

D24. Aircraft Noise Overlay

D24.1. Description

The purpose of the Aircraft Noise Overlay is to manage the subdivision of land and location of activities sensitive to aircraft noise in areas of high cumulative noise around the region's airports and airfields, so that the continued operation of the airports and airfields is not compromised and reverse sensitivity issues are addressed.

This High and Moderate Aircraft Noise Areas around Auckland International Airport and specified areas within the noise boundaries around other Auckland airports and airfields are qualifying matters in accordance with sections 77I(e) and (g) and 77O(e) and (g) of the RMA.

The rules and standards of this overlay apply to activities sensitive to aircraft noise, except where more restrictive rules and standards apply in the underlying zoning or precinct.

PC 120 ([see Modifications](#))

[new text to be inserted]

The following airports/airfields are included in the overlay:

- Auckland International Airport;
- Ardmore Airport;
- Kaipara Flats Airfield;
- North Shore Airport; and
- Whenuapai Airbase.

D24.2. Objectives

- (1) Airports and airfields are protected from reverse sensitivity effects.
- (2) The adverse effects of aircraft noise on residential and other activities sensitive to aircraft noise are avoided, remedied or mitigated.

D24.3. Policies

- (1) Avoid the establishment of new activities sensitive to aircraft noise (except tertiary education facilities) within the 65dB L_{dn} noise contour in the Aircraft Noise Overlay.
- (2) Avoid the establishment of new tertiary education facilities and additions or alterations to existing activities sensitive to aircraft noise (other than existing dwellings) within the 65dB L_{dn} noise contour in the Aircraft Noise Overlay unless all habitable rooms and all learning, amenity and recreation spaces on site are located inside buildings and achieve an internal noise environment of 40dB L_{dn}.
- (3) Avoid establishing residential and other activities sensitive to aircraft noise at:
 - (a) airports/airfields except for Auckland International Airport: within the area between the 55dB L_{dn} and 65dB L_{dn} noise contours, unless the effects can be

adequately remedied or mitigated through restrictions on the numbers of people to be accommodated through zoning and density mechanisms and the acoustic treatment (including mechanical ventilation) of buildings containing activities sensitive to aircraft noise excluding land designated for defence purposes;

(b) Auckland International Airport: within the area between the 60dB L_{dn} and 65dB L_{dn} contours, unless the effects can be adequately remedied or mitigated through restrictions on the numbers of people exposed to aircraft noise in the external environment through zoning and density controls and through providing acoustic treatment (including mechanical ventilation) of buildings containing activities sensitive to aircraft noise; and

(c) Auckland International Airport: within the area subject to more than 57dB L_{dn} of aircraft engine testing noise (which when added to aircraft operations noise would give a cumulative total noise level over 60dB L_{dn}), unless the effects can be adequately remedied or mitigated through restrictions on the numbers of people exposed to aircraft noise in the external environment through zoning and density controls and the acoustic treatment (including mechanical ventilation) of buildings containing activities sensitive to aircraft noise.

(4) In relation to Auckland International Airport, avoid establishing new residential areas (except within the area included within [412 Flat Bush Precinct](#)) or other areas that would contain activities sensitive to aircraft noise by rezoning land within the area between the 60dB L_{dn} and 65dB L_{dn} noise contours.

(5) Manage residential intensification and activities sensitive to aircraft noise within areas identified for accommodating urban growth in a way that avoids reverse sensitivity effects as far as practicable, including reverse sensitivity effects between those land uses and such effects on Auckland International Airport, Ardmore Airport, Whenuapai Airbase and North Shore Airport, and that avoids, remedies or mitigates adverse aircraft noise effects on people and communities.

D24.4. Activity table

Except where more restrictive provisions apply in the underlying zoning or precinct, the following rules apply to activities sensitive to aircraft noise within the Aircraft Noise Overlay.

(1) Table D24.4.1 specifies the activity status of activities for the North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase pursuant to section 9(3) and section 11 of the Resource Management Act 1991.

(2) Table D24.4.2 specifies the activity status of activities for Ardmore Airport pursuant to section 9(3) and section 11 of the Resource Management Act 1991.

