

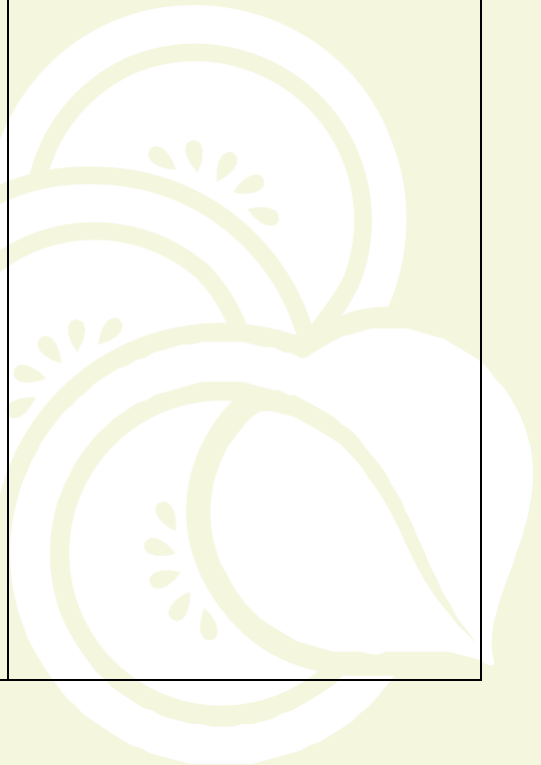


Frost Fan Rules

Frost fans are used on kiwifruit orchards to prevent crops from frost damage. The fans use the warmer air in the inversion layer by angling the blade slightly downwards to pull the inversion layer down to ground level to prevent frost damage which can cause reduced yield and loss of revenue. Frost fans are generally subject to noise and height rules in district plans and the following summarise each rule in kiwifruit growing regions.

Region	Rules
Opotiki	<p>Frost fans shall be a permitted activity subject to the following requirements in the rural zone:</p> <ul style="list-style-type: none"> (a) Noise generated by frost fans shall not exceed 60dB LAeq 10mins when assessed at the notional boundary of any other rural zoned site (excluding any dwelling/s located on the same site as the device is being operated) or at the boundary of a residential zone (b) The maximum height for frost fans is up to 12m in height. <p>Non-compliance shall be assessed as a Restricted Discretionary Activity.</p>
Whakatane	<p>Frost fans shall be a permitted activity subject to the following requirement:</p> <ul style="list-style-type: none"> (a) Noise generated by frost fans shall not exceed 55dB LAeq,10min (b) A legible notice is to be fixed to the road frontage of the property on which it is being used, giving the name, address and telephone number of the person responsible for the operation. <p>Non-compliance shall be assessed as a Restricted Discretionary Activity.</p>
Western Bay of Plenty	<p>Frost fans shall be a permitted activity subject to the following requirements:</p> <ul style="list-style-type: none"> (a) Shall not exceed 55dB LAeq or 65dB LAm_{ax} when measured: <ul style="list-style-type: none"> Rural and lifestyle zones <ul style="list-style-type: none"> (i) At the notional boundary of any dwelling in the Rural or Lifestyle Zone that:- is or will be located on a title separate to that of the subject site and in different ownership; and was existing or approved prior to the date that certification is provided to the Council (ii) At any point at or within the boundary of a property in the Rural or Lifestyle Zone that: - is located on a title separate to that of the subject site and in different ownership; and - did not have an existing or approved dwelling prior to the date that certification is provided to the Other zones <ul style="list-style-type: none"> (iii) At any point at or within the boundary of any property within a Residential, Rural-Residential, Medium Density Residential or Future Urban Zone (b) When the frost protection fan is operating for maintenance purposes the machine shall only be used from Monday to Friday 8am to 5pm. Testing

