

# Produce Specification: Apples

GENERAL APPEARANCE BY VARIETY					
VARIETY	BRIX ° (SOLUBLE SOLIDS)	MINIMUM PENETROMETER VALUE (KG-F)	COLOUR	SHAPE	SENSORY
Ambrosia	>11.5	6.5	Foreground 35% blush red, pale-yellow undertones; white flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.
Ballarat	>11	7	Green skin with red blush; white flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.

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Braeburn	>11	7	Background light green. Foreground 40% red blush. Bright orange stripe.	Conical to oblong. More round than oval. No misshapen.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Braeburn Red	>11	7	60% red blush.	Conical to oblong. More round than oval. No misshapen.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Cripps Pink	>12	6.5	Pink or light-red flush over fruit surface; pale green-cream background; white flesh with green tinge.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.
Early Season (Any Early season variety e.g. Sunrise)	>11	6.5	Typical of the variety.	Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Envy	>12	7.2	Pale green to yellow background with a red fleck over red wash.	Round to round conical. Max. 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Eve	>11	6.5	Smooth, shiny skin bright red in colour	Conical to oblong. Well-rounded to	Firm, crisp, with juicy flesh, not

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			with faint yellow speckling and small yellow patches around the stem; white flesh.	flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	fibrous or floury. No off odours or tastes.
Genesis	>12	7.2	Pale green to yellow background with red blush > 40%. Creamy yellow flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.
Granny Smith	>11.5	6.8	Uniform bright green. Greenish white flesh.	Round. Elongated, tapering at the apex. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.

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Jazz	>12	7.2	Pale green to yellow background with red blush > 40%. Creamy yellow flesh.	Round to round conical. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Lemonade	>12	7.2	Bright yellow skin may have patches of green, orange or pink blush; light yellow flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is more oval than round. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.
Mariri Red – Hailstone Heroes	>11	7	Red blush over a greenish yellow background colour; >50% red; pale cream coloured flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.

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NZ Beauty	>12	6.5	Foreground 80% Blush Pale cream background with >60% red blush. White flesh.	Round to conical. May be slightly elongated. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
NZ Rose	>12	6.3	Light yellow background with rosy, pink foreground colour covering >50%. Cream coloured flesh.	Round to round-conical. Max 15° dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Pacific Queen	>12	6.5	Dark red blush covering 75-100% with russeted lenticels and stem end. White flesh.	Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Pink Lady	>12	6.5	Light green background with pink to reddish pink blush covering >50%. Cream coloured flesh.	Round to round conical. More round than oval. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Queen	>12	6.5	Crimson red with speckles of russeting on the outside; white flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.

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Red Delicious	>12	6.8	Solid to striped deep red skin >80%. Cream coloured flesh.	Round to elongated heart shape. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Rockit	>11.5	6.5	Golden-yellow base covered in large patches of dark red-orange blush and striping, pale lenticels. Yellow flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.
Royal Gala	>11	6.5	Yellow background, with foreground red stripes.	Conical to oblong. More round than oval. No misshapen.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
Smitten	>12	6.5	Bright yellow skin, orange-red blush and streaks, ivory flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.

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Sunrise	>11	6.5	Light yellow background with red blush covering >50%. White flesh.	Conical and slightly elongated. Max 15% dropped shoulder.	Firm, crisp, with juicy flesh. No off odours or tastes. No mealiness.
SweeTango	>11	6.5	Pale yellow-green base, covered in large patches of bright to dark red blushing and striping, russet around stem cavity and large white lenticels. White flesh.	Conical to oblong. Well-rounded to flattened base. Evenly shaped with no distortions. Shape is rounder than it is oval. 10% stem intact. Stems may be absent where there is a clean break, and no damage to flesh or skin.	Firm, crisp, with juicy flesh, not fibrous or floury. No off odours or tastes.