- (3) Table D24.4.3 specifies the activity status of activities for Auckland International Airport pursuant to section 9(3) and section 11 of the Resource Management Act 1991.
- (4) For the purposes of interpreting the rules in Table D24.4.3 Activity table for Auckland International Airport:
- (a) where a site is shown partly within the high aircraft noise area and partly within the moderate aircraft noise area, the respective high aircraft noise area and moderate aircraft noise area provisions will apply to the relevant part of the site;
 - (b) where a site is shown partly within the moderate aircraft noise area and partly within the aircraft noise notification area, or partly within the 57dB L_{dn} noise boundary, the respective moderate aircraft noise area or 57dB L_{dn} noise boundary provisions will apply to the relevant part of the site;
 - (c) where a building containing activities sensitive to aircraft noise is shown partly within the high aircraft noise area and partly within the moderate aircraft noise area, the high aircraft noise area provisions will apply to the whole of the building; and
 - (d) where a building containing activities sensitive to aircraft noise is shown partly within the moderate aircraft noise area and partly within the aircraft noise notification area or partly within the 57dB L_{dn} noise boundary, the moderate aircraft noise area or 57dB L_{dn} noise boundary provisions will apply to the whole of the building.

Table D24.4.1 Activity table for North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase

Activity		Activity status
Development between the 55dB L_{dn} and 65dB L_{dn} noise boundaries (including Lot 3 DP 104718)		
(A1)	New activities sensitive to aircraft noise	RD
(A2)	New activities sensitive to aircraft noise that do not comply with Standard D24.6.1(1)	NC
(A3)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise	RD
(A4)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise that do not comply with Standard D24.6.1(1)	NC
Development within the 65dB L_{dn} noise boundary (excluding Lot 3 DP 104718)		
(A5)	New activities sensitive to aircraft noise	Pr
(A6)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise	NC
Subdivision		

(A7)	Subdivision of land for activities sensitive to aircraft noise to create a new site within the 65dB L _{dn} noise boundary	Pr
(A8)	Subdivision of land for activities sensitive to aircraft noise to create a new site between the 55dB L _{dn} and 65dB L _{dn} noise boundaries	NC

Table D24.4.2 Activity table for Ardmore Airport

Activity		Activity status
Development within the 65dB L_{dn} noise boundary ANB		
(A9)	New activities sensitive to aircraft noise	Pr
(A10)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (not including alterations or additions to a habitable room or sleeping area)	P
(A11)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning)	D
(A12)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning) that do not comply with Standard D24.6.2(1) or D24.6.2(2)	Pr
(A13)	A new single dwelling on a site where a title was issued prior to 17 October 2007	D
Development between the 60dB L_{dn} and the 65dB L_{dn} noise boundaries		
(A14)	New activities sensitive to aircraft noise	D
(A15)	New activities sensitive to aircraft noise that does not comply with Standard D24.6.2(1) and D24.6.2(5)	NC
(A16)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (that do not involve alterations or additions to a habitable room)	P
(A17)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (that involve alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning)	RD
(A18)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise that involve alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning that do not comply with Standard D24.6.2(3) and D24.6.2(5)	D
(A19)	A single dwelling on a site where a title was issued prior to 17 October 2007	D
Development between the 55dB L_{dn} and 60dB L_{dn} noise boundaries ONB		
(A20)	New activities sensitive to aircraft noise	RD
(A21)	New activities sensitive to aircraft noise that do not comply with Standard D24.6.2(1), D24.6.2(4) and D24.6.2(5)	NC
(A22)	Alterations or additions to existing buildings accommodating	P

	activities sensitive to aircraft noise that do not involve alterations and additions to a habitable room	
(A23)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations and additions to habitable rooms and sleeping areas or rooms for convalescing and learning)	P
(A24)	Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations and additions to habitable rooms and sleeping areas or rooms for convalescing and learning) that do not comply with Standard D24.6.2(4) and D24.6.2(5)	D
(A25)	A new single dwelling on a site where a title was issued prior to 17 October 2007	P
Subdivision		
(A26)	Subdivision (except subdivision associated with a network utility) within the 65dB L _{dn} noise boundary where the application identifies legal mechanisms on any land title(s) to permanently avoid the establishment of any additional activities sensitive to aircraft noise	D
(A27)	Subdivision (except subdivision associated with a network utility) within the 65dB L _{dn} noise boundary where the application does not identify legal mechanisms on any land title(s) to permanently avoid the establishment of any additional activities sensitive to aircraft noise	NC
(A28)	Subdivision (except subdivision associated with a network utility) between the 60dB L _{dn} and the 65dB L _{dn} noise boundaries and between the 55dB L _{dn} and 60dB L _{dn} noise boundaries	RD

