

Relevant Overlay Codes

The following Assessment Benchmarks have been addressed by Saunders Havill Group for this application:

1. Airport Environs Code	1
2. Potential and Actual Acid Sulfate Soils Overlay	10
3. Transport Air Quality Overlay	13
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Assessment Benchmarks to be undertaken by other consultants:

- Flood Overlay Code (Water Technology Overlay Flow Flood Assessment) – **Appendix C**

1. Airport Environs Code

1. This code applies to assessing development in the Airport environs overlay, if:
 - a. accepted development subject to compliance with identified requirements, where acceptable outcomes of this code are identified requirements in a table of assessment for an overlay (section 5.10); or
 - b. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for an overlay (section 5.10); or
 - c. impact assessable development.
2. Land in the Airport environs overlay is identified on the Airport environs overlay maps and is included in the following sub-categories:
 - a. Obstacle Limitation Surfaces (OLS) sub-categories:
 - i. approach and departure limitation surface boundary and contours sub-category;
 - ii. conical limitation surface contours sub-category;
 - iii. horizontal limitation surface boundary sub-category;
 - iv. transitional surface sub-category;
 - v. runway centreline sub-category.
 - b. Procedures for Air Navigation Services—Aircraft Operational Surfaces (PANS-OPS) sub-categories:
 - i. procedures for air navigation surfaces (PANS) sub-category.
 - c. Bird and bat strike zone sub-categories:
 - i. distance from airport 0-3km sub-category;
 - ii. distance from airport 3-8km sub-category;
 - iii. distance from airport 8-13km sub-category.
 - d. Public safety area sub categories:
 - i. public safety area sub-category;
 - ii. airport runway sub-category.
 - e. Light intensity sub-categories:
 - i. Zone A - 0 candela - 600m wide 1000m from runway strip sub-category;
 - ii. Zone B - 50 candela - 900m wide 2000m from runway strip sub-category;
 - iii. Zone C - 150 candela - 1200m wide 3000m from runway strip sub-category;
 - iv. Zone D - 450 candela - 1500m wide 4500m from runway strip sub-category;
 - v. within 6km - Max intensity of light sources 3 degrees above horizon sub-category.
 - f. Aviation facilities sub-categories:
 - i. aviation facilities sub-category;
 - ii. glidepath - 1500m at 30 degrees sub-category;
 - iii. distance from NDB - 500m sub-category;
 - iv. distance from radar - 4,000m sub-category;

- v. distance from VHF - 500m sub-category;
- vi. distance from VOR - 1000m sub-category;
- vii. distance from outer marker - 50m sub-category.
- g. Australian Noise Exposure Forecast (ANEF) contour sub-categories:
 - i. ANEF 40-45 sub-category;
 - ii. ANEF 35-40 sub-category;
 - iii. ANEF 30-35 sub-category;
 - iv. ANEF 25-30 sub-category;
 - v. ANEF 20-25 sub-category.
- h. Height restriction zone sub-categories:
 - i. height restriction zone 15m sub-category;
 - ii. height restriction zone 45m sub-category;
 - iii. height restriction zone 90m sub-category.

3. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Editor’s note—For a proposal to be accepted development subject to compliance with identified requirements, it must meet all the identified acceptable outcomes of this code that relate to the applicable sub-category and any other applicable code. Where it does not meet all identified acceptable outcomes, the proposal becomes assessable development and a development application is required. Where a development application is triggered, only the specific acceptable outcomes that the proposal fails to meet need to be assessed against the corresponding assessable acceptable outcomes or performance outcomes and relevant overall outcomes. Other identified acceptable outcomes that are met are not assessed as part of the development application.

Editor’s note—Where this code includes performance outcomes or acceptable outcomes that relate to:

- Noise impact assessment, guidance is provided in the Noise impact assessment planning scheme policy.

8.2.2.2 Purpose

1. The purpose of the Airport environs overlay code is to:
 - a. Implement the policy direction in the Strategic framework, in particular:
 - i. Theme 1: Brisbane’s globally competitive economy and Element 1.2 — Brisbane’s industrial economy;
 - ii. Theme 5: Brisbane’s CityShape and Element 5.1 — Brisbane’s City Centre and Element 5.2 — Brisbane’s Major Industry Areas.
 - b. Provide for the assessment of the suitability of development in the Airport environs overlay.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development protects the safety and functioning of operational airspace of the Brisbane, Archerfield and Amberley airports.
 - b. Development protects the functioning of aviation facilities from incompatible land uses, buildings, structures and works.