<b>APPLES – GENERAL ACCEPTANCE CRITERIA</b>		
<b>SIZE</b>	Evenly sized fruit (as pre-ordered per requirements).	
<b>CLEANLINESS</b>	Free from dirt, insect stains, residue.	
<b>UNSALEABLE DEFECTS</b>		
<b>FOREIGN MATTER</b>	Evidence of live insects.	
	Nil foreign matter (e.g. glass, metal, hard plastics).	
<b>PRODUCT COUNT</b>	No undercounts.	
<b>PACK WEIGHT</b>	No underweights.	
<b>MAJOR DEFECTS</b>		
<b>DISEASES</b>	Fungal or bacterial rots of skin or flesh.	
	Sunken spots surrounded by red / black halo (Apple scab).	
<b>PHYSICAL IMPURITIES</b>	Cuts, holes, cracks or wounds that break the skin.	
	Stem punctures should not exceed 10 items per carton.	
	With deep, soft bruises that have distinct edges and are indented or water-soaked lesions.	
<b>PHYSIOLOGICAL DEFECTS</b>	Internal bitter pit.	
	Internal browning.	
	Lenticel injury.	
<b>TEMPERATURE DAMAGE</b>	Sunburn characterised by discolouration of skin.	
	Soft, brown skin and water-soaked translucent flesh (freezing injury).	
<b>MINOR DEFECTS</b>		
<b>PHYSICAL IMPURITIES</b>	Minor superficial bruises e.g. flat/sunken areas slightly darker than skin colour with no distinct edges or indented >1 cm <sup>2</sup> .	
	Hail marks, e.g. healed marks in a depression of the skin, affecting in aggregate >1 cm <sup>2</sup> , no broken skin or unhealed scars.	
	Bruising > 1 cm <sup>2</sup> . More than 1 bruising.	
<b>SURFACE INCONSISTENCIES</b>	Stem end russet > 1 cm <sup>2</sup> .	
	Stem end cracks and cuts > 1 cm.	
	Scattered cheek russet > 1 cm <sup>2</sup> .	
<b>SIZE - DIAMETER</b>		
<b>PRE-PACK SIZE</b>	<b>135 – 165ct</b>	65 – 70 mm
<b>SIZE CATEGORY</b>	<b>165ct</b>	65 – 67 mm
	<b>135 – 150ct</b>	67 – 70 mm
	<b>100 – 120ct</b>	70 – 76 mm
	<b>80 – 90ct</b>	83 – 86 mm
	<b>60 – 70ct</b>	90 – 95 mm
<b>RECEIVAL</b>		
<b>TEMPERATURE °C (AT ARRIVAL)</b>	4 – 10 (12 during first 2 weeks of season).	
<b>TOLERANCE</b>	Unsaleable defects 0%	
	Major defects <5%	
	Minor defects <10%	
	Combined total limit <10%	






	<5% outside size range	
<b>MINIMUM PENETROMETER VALUE (KG-F)</b>	≤25% of individual penetrometer value readings should be 0.5 Kg-F below the minimum acceptable penetrometer value.	
<b>PACKAGING &amp; LABELLING</b>	<p>Packaging manufactured from new food grade materials or sanitised returnable crates.</p> <p>Packaging to adhere to <b>Foodstuffs North Island Produce Packaging Guidelines</b>.</p> <p>All labelling must meet the current legislative requirements.</p> <p><b>Crate card</b> must include the product description, SKU number (in large font), supplier name, grower/packer’s name, product grade, count/weight, and delivery date.</p> <p><b>Pre-packaged</b> produce must display the grower’s name, the packed on date, best before date or used by date (batch code is optional).</p>	
<b>SHELF LIFE</b>	Produce must have a shelf life of <b>at least 14 days</b> upon arrival at the Distribution Centre, or directly at the store from the supplier.	
<b>TRANSPORT CONDITIONS</b>	<p>Stacked to Ti Hi specifications onto a stabilised pallet as per-ordered.</p> <p>Refrigerated van with air bag suspension, unless otherwise approved.</p> <p>Goods must be received in accordance with <b>Foodstuffs North Island Receiving and Carrier Guidelines</b> (refer to reference materials for more information).</p> <p>Of note are pallet size, stacking standards and crate cards.</p>	
<b>CHEMICAL CONTAMINATE RESIDUE</b>	Relevant growers and/or producers, hold, will maintain, and will comply with all necessary certificates, licences, permits, and other approvals required by Laws or the Policies and Compliance Requirements for the manufacture, packing, supply, and storage of the groceries. This includes NZGAP (including the Social Practice Standards add-on) and/or GLOBALG.A.P (including GRASP) certification.	
<b>ORGANICS</b>	BioGro certificate, or equivalent, is required to supply organic products into both Foodstuffs stores and Distribution Centres. The current certificate should be available on the Foodstuffs Exchange.	
<b>PHOTOS OF DEFECTS</b>		
		
Bruising.	Bruising.	Bruising.

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<p>Bruising: Fruit flesh injury/mark to soft tissue appearing as an area of soft and/or discoloured skin, caused by impact or pressure over a large area. Bruising of the flesh without breaking the skin, &gt; 1 cm<sup>2</sup> in total area.</p>	<p>Bruising.</p>	<p>Hairline split.</p>
		
<p>Stem-end russet must be &lt; 5% which equates to an area of smooth russet covering the stem cavity and half of the apple shoulder.</p>	<p>Cheek russet must be smooth and be &lt; 1 cm<sup>2</sup> in total area.</p>	<p>Scattered and shoulder russet.</p>
		
<p>Internal browning. Total aggregate area &lt;1 cm<sup>2</sup> of internal browning.</p>	<p>Fruit flesh cut/puncture by the stem of another apple.</p>	<p>Punctures.</p>

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<p>Lenticel injury.</p>	<p>Brown scar tissue, which usually appear as smooth or rough circular areas depending on when the hail occurred in the growing season, and the type of hail. A maximum of 1 cm<sup>2</sup> is allowed. The russeted area must be smooth and superficial.</p>	<p>Superficial bruising. No deep indent, dark colour, and smaller than the 1 cm<sup>2</sup> we use for true bruising.</p>