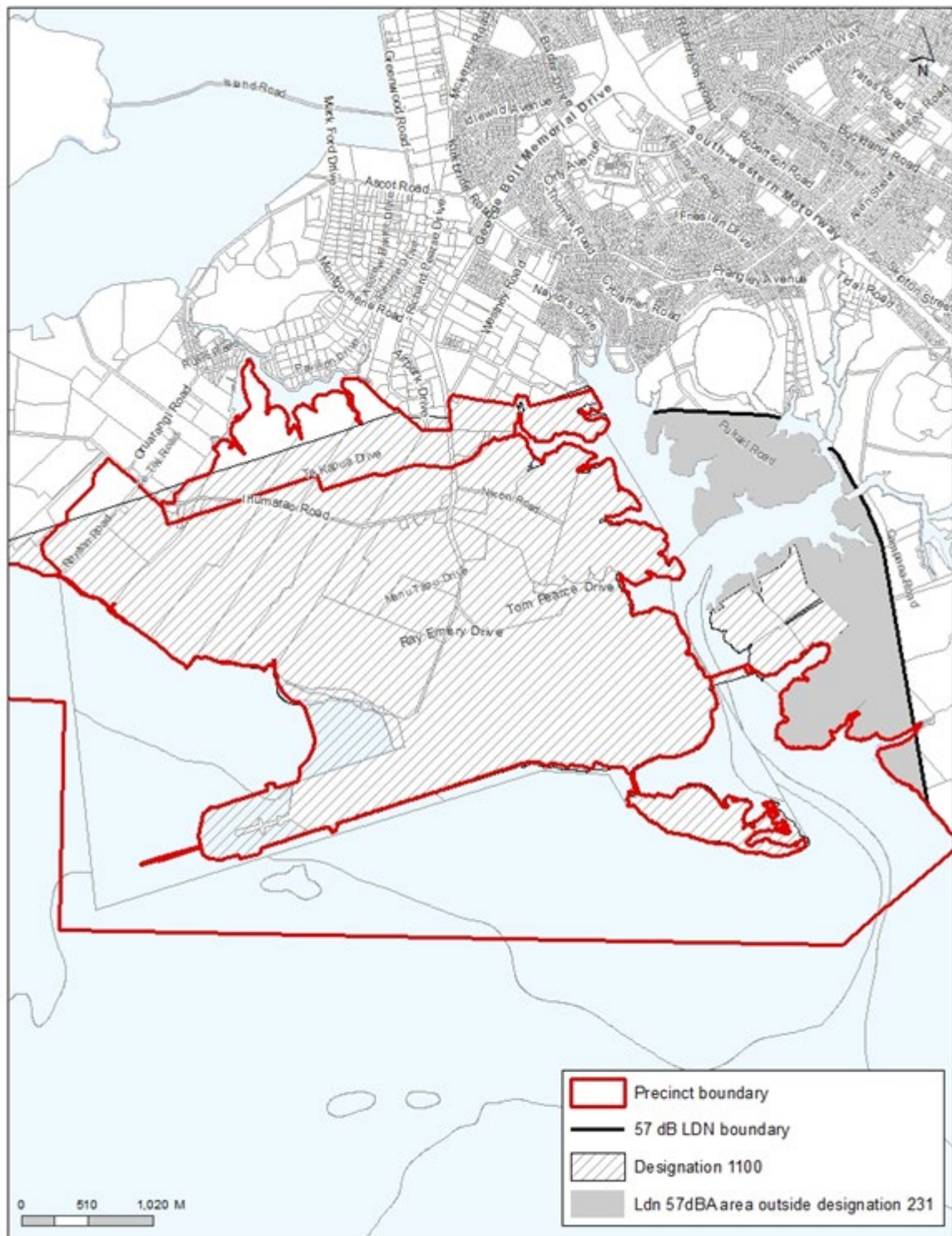
Table D24.4.3 Activity table for Auckland International Airport

