



Apple

GENERAL CHARACTERISTICS

Apple shall be mature, firm, clean, fresh and well formed and shall have color and shape characteristics of variety. Apple shall have smooth and shiny surface. Apple shall be free from hail marks/spots, russet, scald or any type of fungus or diseases.

Grades

There shall be Six Grades for Himachal Apple i.e. Ex Large, Large, Medium, Small, Ex. Small and Pitthoo. In case of J&K Apple, two grades shall be there viz; 4 & 5 layer. The size requirement for these grades shall be as follows:

Size

Variant-Himachal Apple	Ex Large	Large	Medium	Small	Ex Small	Pitthoo
Count	80	100	125	150	175	200
Dia	>85 mm	75-80 mm	70-75 mm	65-70 mm	60-65 mm	50-60 mm

Variant-J & K Apple	4 Layer	5 Layer				
Count	58-62	105-110				
Dia	70-80 mm	55-70 mm				

Quality Parameters

Defects	Grade I	Grade II	Grade III
Cuts	Not Allowed	Not Allowed	<1%
Misshape	Not Allowed	<1%	<3%
Punctured Skin	Not Allowed	Not Allowed	<1%
Mechanical Damage	Not Allowed	Not Allowed	<3%
Hailed	Not Allowed	<1%	<3%
Bruising	Not Allowed	<2%	<4%
Rusting	Not Allowed	<3%	<5%
Sun Burn	Not Allowed	<1%	<5%
Shriveled	Not Allowed	<1%	<5%
Fruit Pressure	Above 17lbs	15-16 lbs	12-15 lbs
Rotting	Not Allowed	Not Allowed	Not Allowed
Scald	Not Allowed	<3%	<5%
Ruptured Skin	Not Allowed	Not Allowed	<1%
Immature	Not Allowed	Not Allowed	Allowed
Fungal Infection	Not Allowed	Not Allowed	Not Allowed
Insect Infestation	Not Allowed	Not Allowed	Not Allowed

Defects



FLY SPECS



RUSSETING



HAILING



IMMATURE



INSECT DAMAGE



MECHANICAL INJURY



MISSHAPE



PRESSURE DAMAGE



PUNCTURED SKIN



SHRIVELLED



ROTTENING



INTERNAL BROWNING



Defect & Size Tolerance (By Weight)

Defects Tolerance	Grade I	Grade II	Grade III
Minor Defects	4-5 %	5-10 %	10-15 %
Major Defects	2%	5 %	7 %
Serious Defects	1%	1%	2%
Size Tolerance	3 %	5 %	10 %

Tradable Specifications

S. No.	Quality Specification	Mature, firm and clean having smooth and shiny surface free from hailing and russet with proper fruit pressure
1.	Size <ul style="list-style-type: none"> Acceptable size (Measured from at least one side by way of passing through sieve) Reject 	<ul style="list-style-type: none"> 55 mm-75 mm If below 55 mm and above 75 mm exceeding 5%
2.	Cut marks <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Up to 1% Above 1%
3.	Immature <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Between 2-3% Above 3%
4.	Fruit Pressure <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> > 15 lbs < 15 lbs
5.	Colour % <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> > 85 % blush < 85 %

6.	<p>Hail Marks(Deep hail marks can deteriorate the cosmetic value as well as shelf life of fruit)</p> <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • < 3% • >3 %
7.	<p>Pressure Damage (Due to packing material or transit which can decrease the shelf life of fruit)</p> <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Light pressure marks • Heavy pressure marks
8.	<p>Russet</p> <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Less than 5 % • >5 %
9.	<p>Shriveled (Occurs mostly when the fruit is stored at improper temperature& RH)</p> <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Less than 1 % • More than 1 %
10.	<p>Sun Burn/Scald</p> <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Less than 1 % • > 1%



Banana

GENERAL CHARACTERISTICS

Banana shall be clean, firm, and mature and shall have shape and size true to its variety. Banana fingers should be properly intact with green and turgid stalk to its crown.

