

NEW JERSEY GRADES AND PACKING REQUIREMENTS FOR APPLES IN STANDARD APPLE BOXES

Numbers and letters in parentheses following grade terms indicate where such terms are defined under "Definition of Terms."

N. J. Extra Fancy and N. J. Fancy grades are provided for the packing in boxes of wrapped apples of all varieties.

N. J. Extra Fancy shall consist of apples of one variety which are mature (1) but not overripe (2), carefully handpicked (3), clean (4), fairly well formed (5); free from decay, internal browning, internal breakdown, scald, freezing injury, unhealed broken skins, and bruises (except those incident to proper handling and packing), and visible watercore. The apples shall also be free from damage (7) caused by russeting (7a), sunburn (7b), sprayburn (7b), limbrubs (7c), hail (7d), drought spot (7d), scars (7d), disease (7e), insects (7f), or mechanical or other means (7). Each apple of this grade shall have the amount of color specified hereinafter for the variety. (See Tolerances and Condition After Storage or Transit.)

N. J. Fancy - The requirements of this grade are the same as N.J. Extra Fancy except that less color is required for all varieties except yellow and green varieties for which the requirements for both grades are the same. Apples of this grade shall be of one variety, mature (1) but not overripe (2), carefully handpicked (3), clean (4), fairly well formed (5); free from decay, internal browning, internal breakdown, scald, freezing injury, unhealed broken skins, and bruises (except those incident to proper handling and packing), and visible watercore. The apples shall also be free from damage (7) caused by russeting (7a), sunburn (7b), sprayburn (7b), limbrubs (7c), hail (7d), drought spot (7d), scars (7d), disease (7e), insects (7f), or mechanical or other means (7). Each apple of this grade shall have the amount of color specified hereinafter for the variety. (See Tolerances and Condition After Storage or Transit.)

COMBINATION GRADES

Combinations of the following grades may also be used as follows: Combination N. J. Extra Fancy and N. J. Fancy.

When combination grades are packed, at least 50 percent of the apples in any container shall meet the requirements of the higher grade in the combination (N. J. Extra Fancy).

COLOR

In addition to the foregoing requirements for N. J. Extra Fancy and N. J. Fancy, each apple of these grades must have the percentage of color shown in the table below.

For the solid red varieties, the percentage stated refers to the area of the surface which must be covered with a good shade of solid red characteristic of the variety, except that an apple having color of a lighter shade of solid red or striped red than that considered as good shade of red characteristic of the variety may be admitted to a grade provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of good red characteristic of the variety required for the grade.

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For the striped red varieties, the percentage stated refers to the area of the surface in which the stripes of good shade of red characteristic of the variety shall predominate over the stripes of lighter red, green or yellow. However, an apple having color of a lighter shade than that considered as good shade of red characteristic of the variety may be admitted to a grade provided it has sufficient additional area covered so that the apple has as good an appearance as one with the minimum percentage of stripes of good red characteristic of the variety required for the grade. Faded brown stripes shall not be considered as color except in the case of the Gray Baldwin variety.

<u>Variety</u>	<u>N. J. Extra Fancy</u>	<u>N. J. Fancy</u>
Solid Red		
Arkansas Black	50	25
Detroit Red	50	25
Gano	50	25
King David	50	25
Opalescent	50	25
Virginia Beauty	50	25
Winesap	50	25
Other similar varieties	50	25
Striped or Partially Red		
Jonathan	50	25
Kinnard	50	25
Missouri Pippin	50	25
Other similar varieties	50	25
Arkansas (Mamouth Black Twig)	33	15
Delicious	33	15
Baldwin	33	15
Gray Baldwin	33	15
Ben Davis	33	15
Limbertwig	33	15
Northern Spy	33	15
Paragon	33	15
Rainier	33	15
Rome Beauty	33	15
Stayman Winesap	33	15
York Imperial	33	15
Other similar varieties	33	15
Stark	25	10
Red June	33	Tinge of color "
Williams	33	
Wealthy	33	
McIntish	33	
Other similar varieties	33	
Gravenstein	25	
Oldenburg (Duchess of Oldenburg)	25	
Red Astrachan	25	
Smokehouse	25	
Other similar varieties	25	

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<u>Variety</u>	<u>N. J. Extra Fancy</u>	<u>N. J. Fancy</u>
Red Cheeked or Blushed		
Maiden Blush	(1)	None
Winter Banana	(1)	"
Golden Delicious	(1)	"
Other red cheeked or blushed varieties	(1)	"
Yellow or Green varieties	(2)	(2)

- (1) Blushed cheek
- (2) Characteristic color

DEFINITION OF TERMS

As Used in **These** Grades:

1. "Mature" means having reached the stage of maturity which will insure the proper completion of the ripening process.

Before a mature apple becomes overripe it will show varying degrees of firmness depending upon the stage of the ripening process. The following terms are used for describing these different stages of maturity of apples.

"Hard" means apples with tenacious flesh and starchy flavor. **Apples at this stage** are suitable for storage and long-distance shipment.

"Firm" means apples with tenacious flesh, but becoming crisp with a slight starchy flavor except the Delicious variety. Apples at this stage are also suitable for storage and long-distance shipment.