Activity		Activity status
Activities in the high aircraft noise area		
(A29)	New activities sensitive to aircraft noise (excluding tertiary education facilities)	Pr
(A30)	New tertiary education facilities and additions or alterations to existing activities sensitive to aircraft noise other than existing dwellings	NC
(A31)	Additions or alterations to an existing dwelling	RD
Activities in the high aircraft noise area within residential zones		
(A32)	Commercial services	P
(A33)	Dairies up to 100m ² gross floor area	P
(A34)	Food and beverage services up to 100m ² gross floor area	P
(A35)	Show homes	RD
(A36)	Storage and lock-up facilities	P
Activities within the moderate aircraft noise area and/or within the 57dB L_{dn} noise boundary (Figure 1)		

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(A37)	New dwellings (or any subdivision for new dwellings) in a residential zone where: (a) average density does not exceed one dwelling per 400m ² ; or (b) the maximum density controls and/or minimum site size within the area included within I412 Flat Bush Precinct in the moderate aircraft noise area are complied with	P
(A38)	New dwellings (or any subdivision for new dwellings) in a residential zone where: (a) average density exceeds one dwelling per 400m ² ; or (b) the maximum density controls and/or minimum site size within the area included within I412 Flat Bush Precinct in the moderate aircraft noise area are exceeded	RD
(A39)	Additions or alterations to an existing dwelling in a residential zone	P
(A40)	Additions or alterations to existing activities sensitive to aircraft noise (other than dwellings in a residential zone)	RD
(A41)	New activities sensitive to aircraft noise within the moderate aircraft noise area and/or the 57dB L _{dn} boundary shown in Figure 1 not otherwise listed within this activity table	D
(A42)	New activities sensitive to aircraft noise within the moderate aircraft noise area and/or the 57dB L _{dn} noise boundary that do not comply with D24.6.3	NC

Figure 1 Auckland Airport 57 dB L_{dn} Boundary



Auckland Airport L_{dn} 57 dBA boundary

D24.5. Notification

- (1) Any application for resource consent for an activity listed in Table D24.4.1, Table D24.4.2 and Table D24.4.3 above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (1) When deciding who is an affected person in relation to any activity for the purposes of section 95E of the Resource Management Act 1991 the Council will give specific consideration to those persons listed in Rule [C1.13\(4\)](#).

D24.6. Standards

All activities listed in Table D24.4.1, Table D24.4.2 and Table D24.4.3 must comply with the following standards.

D24.6.1. North Shore Airport, Kaipara Flats, and Whenuapai

- (1) The following activities:

- D24.4.1(A1) New activities sensitive to aircraft noise; and
- D24.4.1(A3) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise

must provide sound attenuation and related ventilation and/or air conditioning measures:

- (a) to ensure the internal noise environment of habitable rooms does not exceed a maximum noise level of 40dB L_{dn};
- (b) that are certified by a person suitably qualified and experienced in acoustics to the Council's satisfaction prior to its construction; and
- (c) so that the related ventilation and/or air conditioning system(s) satisfies the requirements of New Zealand Building Code Rule G4 with all external doors of the building and all windows of the habitable rooms closed.

D24.6.2. Ardmore Airport

- (1) The following activities:

- D24.4.2(A11) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning);
- D24.4.2(A14) New activities sensitive to aircraft noise; and
- D24.4.2(A20) New activities sensitive to aircraft noise;

must provide sound attenuation and related ventilation and/or air-conditioning measures to ensure:

- (a) the internal noise environment of habitable rooms and sleeping areas and rooms for convalescing and learning does not exceed a maximum of 40dB L_{dn} ; and
- (b) the related ventilation and/or air conditioning system(s) satisfies the requirements of New Zealand Building Code Rule G4 with all external doors of the building and all windows of the habitable rooms closed.