	<p>outside these hours may only take place for urgent unforeseen maintenance purposes or for testing operational readiness</p> <p>(c) The maximum height for frost fans is up to 15m in height inclusive of blades.</p>	
Waikato		
Waikato	Waikato Section	Franklin Section
	<p>Frost fans shall be a permitted activity subject to the following requirements:</p> <p>a. Noise from the activity measured at any other site does not exceed:</p> <p>50dBA (L10), 7am to 7 pm any day, and 45dBA (L10), 7pm to 10pm any day, and 40dBA (L10), and 65dBA (Lmax) at all other times.</p> <p>Construction of a frost fan in the rural zone must also meet the following conditions to be a permitted activity:</p> <p>a. The height of support structure does not exceed 10.5m, and</p> <p>b. Fan blades do not rotate higher than 13.5m.</p> <p>And:</p> <p>a. it does not protrude through the obstacle limitation surfaces defined in Chapter 30, Designation N1 (Hamilton Airport), and</p> <p>b. It does not protrude through the obstacle limitation surfaces defined in Appendix K (Te Kowhai Airfield), and</p> <p>c. Its height does not exceed 5m in the Battlefields View Shaft identified on the planning maps, and</p> <p>d. Its height does not exceed 7.5m in the Landscape Policy Area, and</p> <p>e. The highest part of the building is at least 20m vertically and horizontally from the ridge in a Ridgeline Policy Area, and</p> <p>f. The highest part of the building is below the 60m contour (Moturiki Datum) on the eastern side of the Hakarimata Range between Elgood and Parker Roads.</p>	<p>The activity shall adopt the best practicable option to ensure that noise does not exceed a reasonable level in accordance with section 16 of the Resource Management Act (duty to avoid unreasonable noise)</p> <p>No structure may be sited within 30 metres of the edge of a river, lake or wetland.</p> <p>Additional restrictions for structure may apply to structures near the National Grid or identified landscape areas/plan overlays.</p>



Waipa	<p>Frost fans shall be subject to the following requirements in the rural zone:</p> <ul style="list-style-type: none"> (a) Noise generated by frost fans shall not exceed 55dBA Leq (15mins) when assessed within the notional boundary of a dwelling on any other site in the Rural Zone, or within the site boundary of any Large Lot Residential Zone or Residential Zone. (b) Frost fans shall only be operated when the local air temperature drops to, or below 2 degrees centigrade, recorded at a height above ground relevant to the height of the bud or fruit being protected. <p>Activities that fail to comply will require a resource consent for a non-complying activity.</p>							
Auckland								
Auckland	<p>Frost fans shall be subject to the following requirements:</p> <p>Noise levels in the Rural - Mixed Rural Zone, Rural - Rural Production Zone, Rural - Rural Coastal Zone or the Future Urban Zone</p> <table border="1"> <thead> <tr> <th>Time</th> <th>Noise level</th> </tr> </thead> <tbody> <tr> <td>Monday to Saturday 7am-10pm</td> <td rowspan="2">55dB LAeq</td> </tr> <tr> <td>Sunday 9am-6pm</td> </tr> <tr> <td>All other times</td> <td>45dB LAeq 75dB LAFmax</td> </tr> </tbody> </table>	Time	Noise level	Monday to Saturday 7am-10pm	55dB LAeq	Sunday 9am-6pm	All other times	45dB LAeq 75dB LAFmax
Time	Noise level							
Monday to Saturday 7am-10pm	55dB LAeq							
Sunday 9am-6pm								
All other times	45dB LAeq 75dB LAFmax							
Far North	<p>Frost fans shall be subject to the following requirements, in the rural production zone:</p> <ul style="list-style-type: none"> (a) The activity shall adopt the best practicable option to ensure that noise does not exceed a reasonable level in accordance with section 16 of the Resource Management Act (duty to avoid unreasonable noise) 							
Kaipara	<p>Frost fans shall be subject to the following requirements in the rural zone, Maori Land and Maori Purposes Treaty Settlement Land zones:</p> <p>The activity shall adopt the best practicable option to ensure that noise does not exceed a reasonable level in accordance with section 16 of the Resource Management Act (duty to avoid unreasonable noise)</p>							
Whangarei	<p>Frost fans shall be subject to the following requirements, in the rural production Zone:</p> <ul style="list-style-type: none"> (a) Noise generated by single or multiple frost fans on a site does not exceed 55 dB LAeq (10 minute) at any time when assessed at the notional boundary of any noise sensitive activity on a separate site under different ownership. <i>Note: The noise rule includes a correction for the special audible characteristics of frost control fans and no further penalty shall be applied to measured noise levels.</i> (b) Operation of frost fans during the night period shall be for protection of crops from frost only. Any other operation, such as for the purposes of maintenance, shall be undertaken during the day period 							