- c. Development within the vicinity of the Brisbane and Archerfield airports is appropriately located to prevent exposure to very high levels of aircraft noise and designed to adequately attenuate expected aircraft noise to protect the health and wellbeing of occupants.
- d. Development ensures that operational airspace of the Brisbane, Archerfield and Amberley airports is not put at risk from light sources or wildlife interference generated by development.
- e. Development minimises potential hazards to the safety and functioning of airport operations resulting from emissions from smoke, dust or any other airborne particulate or the creation of air turbulence.
- f. Development does not materially increase the number of people or the storage and handling of dangerous goods or combustible liquids within public safety areas.
- g. Development minimises the potential hazard to safety of airport operators resulting from reflection of sunlight, and other potential threat of interference to pilot vision.
- h. Development avoids increased risks to public safety near airport runways.

8.2.2.3 Performance outcomes and acceptable outcomes

Table 8.2.2.3.A—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
Section A—If in the OLS sub-categories, the PANS OPS sub-categories or the height restriction zone sub-categories		
General		
<p>PO1 Development does not create or potentially create a permanent or temporary obstruction or hazard to operational airspace of Brisbane, Archerfield or Amberley airports.</p>	<p>AO1 Development does not penetrate or create any physical obstruction into the OLS, height restriction zone or PANS-OPS and create an obstacle to an aircraft operating to or from the Brisbane, Archerfield or Amberley airports unless approved in accordance with the relevant federal legislation. Editor's note— Where development intrudes into an airport's OLS or PANS-OPS, advice from the Civil Aviation Safety Authority should be sought.</p>	<p>The subject site is situated within the Obstacle Limitation Surfaces, Procedures for Air Navigation Services – Aircraft Operations Surfaces and Bird and bat strike zone and public safety zone of the Airport Environs overlay.</p> <p>As the site is mapped within this overlay and is over 100m in height, an application has been made to Air Services Australia to provide advice and recommendations on the</p>

		proposed development. Once the assessment period is concluded, any advice/recommendations will be relayed to EDQ and/or incorporated in the design, as required.
<p>PO2 Development ensures that emissions do not significantly affect air turbulence, visibility or aircraft engine operation within the operational airspace of Brisbane, Archerfield or Amberley airports. Editor's note— Where development does emit gases or particulates above those outlined in AO2, advice from the Civil Aviation Safety Authority should be sought.</p>	<p>AO2 Development does not emit into the OLS or height restriction zone: a. a gaseous plume at velocity exceeding 4.3m/s, as determined in conjunction with CASA Advisory Circular AC-139-05(1) Plume rise assessments; b. smoke, dust, ash, steam or other airborne particulate.</p>	N/A
Additional performance outcomes and acceptable outcomes if involving air service		
<p>PO3 Development does not create a hazard to aviation operations conducted to or from the Brisbane or Archerfield airports.</p>	<p>AO3 Development will not create a hazard to airport operations in accordance with the written confirmation of the Civil Aviation Safety Authority.</p>	N/A
Section B—If in the Bird and bat strike zone sub-categories		
<p>PO4 Development does not attract birds and bats into operational airspace in significant numbers likely to cause a safety hazard to airport operations.</p>	<p>AO4.1 Development within the Bird and bat strike zone sub-categories area ensures that waste is covered and collected so that it is inaccessible to birds and bats.</p> <p>AO4.2 Development involving landscaping or drainage works, including artificial water bodies located within the distance from airport 0-3km sub-category, are designed and</p>	Waste is internally collected and disposed of via waste collection on-site.

	installed to minimise the potential to attract birds and bats.	
Section C—If in the Public safety area sub-categories		
P05 Development does not expose or increase the risk to public safety.	<p>A05.1 Development does not increase the number of people living, working or congregating in the Public safety area sub-categories.</p> <p>A05.2 Development does not materially increase the storage and handling of dangerous goods or combustible liquids within the Public safety area sub-categories.</p>	N/A
Section D—If in the Light intensity sub-categories		
P06 Development ensures that buildings and structures do not adversely impact airport operations or interfere with pilot vision.	<p>A06.1 Development ensures that outdoor lighting:</p> <ul style="list-style-type: none"> a. does not imitate the format of approach or runway lighting by configuring lights in straight parallel lines greater than 500m in length; b. does not emit light that will exceed the maximum light intensity specified within the light intensity area identified on the Light intensity sub-categories. <p>Note—Compliance with this acceptable outcome may be demonstrated by complying with the standards specified in the Civil Aviation Safety Authority guideline Chapter 12—Aerodrome lighting, 1.2 Lighting in the vicinity of an aerodrome and written confirmation from the airport operator.</p> <p>A06.2</p>	N/A