(2) The following activities:

- D24.4.2(A11) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning); and
- D24.4.2(13) A new single dwelling on a site where a title was issued prior to 17 October 2007;

must:

- (a) be constructed from materials and use construction methods and insulation to achieve at least a 30dBA noise reduction in all such rooms with all external doors of the building and all windows of these rooms closed;
 - (b) be certified by a suitably qualified and experienced person as meeting that standard to the Council's satisfaction prior to its construction; and
 - (c) provide a ventilation system that:
 - (i) complies with the mechanical ventilation requirements of Part G4 of the New Zealand Building Code for buildings where all external windows and doors are closed;
 - (ii) creates no more than 40dB $L_{Aeq (1min)}$ in the principal living room, no more than 30dB $L_{Aeq (1min)}$ in the other habitable rooms, no more than 40dB $L_{Aeq (1min)}$ in any hallway, in each building, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; and
 - (iii) on completion of construction, the owner must provide the Council with certificates prepared by suitably qualified and experienced persons certifying the acoustic treatment, sound attenuation measures and ventilation measures have been done to achieve compliance with this clause.
- (3) Activity D24.4.2(A17) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (that involve alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning) must:

- (a) be constructed from materials and using construction methods and insulation to achieve at least a 30dBA noise reduction in all such rooms, with all external doors of the building and all windows of these rooms closed;
 - (b) be certified by a suitable qualified and experienced person as meeting that standard to the Council's satisfaction prior to construction; and
 - (c) provide a ventilation system that:
 - (i) complies with the mechanical ventilation requirements of Part G4 of the New Zealand Building Code for buildings where all external windows and doors are closed;
 - (ii) creates no more than 40dB $L_{Aeq (1min)}$ in the principal living room, no more than 30dB $L_{Aeq (1min)}$ in the other habitable rooms, no more than 40dB $L_{Aeq (1min)}$ in any hallway, in each building, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; and
 - (iii) on completion of construction, the owner must provide the Council with certificates prepared by suitably qualified and experienced persons certifying the acoustic treatment, sound attenuation measures and ventilation measures have been done to achieve compliance with this clause.
- (4) The following activities:
- D24.4.2(A20) New activities sensitive to aircraft noise; and
 - D24.4.2(A23) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (including alterations and additions to habitable rooms and sleeping areas or rooms for convalescing and learning);

must:

- (a) be constructed from materials and using construction methods to achieve at least a 25dBA noise reduction in all such rooms, with all external doors of the building and all windows of these rooms closed;
- (b) be certified by a suitably qualified and experienced person as meeting that standard to the Council's satisfaction prior to construction; and
- (c) provide a ventilation system that:
 - (i) complies with the mechanical ventilation requirements of Part G4 of the New Zealand Building Code for buildings where all external windows and doors are closed;

- (ii) creates no more than 40dB $L_{Aeq (1min)}$ in the principal living room, no more than 30dB $L_{Aeq (1min)}$ in the other habitable rooms, no more than 40dBA $L_{Aeq (1min)}$ in any hallway, in each building, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; and
 - (iii) on completion of construction, the owner must provide the Council with certificates prepared by suitably qualified and experienced persons certifying the acoustic treatment, sound attenuation measures and ventilation measures have been done to achieve compliance with this clause.
- (5) Educational facilities, care centres and additions to existing educational facilities and care centres between the 60dB L_{dn} and the 65dB L_{dn} noise boundaries and between the 55dB L_{dn} and 60dB L_{dn} noise boundaries must be constructed and maintained to achieve an interior noise environment in classrooms and all other places of learning not exceeding 35dB $L_{Aeq (15min)}$ 8.30am to 3.30pm Monday to Friday (inclusive).

D24.6.3. Auckland International Airport

- (1) In buildings containing activities sensitive to aircraft noise (except care centres, educational facilities, and tertiary education facilities); acoustic insulation and related ventilation and/or air conditioning system/s must be installed to achieve an internal environment in all habitable rooms (with all external doors of the building and all windows of the habitable rooms closed) of 40dB L_{dn} . The mechanical ventilation system and/or air conditioning system(s) must include:
- (a) a mechanical kitchen extractor fan ducted directly to the outside to serve any cooking hob, if not already installed and in sound working order; and
 - (b) a mechanical ventilation system or mechanical ventilation systems capable of:
 - (i) providing at least 15 air changes of outdoor air per hour in the principal living room of each building and five air changes of outdoor air per hour in the other habitable rooms of each building, with all external doors and windows closed except windows in non-habitable rooms that need to be ajar to provide air relief paths;
 - (ii) enabling the rate of airflow to be controlled across the range, from the maximum airflow capacity down to 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
 - (iii) limiting internal air pressure to not more than 30 Pascals above the ambient air pressure;
 - (iv) being individually switched on and off by the building occupants, in the case of each system; and