Grades

There shall be two grades for Banana Dwarf Cavendish and Banana Robusta varieties i.e. Premium and Regular depending upon the season. The size requirement for these grades shall be as follows:

Size

Variant	Season		Off-Season	
	Length (mm)	Diameter (mm)	Length (mm)	Diameter (mm)
Banana Dwarf Cavendish	>130	> 35	100-130	30-35
Banana Robusta	> 220	> 35	150-220	30-35

Criteria for measurement

Length: The length of the fingers is determined along the outside curve from the blossom end to the base of the pedicel where the edible pulp ends.

Diameter: It is defined as the thickness or girth of a transverse section between the lateral faces.

The reference fruit for measurement of the length and grade is:

- ❖ For hands, the medium finger on the outer row of the hand.
- ❖ For clusters/bunch (parts of hands), the finger next to the cut section of the hand, on the outer row of the cluster.



Quality Parameters

Defects	Premium	Regular
Cuts	Not Allowed	Not Allowed
Natural Cracks	Not Allowed	Allowed
Ruptured Skin	Not Allowed	Allowed
Mechanical Damage	Not Allowed	Allowed
Foul Smell	Not Allowed	Not Allowed
Bruising	Not Allowed	Allowed
Chilling Injury	Not Allowed	Not Allowed
Sun Burn	Not Allowed	Allowed
Abnormal Curvature	Not Allowed	Allowed
Rotting	Not Allowed	Not Allowed
Doubles	Not Allowed	Allowed
Ruptured Skin	Not Allowed	Allowed
Immature	Not Allowed	Allowed
Fungal Infection	Not Allowed	Not Allowed
Insect Infestation	Not Allowed	Not Allowed

Defects



**IMMATURE
INFECTED**



DOUBLES



BLACK CHITTI/FUNGAL



BRUISING



NECK BROWNING



OVERRIPE

Photo of banana having black stalk finger attached to the crown



Defect & Size Tolerance (By Weight)

Defects Tolerance	Premium	Regular
Minor Defects	2 %	5 %
Major Defects	1 %	5 %
Serious Defects	1%	1%
Size Tolerance	2 %	5 %

Tradable Specifications

S. No.	Quality Specification	Clean, firm and mature, firm having intact fingers free from diseases upto following standards
1.	<p>Size</p> <ul style="list-style-type: none"> Acceptable size Reject 	<ul style="list-style-type: none"> Length ranging from 180 mm-220 mm Diameter upto 30-35 mm (Season) Off season from Mid- December to Mid-February Length less than 180 mm or exceeds 220 mm Diameter less than 30 mm or exceeds 35 mm
2.	<p>Cut marks</p> <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Up to 1% maximum Above 1%
3.	<p>Immature</p> <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Between 2-3% Above 3%
4.	<p>Fruit Pressure</p> <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Should be firm Loose
5.	<p>Colour %</p> <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Slight golden to yellow Greenish colour
6.	<p>Natural crack</p> <ul style="list-style-type: none"> Acceptable 	<ul style="list-style-type: none"> Upto 1 %

	<ul style="list-style-type: none"> • Rejected 	<ul style="list-style-type: none"> • > 1 %
7.	Sun Burn <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Upto 2% • > 2 %
8.	Rotten <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Upto 1 % • > 1 %
9.	Doubles <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Upto 2% • > 2 %
10.	Fungal Infection <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Upto 1 % • > 1 %
11.	Insect Infestation <ul style="list-style-type: none"> • Acceptable • Rejected 	<ul style="list-style-type: none"> • Upto 1 % • > 1 %



Kinnow

GENERAL CHARACTERISTICS

Kinnow shall be mature, firm, juicy, well formed and have similar varietal characteristics.

Grades

There shall be two Grades for Kinnow i.e. Premium and Regular. The size requirement for these Grades, as per count, shall be as follows:

Size

Parameter	Count (pcs per box)							
	30	36	42	48	54	60	72	80
Diameter (mm)	> 90	85-90	80-85	75-80	70-75	65-70	60-65	< 55

