean" means practically free from dirt or other foreign material.

(4) "Well developed" means the tomato shows normal growth; i.e., the tomatoes are not ridged or peaked at the stem end, do not contain dry tissue, and usually contain no open spaces.

(5) "Well formed" means the tomato is well proportioned and is not appreciably lopsided, elongated, angular or otherwise appreciably deformed.

(6) "Smooth" means free from ridges or rough areas, except when permitted under injury caused by catfaces and scars.

(7) "Uneven ripening" means distinctly red or pink and distinctly green areas appear on the same fruit, or the walls of the fruit are appreciably gray in color, or the general appearance of the tomatoes in a lot is materially affected. Uneven ripening is that condition where the color of the walls and skin of the tomato during the ripening period is mottled or variable. The color usually varies from green to whitish or whitish to pink or red, but may vary from dark green to dark red.

(8) "Injury" means any specific defect described in Table I, Classification of Defects; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which appreciably detracts from the appearance, or the edible or shipping quality of the tomatoes.

(9) "Fairly well formed" means the tomato is not decidedly kidney shaped, lopsided, elongated, angular or otherwise deformed.

(10) "Fairly smooth" means the tomato is not conspicuously ridged or rough.

(11) "Damage" means any specific defect described in Table I, Classification of Defects; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or shipping quality of the tomatoes.

(12) "Badly misshapen" means the tomato is so badly deformed that its appearance is seriously affected.

(13) "Serious damage" means any specific defect described in Table I, Classification of Defects; or an equally objectionable variation of any of these defects, any other defect, or any combination of defects, which seriously detracts from the appearance, or the edible or shipping quality of the tomatoes.

Table 1. Classification of Defects

FACTOR	INJURY	DAMAGE	SERIOUS DAMAGE
Catface (Irregular, dark, leathery scars at blossom end.)	Not smooth or more than 1/4 inch in diameter.	Not fairly smooth; deep; channels extend into locules; or fairly smooth and exceeds an area 1/2 inch in diameter on a 2-1/2 inch tomato. Smaller tomatoes shall have lesser areas of fairly smooth catfaces and larger tomatoes may have more, provided the appearance is not affected to a greater extent than that of a 2-1/2 inch tomato.	Excessively rough or deep; or fairly smooth and exceeds an area 3/4 inch diameter on a 2-1/2 inch tomato. Smaller tomatoes shall have lesser areas of fairly smooth catfaces and larger tomatoes may have more, provided the appearance is not affected to a greater extent than that of a 2-1/2 inch tomato.
Scars	Smooth and aggregating an area more than 3/16 inch in diameter; or slightly sunken or slightly rough and aggregating an area more than 1/8 inch in diameter; or more than slightly rough or slightly sunken.	Aggregating an area more than 3/8 inch in diameter on a 2-1/2 inch tomato. Smaller tomatoes shall have lesser areas of scars and larger tomatoes may have more, provided the appearance is not affected to a greater extent than that of a 2-1/2 inch tomato.	Aggregating an area more than 1/2 inch in diameter on a 2-1/2 inch tomato. Smaller tomatoes shall have lesser areas of scars and larger tomatoes may have more, provided the appearance is not affected to a greater extent than that of 2-1/2 inch tomato.

Cuts	Not shallow, not well healed, or more than 1/2 inch long.	Fresh cuts or holes or any hole or cut penetrating the tomato wall.
Puffiness	One or more locules with open space materially affecting appearance of tomato when cut thru center at right angle to line running from stem to blossom-end.	Two or more locules with open spaces seriously affecting appearance of tomato when cut thru center at right angle to line running from stem to blossom-end.
Growth cracks (Cracks radiating from stem scar or concentric to stem scar.)	Not healed or more than 1/2 inch long; or very narrow, well healed but so numerous as to materially affect appearance.	