- (v) operating at a noise level of no more than 40dB $L_{Aeq(1min)}$ in the principal living room, no more than 30dB $L_{Aeq(1min)}$ in the other habitable rooms, no more than 40dB $L_{Aeq(1min)}$ in any hallway, in each building, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; or
- (c) air conditioning plus mechanical outdoor air ventilation capable of:
 - (i) providing internal temperatures in habitable rooms not greater than 25 degrees Celsius with all external doors and windows of the habitable rooms closed;
 - (ii) providing 0.5 air changes (plus or minus 0.1) of outdoor air per hour in all habitable rooms;
 - (iii) providing for each air conditioning and mechanical ventilation system to be individually switched on and off by the building occupants; and
 - (iv) operating at a noise level of no more than 40dB $L_{Aeq(1min)}$ in the principal living room, no more than 30dB $L_{Aeq(1min)}$ in the other habitable rooms, no more than 40dB $L_{Aeq(1min)}$ in any hallway, in each building, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser.
- (2) For care centres, acoustic insulation and related ventilation and/or air conditioning systems must be installed to achieve an internal acoustic environment in each learning area and sleeping area (with all external doors and windows of the learning areas and sleeping areas closed) of 40dB L_{dn} . To achieve this, the care centre must provide either:
 - (a) a mechanical ventilation system or mechanical ventilation systems for each learning area and sleeping area:
 - (i) designed to achieve indoor air temperatures not less than 16 degrees Celsius in winter;
 - (ii) capable of providing outdoor air ventilation at the rate of 15l air/second/m² for the first 50m² and 7.5l air/second/m² of remaining area, when all external doors and windows of the learning area and sleeping area are closed;
 - (iii) capable of enabling the rate of air flow to be controlled across the range, from the maximum air flow capacity down to 8l/second/person for the maximum number of people able to be accommodated in the learning area and sleeping area at one time;
 - (iv) otherwise complying with the New Zealand Standard on Ventilation for Acceptable Indoor Air Quality (NZS 4303:1990);
 - (v) designed and installed so that each ventilation system can be capable of being individually switched on/off by the building occupants; and

- (vi) capable of creating no more than 35dB $L_{Aeq (1min)}$ in each learning area and sleeping area, no more than 40dB $L_{Aeq (1min)}$ in any hallway or corridor, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; or
- (b) air conditioning plus mechanical outdoor air ventilation capable of:
 - (i) providing 8l outdoor air/second/person;
 - (ii) providing internal air temperatures in each learning area and sleeping area not greater than 27 degrees Celsius,
 - (iii) providing that the mechanical system creates no more than 35dB $L_{Aeq (1min)}$ in each learning area and sleeping area, no more than 40 dB $L_{Aeq (1min)}$ in any hallway or corridor, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser; and
 - (iv) otherwise complying with the New Zealand Standard on Ventilation for Acceptable Indoor Air Quality (NZS 4303:1990).
- (3) For educational facilities and tertiary education facilities, acoustic insulation and related ventilation and/or air conditioning systems must be installed to achieve an internal acoustic environment in each classroom (which includes any room used for teaching or research at a tertiary education facility), library and hall (which includes indoor recreational facilities at a tertiary education facility), with all external doors and windows of the classrooms, libraries and halls closed, of 40dB L_{dn} . To achieve this, those facilities must provide:
 - (a) in the case of classrooms and libraries, air conditioning and/or mechanical ventilation systems for each classroom or library that are:
 - (i) designed to achieve indoor air temperatures not less than 16 degrees Celsius in winter and not greater than 27 degrees Celsius in summer;
 - (ii) capable of providing outdoor air ventilation at the rate of 8 litres of air per second per person for the maximum number of people able to be accommodated in any such room at one time ("the required airflow");
 - (iii) capable of enabling (in the case of classrooms or libraries in which only mechanical ventilation systems are used to satisfy the above temperature and outdoor air requirements), the outdoor airflow to be controlled across the range, from the maximum airflow capacity down to the required airflow when all external doors and windows of the classroom or library are closed;
 - (iv) otherwise complying with the New Zealand Standard on Ventilation for Acceptable Indoor Air (NZS 4303:1990); and
 - (v) operating at a noise level of no more than 35dB $L_{Aeq (1min)}$ in each classroom, no more than 40dB $L_{Aeq (1min)}$ in each library, no more than

40dB $L_{Aeq (1min)}$ in any hallway or corridor, and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser.