	<p>Development in the Within 6km-Max intensity of light sources 3 degrees above horizon sub-category does not involve:</p> <ul style="list-style-type: none"> a. coloured flashing or sodium lighting; or b. glare or upward shining lights; or c. flare plumes. 	
<p>Section E—If in the Aviation facilities sub-categories</p>		
<p>PO7 Development is of an appropriate design or implements management measures that avoid potential adverse impacts on an aviation facility. Note—Development complies with this performance outcome where written confirmation from Air Services Australia confirms that the development will not impair the functioning of the aviation facility.</p>	<p>A07 Development does not impair the functioning of an aviation facility by creating a permanent or temporary structure or any other physical line-of-sight obstruction between transmitting or receiving devices that:</p> <ul style="list-style-type: none"> a. transmits an electromagnetic field that will interfere with the functioning of the aviation facility; or b. contains a reflective surface that will interfere with the functioning of the aviation facility. <p>Note—Advice from Air Services Australia should be sought when proposing development within the Aviation facility sub-category. The SPP guidance: Strategic airports and aviation facilities identifies development likely to impact certain aviation facilities.</p>	N/A
<p>Section F—If in the Australian Noise Exposure Forecast (ANEF) contour sub-categories</p>		
<p>PO8 Development adequately attenuates for aircraft noise in buildings to protect the health and wellbeing of occupants by complying with the internal noise criteria in Table 8.2.2.3.B. Note—A noise impact assessment report prepared in accordance with the Noise impact assessment planning scheme policy can assist</p>	<p>A08.1 Development for a caretaker's accommodation, childcare centre, community care centre, community residence, dual occupancy, dwelling house, dwelling unit, educational establishment, health care service, hospital, multiple dwelling, relocatable home park, residential care facility, retirement facility</p>	N/A

<p>in demonstrating achievement of this performance outcome.</p>	<p>or rooming accommodation located in the ANEF 20-25 sub-category:</p> <ul style="list-style-type: none"> a. provides external windows and doors which are acoustically rated to a minimum of Rw 30; b. ensures that the roof, ceiling and insulation combination is acoustically rated to a minimum of Rw 45; c. ensures that external walls are acoustically rated to a minimum of Rw 50. <p>A08.2 Development for a resort complex, rural workers' accommodation, short-term accommodation or tourist park located in the ANEF 25-30 sub-category:</p> <ul style="list-style-type: none"> a. provides external windows and doors which are acoustically rated to a minimum of Rw 30; b. ensures that the roof, ceiling and insulation combination is acoustically rated to a minimum of Rw 45; c. ensures that external walls are acoustically rated to a minimum of Rw 50. 	
	<p>A08.3 Development for an office is not located in the ANEF 25-30 sub-category, ANEF 30-35 sub-category, ANEF 35-40 sub-category, or ANEF 40-45 sub-category.</p>	
	<p>A08.4 No acceptable outcome is prescribed where development for a community use, detention facility, funeral parlour, place of worship, theatre or veterinary service.</p>	

	<p>A08.5 Development for a use not identified in A08.1, A08.2, A08.3 or A08.4 is not located in the ANEF 40-45 sub-category.</p>	
<p>PO9 Development for a sensitive use is appropriately located to prevent inappropriate exposure to very high levels of aircraft noise.</p>	<p>A09.1 Development for a caretaker's accommodation, childcare centre, community care centre, community residence, dual occupancy, dwelling house, dwelling unit, educational establishment, health care service, hospital, multiple dwelling, relocatable home park, residential care facility, retirement facility or rooming accommodation is not located within the ANEF 25-30 sub-category, ANEF 30-35 sub-category, ANEF 35-40 sub-category, or ANEF 40-45 sub-category.</p> <p>A09.2 Development for a resort complex, rural workers' accommodation, short-term accommodation or tourist park is not located within the ANEF 30-35 sub-category, ANEF 35-40 sub-category, or ANEF 40-45 sub-category.</p>	N/A

Table 8.2.2.3.B—Internal noise criteria

Use	Activity of internal space	L _{AMax} 'S' time weighting
Caretaker's accommodation	Sleeping areas	50dB(A)
Childcare centre	Other habitable rooms	55dB(A)
Community residence		
Dual occupancy		
Dwelling house		
Dwelling unit		
Multiple dwelling		