"Firm ripe" means with crisp flesh except that in apples of the Gano, Ben Davis and Rome Beauty varieties the flesh may be slightly mealy. Apples at this stage may be shipped long distances, but should be moved into consumption within a short period of time.

"Ripe" means mealy and soon to become soft for the variety. **Apples at this stage** should be moved immediately into consumption.

2. "Overripe" means dead ripe, very mealy or soft, past commercial utility.

3. "Carefully handpicked" means that the apples do not show evidence of rough handling or of having been on the ground.

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

5. "Fairly well formed" means that the apples may be slightly abnormal in shape but not to an extent which detracts materially from the appearance of the fruit.

6. "Seriously deformed" means so badly misshapen that the appearance is severely affected.

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7. "Damage" means any injury or defect which materially detracts from the appearance or keeping quality of the apples.

(a) Russetting which exceeds the following shall be considered as damage:

Russetting which is excessively rough on Roxbury Russet and other similar varieties.

Russetting on other varieties which covers a total area of more than 25 percent of the surface in the aggregate except that--

- (1) Smooth solid russetting which covers an area of more than 10 percent of the surface in the aggregate shall be considered as damage unless the russetting is within or continuous with that in the stem basin or calyx cavity, in which case an additional 15 percent shall be permitted, provided that the total area covered shall not exceed 25 percent in the aggregate.
- (2) Slightly rough russetting which covers an area of more than 15 percent of the surface if confined to the stem basin or calyx cavity or continuous therewith, or such russetting which covers an area of more than one-half inch in diameter if it is not continuous with the russetting in the stem basin or calyx cavity, shall be considered as damage.
- (3) Rough russetting which is well within the stem basin and is not readily apparent shall be permitted, but any other rough russetting which exceeds one-quarter inch in diameter shall be considered as "damage."

Any one of the following defects, or any combination thereof, the seriousness of which exceeds the maximum allowed for any one defect, shall be considered as damage:

(b) Sunburn or sprayburn which has caused blistering or cracking of the skin or when the discolored area does not blend into the normal color of the fruit unless the injury can be classed as russetting (7a).

(c) Dark brown or black limbrubs which affect a total area of more than one-half inch in diameter or light brown limbrubs which affect a total area of more than one inch in diameter.

(d) Hail marks, drought spots or other similar depressions or scars which are not superficial or where the injury affects more than one-half inch of the surface in the aggregate.

(e) Disease. Scab spots which are not corked over or corked-over scab spots which affect a total area of more than one-fourth inch in diameter.

Cedar-rust infection which exceeds in the aggregate an area of one-quarter inch in diameter.

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Sooty blotch or fly speck which is thinly scattered over more than one-tenth of the surface, or dark, heavily concentrated spots which affect an area of more than one-half inch in diameter.

(f) Insects. More than two healed insect stings or any healed insect sting which is over one-eighth inch in diameter exclusive of any encircling discolored ring.

Worm holes.

TOLERANCES FOR PRECEDING GRADES

In order to allow for variations incident to proper grading and handling, not more than a total of 10 percent of the apples in any container may be below the requirements of the grade, provided that not more than 5 percent shall be seriously damaged by insects and not more than one-fifth of this amount, or 1 percent shall be allowed for decay or internal breakdown.

When applying the foregoing tolerances to the combination grades no part of any tolerance shall be used to reduce the percentage of apples of the higher grade required in the combination.

The tolerances specified for the various grades are placed on a container basis. However, any lot of apples shall be considered as meeting the requirements of a specified grade if the entire lot averages within the tolerances specified, provided that no sample from the containers in any lot is found to exceed the following amounts:

For a specified tolerance of 10 percent, not more than one and one-half times the tolerance shall be allowed in any one package.

For specified tolerances of 5 percent or less, not more than double the tolerance shall be allowed in any one package.

CONDITION AFTER STORAGE OR TRANSIT

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

SIZE REQUIREMENTS

The numerical count of the apples packed in a box shall be indicated on the box. The apples in any box shall not vary more than one-fourth inch in their transverse diameter.

In order to allow for variations incident to proper sizing, not more than 10 percent, by count, of the apples in any container may not meet the size requirements.

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PACKING REQUIREMENTS

Apples packed in the Standard Northwestern apple boxes shall be arranged in the containers according to the approved and recognized methods with the stems pointing towards the ends of the boxes, and all boxes shall be tightly filled, but the contents shall not show excessive or unnecessary bruising because of overfilled packages. Apples packed in standard boxes shall show a total bulge (top and bottom) of not less than three-fourths inch. Each wrapped apple shall be completely enclosed by its individual wrapper.

In order to allow for variations incident to proper packing, not more than 5 percent of the boxes may not meet these requirements.

MARKING

In order to conserve space, abbreviations may be used for marking the New Jersey grade names on containers. The following abbreviations are suggested where it is not desired to use the full grade name.

1. N. J. Fcy. for N. J. Fancy
2. N. J. Extra Fcy. for N. J. Extra Fancy
3. Combination grades may be designated by abbreviations of the grades preceded by the abbreviation "Comb." as Comb. N. J. Extra Fcy.-N. J. Fcy.

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