- (b) in the case of halls, either a mechanical ventilation system or mechanical ventilation systems for each hall capable of:
 - (i) providing at least 12 litres of outdoor air per second per square metre with all external doors and windows of the hall closed;
 - (ii) enabling the outdoor airflow to be controlled across the range, from the maximum airflow down to the rate of 8 litres of outdoor air per second per person for the maximum number of occupants able to be accommodated in the hall at one time;
 - (iii) otherwise complying with the New Zealand Standard on Ventilation for Acceptable Indoor Air Quality (NZS 4303:1990); and
 - (iv) operating at a noise level of no more than 35dB $L_{Aeq (1min)}$ in each hall, and no more than 40dB $L_{Aeq (1min)}$ in any hallway or corridor. Noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser, or
- (c) air conditioning plus mechanical outdoor air ventilation capable of:
 - (i) providing 8 litres per second per person of outdoor air,
 - (ii) proving internal air temperatures in each hall not greater than 27 degrees Celsius,
 - (iii) providing that the mechanical system creates no more than 35dB $L_{Aeq (1min)}$ in each hall, no more than 40dB $L_{Aeq (1min)}$ in any hallway or corridor and noise levels from the mechanical system(s) must be measured at least 1m away from any diffuser;
 - (iv) otherwise complying with the New Zealand Standard on Ventilation for Acceptable Indoor Air Quality (NZS 4303:1990).
- (4) The required acoustic treatment measures to achieve the acoustic noise environment specified in rule D24.6.3(1), (2) and (3) must be determined by using the Future Airport Noise Contours contained in [Appendix 19 Auckland Airport Future Aircraft Noise Contours \(FANC\) – Aircraft Noise Overlay](#).
- (5) Upon the completion of the installation of the acoustic treatment measures the owner must provide the Council with certificates prepared by a suitably qualified and experienced:
 - (a) acoustical consultant certifying that the acoustic treatment measures specified for the activity in this control are sufficient to achieve compliance with this control and have been undertaken in accordance with sound practice; and

- (b) ventilation engineer certifying that the ventilation measures specified for the activity in this control are sufficient to achieve compliance with this control and have been undertaken in accordance with sound practice.

D24.7. Assessment – controlled activities

There are no controlled activities in this overlay.

D24.8. Assessment – restricted discretionary activities

D24.8.1. Matters of discretion

The Council will restrict its discretion to the following matters when assessing a restricted discretionary resource consent application.

D24.8.2. North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase and Ardmore Airport

(1) For the following activities:

- D24.4.1(A1) New activities sensitive to aircraft noise (between the 55dB L_{dn} and the 65dB L_{dn} noise boundary at North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase);
- D24.4.1(A3) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (between the 55dB L_{dn} and the 65dB L_{dn} noise boundary at North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase);
- D24.4.2(A20) New activities sensitive to aircraft noise (between the 55dB L_{dn} and 60dB L_{dn} noise boundaries at Ardmore Airport); and
- D24.4.2(A17) Alterations or additions to existing buildings accommodating activities sensitive to aircraft noise (that involve alterations or additions to habitable rooms and sleeping areas or rooms for convalescing and learning) (between the 60dB L_{dn} and the 65dB L_{dn} noise boundaries at Ardmore Airport):

- (a) the internal noise environment of the proposed and any existing structure;
- (b) the internal ventilation standards for the proposed or any existing structure;
- (c) measures for or relating to the attenuation of aircraft noise arising in connection with the airport/airfield/airbase;
- (d) the imposition of an obligation to ensure any required acoustic treatment measures are not removed without the Council's consent, including requiring the obligation to be registered on the certificate of title; and
- (e) the nature, size and scale of the proposed development.