	<p>(c) A legible notice shall be fixed to the road frontage of the property on which the frost fan is being used giving the name, address and telephone number of the person responsible for its operation</p> <p>(d) In addition to noise standards, in the Rural Production Zone to be a permitted activity, frost fans must not exceed 20m in height and must be setback 8m from a site boundary.</p> <p>The use of frost fans in any other environment/zone is a discretionary activity.</p> <p>Existing use rights may apply where a frost fan has been lawfully established prior to the operative date 24 May 2016.</p>
Hawkes Bay	
Central Hawkes Bay	<p>Frost fans shall be subject to the following requirements, in the rural zone:</p> <p>The activity shall adopt the best practicable option to ensure that noise does not exceed a reasonable level in accordance with section 16 of the Resource Management Act (duty to avoid unreasonable noise)</p>
Hastings District	<p>Frost fans shall be subject to the following requirements:</p> <p>(a) (a) Shall be located such that noise from a frost fan shall not exceed 65 dB LAeq(15 min) when measured outdoors at a distance which is the lesser of:</p> <p>(i) 300 metres from the device; or</p> <p>(ii) At the notional boundary of any existing noise sensitive activity (other than on the site on which the frost fan is situated or any other adjoining site in the same ownership), or at any point within a Residential Zone</p> <p>(b) In the Rural Zone - frost protection fans (measured to the tip of the blade) are permitted to a maximum height of 15 metres.</p> <p>(c) In the Tuki Tuki Special Character Zone, Plains Production Zone and Te Mata Special Character Zone - frost protection fans (measured from ground level to the tip of the blade) are permitted to a maximum height of 15 metres, and a yard distance (a setback from the boundary) of 15m is required.</p>
Gisborne	
Gisborne	<p>Frost fans shall be subject to the following requirements:</p> <p>The activity shall adopt the best practicable option to ensure that noise does not exceed a reasonable level in accordance with section 16 of the Resource Management Act (duty to avoid unreasonable noise)</p>
Whanganui	<p>Frost fans shall be subject to the following requirements, in the rural production, rural lifestyle or rural general zones:</p> <p>(a) The noise (excluding maintenance and testing) does not exceed 55 dBA Leq (15min) at any point within the notional boundary of any noise sensitive activity;</p>

	<ul style="list-style-type: none"> i. At any point within the notional boundary of any noise sensitive activity; or ii. At a distance of 300 metres from the device <p>(b) All new structures in the rural production and rural general zones shall be less than 10 metres in height, setback a minimum of 5 metres from any boundary and shall not be located within 20 metres of any dwelling located on a separate lot.</p>
Tasman	
Tasman	<p>Frost fans shall be subject to the following requirements in the rural 1 and rural 2 zones:</p> <ul style="list-style-type: none"> a. Noise generated by any frost protection device, in combination with noise from any other authorised frost protection device, does not at any time exceed 55 dBA Leq when measured: <ul style="list-style-type: none"> (i) At or within the notional boundary of any dwelling that existed before the frost protection device is installed (other than a dwelling on the site from which the noise is being generated) in the Rural 1, Rural 2, Rural 3 or Rural Residential Zone; and (ii) At or within the boundary of the Residential, Papakainga, or Tourist Services Zone; and (iii) In any other circumstances, at a distance of 300 metres from the frost protection device; (iv) provided that evidence of the ability to meet this condition is certified by an appropriately competent person in acoustic engineering and a copy of that certification, including a plan showing the location of the frost protection device or devices to which the certification applies, is lodged with the Council prior to the installation of any frost protection device. a. Any frost protection device is operated only when the air temperature at the lowest level of the frost-tender part of the crop has fallen to 2 degrees Celsius, and ceases operating when the air temperature at that height has risen to 3 degrees Celsius; except that the device may be operated for maintenance purposes between 8.00 am and 6.00 pm. b. Any new residential activity that is sited within 300 metres of any frost protection device that is likely to exceed the noise limit above, is located, oriented, and constructed to ensure that bedrooms and living rooms achieve an indoor design sound level of 30 dBA Leq and 45 dBA Lmax from any noise permitted in the zone beyond the notional boundary of the building or dwelling. c. Outdoor fan-type frost protection devices are used only for frost protection, for crops that have a distinct period of bud-burst and a distinct end of harvest, and only in the period between bud-burst and end of harvest.

Existing use rights may apply when a frost fan was lawfully established before the current provisions in District Plan became operative. If you are not sure whether this situation applies to you, the best place to start would be to contact your District Council.

Disclaimer: This information is valid as of November 2020. NZKGI disclaims any liability in respect to use of this information.