Quality Parameters

Defects	Premium	Regular
Cuts	Not Allowed	Not Allowed
Black/ Brown Spots	Not Allowed	Allowed
Bruising	Not Allowed	Allowed
Mechanical Damage	Not Allowed	Not Allowed
Fruit Pressure	Not Allowed	Not Allowed
Misshape	Not Allowed	Allowed
Shriveled	Not Allowed	Not Allowed
Punctured Skin	Not Allowed	Allowed
Natural Cracks	Not Allowed	Not Allowed
Immature	Not Allowed	Allowed
Sun Burn	Not Allowed	Allowed
Fungal Infection	Not Allowed	Not Allowed
Insect Infestation	Not Allowed	Not Allowed

Defects



IMMATURE



SCAB



RUSSET





Defect & Size Tolerance (By Weight)

Defects Tolerance	Premium	Regular
Minor Defects	3 %	5 %
Major Defects	1 %	5 %
Serious Defects	1%	1%
Size Tolerance	3 %	5 %

Tradable Specifications

S. No.	Quality Specification	Clean, firm and mature, firm having intact fingers free from diseases upto following standards
1.	Size <ul style="list-style-type: none"> Acceptable size Reject 	<ul style="list-style-type: none"> Diameter ranging between 65-80 mm Less than 65 mm and more than 80 mm
2.	Cut marks <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Up to 1% maximum Above 1%
3.	Immature <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Up to 3% Above 3%
4.	Fruit Pressure <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Should be firm Loose
5.	Colour % <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Slight yellow to orange Greenish colour
6.	Natural crack <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> <1 % > 1 %



7.	Sun Burn <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 2%• > 2 %
8.	<ul style="list-style-type: none">• Rotten• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %
9.	Misshape <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 2%• > 2 %
10.	Fungal Infection <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %
11.	Insect Infestation <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %



Orange

GENERAL CHARACTERISTICS

Orange shall be mature, firm, juicy, well formed and shall have similar Varietal characteristics.

Grades

There shall be two Grades for Orange i.e. Premium and Regular.

Size

The size requirement for these Grades as per count shall be as follows:

Parameter	Count (pcs per box)				
	96	141	171	191	210
	Extra Large	Large	Medium	Small	Extra Small
Diameter (mm)	75-80	65-75	55-65	50-55	40-50

Quality Parameters

Defects	Premium	Regular
Cuts	Not Allowed	Not Allowed
Black/ Brown Spots	Not Allowed	Allowed
Bruising	Not Allowed	Allowed
Mechanical Damage	Not Allowed	Not Allowed
Tight & Smooth Skin	Not Allowed	Not Allowed
Misshape	Not Allowed	Allowed
Shriveled	Not Allowed	Not Allowed
Punctured Skin	Not Allowed	Allowed
Natural Cracks	Not Allowed	Not Allowed
Immature	Not Allowed	Allowed
Sun Burn	Not Allowed	Allowed
Fungal Infection	Not Allowed	Not Allowed
Insect Infestation	Not Allowed	Not Allowed
Uneven Surface	Not Allowed	Allowed
Blisters	Not Allowed	Allowed
Nodes on Surface	Not Allowed	Allowed



Defects

TO be incorporated



Defect & Size Tolerance (By Weight)

Defects Tolerance	Premium	Regular
Minor Defects	3 %	5 %
Major Defects	1 %	5 %
Serious Defects	1%	1%
Size Tolerance	3 %	5 %

Tradable Specifications

S. No.	Quality Specification	Clean, firm and mature, firm having intact fingers free from diseases upto following standards
1.	Size <ul style="list-style-type: none"> Acceptable size Reject 	<ul style="list-style-type: none"> Diameter ranging between 65-75 mm Less than 65 mm and more than 75 mm
2.	Cut marks <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Up to 1% maximum Above 1%
3.	Immature <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Between 2-3% Above 3%
4.	Fruit Pressure <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Should be firm Loose
5.	Colour % <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Slight yellow to orange Greenish colour
6.	Natural crack <ul style="list-style-type: none"> Acceptable Rejected 	<ul style="list-style-type: none"> Upto 1 % > 1 %
7.	Sun Burn	



	<ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 2%• > 2 %
8.	Rottening <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %
9.	Misshape <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 2%• > 2 %
10.	Fungal Infection <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %
11.	Insect Infestation <ul style="list-style-type: none">• Acceptable• Rejected	<ul style="list-style-type: none">• Upto 1 %• > 1 %