(2) Subdivision within the Ardmore Airport:

- (a) measures for or relating to the attenuation of aircraft noise arising in connection with Ardmore Airport;
- (b) the imposition of an obligation not to remove any required acoustic treatment measures without the airport operator's consent, including requiring the obligation to be registered as a covenant on the certificate of title;
- (c) the nature, scale and intensity of the proposed development;
- (d) the location of proposed activities, including activities sensitive to aircraft noise; and
- (e) potential effects on Ardmore Airport.

D24.8.2.1. Auckland International Airport

(1) All restricted discretionary activities in Table D24.4.3:

- (a) the objectives and policies relating to activities sensitive to aircraft noise;
- (b) the nature, size and scale of the proposed development;
- (c) measures for or relating to the attenuation of aircraft noise arising in connection with the airport; and
- (d) the imposition of an obligation to ensure any required acoustic treatment measures are not removed without the Council's consent, including requiring the obligation to be registered as a covenant on the certificate of title.

(2) Show homes:

- (a) relocation of the show home from the site; and
- (b) duration of the activity on the site.

D24.8.3. Assessment criteria

The Council will consider the relevant assessment criteria below for restricted discretionary activities.

D24.8.3.1. North Shore Airport, Kaipara Flats Airfield and Whenuapai Airbase and Ardmore Airport

- (1) The internal noise environment of the proposed and any existing structure should provide satisfactorily levels of health and amenity values to occupants.
- (2) The internal air quality of the proposed or any existing structure should provide satisfactory health, and amenity values to occupants.
- (3) The proposed measures for attenuation of aircraft noise arising in connection with the airport/airfield/airbase should satisfactorily avoid, remedy or mitigate those effects.
- (4) Mechanisms should be put in place to ensure there is an ongoing obligation on owners to ensure that required acoustic treatment measures are not removed without the Council's prior consent.
- (5) Having regard to all the circumstances, including location in relation to the airport/airfield/airbase, likely exposure of the site to aircraft noise, noise attenuation and ventilation measures proposed, and the number of people to be accommodated, the nature, size and scale of the proposed activity should not be likely to lead to potential conflict with and adverse effects upon the operation of the airport/airfield/airbase.

D24.8.3.2. Auckland International Airport

- (1) All restricted discretionary activities in Table D24.4.3.
 - (a) The proposal should be consistent with the objectives and policies relating to the economic importance of the Auckland International Airport and the need to protect it from the reverse sensitivity effects associated with activities sensitive to aircraft noise.
 - (b) The nature, size and scale of the proposed development should not be likely to lead to reverse sensitivity effects on the Auckland International Airport. In considering this, the Council will consider whether:
 - (i) the numbers of people to be exposed to aircraft noise in the external environment as a result of the proposal and the amount of aircraft noise received at the site now and in the future will be adversely affected by that noise;
 - (ii) the development includes amenity areas or other features that raise expectations of high levels of outdoor amenity;
 - (iii) the nature of the development recognises the likelihood of an external environment heavily dominated by aircraft noise; and

- (iv) there will be frequent use of the building or the external environment for sleeping, convalescing, relaxing or learning purposes where quiet environments and the ability to leave windows and doors open are valued.
- (c) Mechanisms should be put in place to ensure there is an on-going obligation on owners to ensure that required acoustic treatment measures are not removed without the Council's prior consent.
- (d) The development should achieve an acceptable internal noise environment for habitable rooms and sleeping areas and rooms for convalescing or learning having regard to:
 - (i) the extent of any standard infringements and whether the non-compliance is insignificant;
 - (ii) where alternative measures are proposed, the design, construction and materials of any structure to be used would achieve an acceptable internal noise environment for habitable rooms and sleeping areas and rooms for convalescing or learning with all external doors and windows of the building/s closed;
 - (iii) whether alternative measures are proposed to ensure adequate ventilation and the removal of cooking smells; and
 - (iv) whether it is reasonable to require acoustic treatment measures (including measures for internal air quality purposes) in existing rooms, or whether such measures should be limited to the addition.
- (2) Show homes:
 - (a) conditions are imposed requiring that the show home is capable of being relocated from the site; and
 - (b) conditions are imposed limiting the duration of the show home activity being located on the site.

D24.9. Special information requirements

There are no special information requirements in this overlay.