Relocatable home park Residential care facility Retirement facility Rooming accommodation		
Resort complex Rural workers' accommodation Short-term accommodation Tourist park	Sleeping areas	55dB(A)
Educational establishment	Libraries, study areas and sleeping areas	50dB(A)
	Teaching areas and other habitable rooms	55dB(A)
Community care centre Health care service Hospital	Sleeping areas, wards, theatres, treatment and consulting rooms	50dB(A)
Office	Private offices and conference rooms	55dB(A)
	Open offices, drafting	65dB(A)
	Typing, data processing	70dB(A)
Other	Comply with AS 2021-2015 Acoustics—Aircraft noise intrusion—Building siting and construction, adopted 12 February 2015	

Note—

- $L_{A_{Max}}$ 'S' time weighting is the A-weighted maximum sound pressure level of aircraft noise measured using the slow responsive time
- Rw: weighted sound reduction index
- dB(A): A-weighted decibels

2. Potential and Actual Acid Sulfate Soils Overlay

1. This code applies to assessing development in the Potential and actual acid sulfate soils overlay, if:
 - a. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for an overlay (section 5.10); or
 - b. impact assessable development.

Note—Where the natural ground level is greater than 20m AHD, the Potential and actual acid sulfate soils overlay code does not apply.

Editor's note—Where the Potential and actual acid sulfate soils overlay code does not apply, it is recommended that acid sulfate soil be appropriately managed in other circumstances as well. For example, installing a piped drain may not disturb much soil but could result in a degraded asset.

2. Land in the Potential and actual acid sulfate soils overlay is identified on the Potential and actual acid sulfate soils overlay map and is included in the following sub-categories:
 - a. Potential and actual acid sulfate soils sub-category;
 - b. Land at or below 5m AHD sub-category;
 - c. Land above 5m AHD and below 20m AHD sub-category.
3. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to acid sulfate soils, an acid sulfate soil investigation report, or an acid sulfate soil management plan, guidance is provided in the Potential and actual acid sulfate soils planning scheme policy.

8.2.15.2 Purpose

- The purpose of the Potential and actual acid sulfate soils overlay code is to:
 - Implement the policy direction in the Strategic framework, in particular Theme 2: Brisbane's outstanding lifestyle and Element 2.3 — Brisbane's healthy and safe communities.
 - Provide for the assessment of the suitability of development in the Potential and actual acid sulfate soils overlay.

1. The purpose of the code will be achieved through the following overall outcomes:

- a. Development ensures that the release of an acid and associated metal contaminant is avoided by not disturbing acid sulfate soils when excavating, removing soil or extracting groundwater or filling land.
- b. Development ensures that disturbed acid sulfate soils or drainage waters are treated and, if required, ongoing management practices are adopted that minimise the potential for environmental harm from acid sulfate soil and protect corrodible assets from acid sulfate soil.
- c. Development is located, designed and constructed to avoid the mobilisation and release of iron compounds for coastal algal blooms.

8.2.15.3 Performance outcomes and acceptable outcomes

Table 8.2.15.3—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
<p>PO1 Development protects the environmental values and ecological health of receiving waters and does not subject assets to accelerated corrosion.</p>	<p>AO1 Development ensures that: 3. no potential or actual acid sulfate soils are disturbed; or Note—This can be demonstrated through the submission of an acid sulfate soil investigation report with reference to the Potential and actual acid sulfate soils planning scheme policy. c. the disturbance impacts in an area that hosts potential acid sulfate soils are appropriately managed, if less than 500m³ of soil is disturbed and the watertable is not affected; or Note—This can be demonstrated through the submission of an acid sulfate soil investigation report and a preliminary acid sulfate soil management plan, with reference to the Potential and actual acid sulfate soils planning scheme policy. c. impacts are appropriately managed if 500m³ or more of soil is disturbed or</p>	<p>An acid sulfate soils investigation and management plan was prepared in 2016 and is still relevant (Appendix N). Future development of the site, including excavation, should be carried out in accordance with the recommendations of the management plan; however, we anticipate that as part of subsequent approval requirements that stage-specific acid sulfate soils management plans will be required to be prepared, as was the case with the Silk 1 development.</p>

	<p>the watertable in an area that hosts potential or actual acid sulfate soils is affected.</p> <p>Note—This can be demonstrated through the submission of an acid sulfate soil investigation report and a full acid sulfate soil management plan, with reference to the Potential and actual acid sulfate soils planning scheme policy using levels of testing commensurate with the level of risk. If the investigation demonstrates that an acid sulfate soil management plan is not required, only an investigation report is required.</p>	
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3. Transport Air Quality Overlay

1. This code applies to assessing development in the Transport air quality corridor overlay, if:
 - a. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for an overlay (section 5.10); or
 - b. impact assessable development.
2. Land in the Transport air quality corridor overlay is identified on the Transport air quality overlay map and is included in the following sub-categories:
 - a. Transport air quality corridor A sub-category;
 - b. Transport air quality corridor B sub-category;
 - c. Tunnel ventilation stack sub-category.
3. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note—The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

Note—Where this code includes performance outcomes or acceptable outcomes that relate to:

- air quality assessment, guidance is provided in the Air quality planning scheme policy;
- designing for air quality, guidance is provided in the Transport air quality corridor planning scheme policy.

8.2.23.2 Purpose

1. The purpose of the Transport air quality corridor overlay code is to:
 - a. Implement the policy direction in the Strategic framework, in particular:
 - i. Theme 3: Brisbane’s clean and green leading environmental performance and Element 3.2—Brisbane’s environmental quality and sustainable design;
 - ii. Theme 5: Brisbane’s CityShape and Element 5.8 — Brisbane’s Growth Nodes on Selected Transport Corridors.
 - b. Provide for the assessment of the suitability of development in the Transport air quality corridor overlay.
2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development, in the context that air emissions are greater in transport corridors than in less busy areas, ensures that site layout and building design:
 - i. minimise the impacts of air pollution from vehicle traffic on the health and wellbeing of users of a childcare centre, multiple dwelling, residential care facility or retirement facility;
 - ii. maximise wind movement around buildings and the dispersion of traffic air pollutants;

- iii. minimise the impacts of air pollution from a tunnel ventilation stack on the health and wellbeing of occupants of sensitive uses.

8.2.23.3 Performance outcomes and acceptable outcomes

Table 8.2.23.3.A—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
Section A—If in the Transport air quality corridor A sub-category		
<p>PO1 Development for a multiple dwelling, residential care facility, rooming accommodation where accommodating 6 people or more, or retirement facility minimises exposure of an occupier of the development to road traffic air pollutants through:</p> <ul style="list-style-type: none"> d. adequate separation from the road; or e. provision of ducted mechanical ventilation with supply of clean outdoor air. 	<p>AO1 Development for a multiple dwelling, residential care facility, rooming accommodation where accommodating 6 people or more, or retirement facility:</p> <ul style="list-style-type: none"> d. is set back to the greater of the requirements of any use code or the minimum separation distance, measured in the horizontal and vertical planes (refer to Figure a), from the kerb as specified in Table 8.2.23.3.B; or e. is installed with ducted mechanical ventilation for the supply of outdoor air in compliance with AS 1668.2: The use of ventilation and air conditioning in buildings - Mechanical ventilation in buildings, and: <ul style="list-style-type: none"> a. locates the mechanical ventilation outdoor air intakes at least the minimum distance, measured in the horizontal and vertical planes (refer to Figure b), from the kerb as specified in Table 8.2.23.3.B; or 	<p>The East Tower is significantly set back and elevated from the Stanley Street frontage.</p> <p>The West Tower includes podium units with terrace areas set back approximately 4m from the road frontage (and approximately 9m from kerb). This increases to >6m and >9m at tower level. Stanley Street is nominated as a Category 1 route, requiring a 10m horizontal setback from kerb and 5m vertical distance from kerb. The proposed lower podium units in the West Tower comply with the setback requirements.</p>

	<p>b. includes filtration of outdoor air to a minimum performance standard of F6 or minimum efficiency reporting value (MERV) 9.</p> <p>Editor's note—MERV rating system (in accordance with the American Society of Heating, Refrigeration and Air-Conditioning) and the F rating system (in accordance with AS 1324.1 Air filters for use in general ventilation and airconditioning - Application, performance and construction) are measures used to describe the efficiency with which particulate filters remove particles of a specified size from an airstream. The higher the MERV designation, the better the removal efficiency, particularly for smaller particles.</p>	
<p>PO2 Development for a childcare centre meets the air quality (planning) criteria in Table 8.2.23.3.C, to ensure that users are not exposed to harmful air pollutant levels. Note—An air quality impact report prepared in accordance with the Air quality planning scheme policy can assist in demonstrating achievement of this performance outcome.</p>	<p>A02 Development for a childcare centre ensures that a habitable room and any covered or uncovered outdoor activity area is located at least the minimum horizontal and vertical distances specified in Table 8.2.23.3.B.</p>	N/A
<p>Section B—If in the Transport air quality corridor B sub-category</p>		
<p>PO3 Development incorporates built form and landscape design elements that maximise wind movement around buildings and the dispersion of road traffic air pollutants, including: d. maintaining gaps between buildings at 7m or higher;</p>	<p>A03 Development at 7m or higher is set back at least 20m from the kerb.</p>	<p>Development is not set back 20m from the kerb. Podium structures on both buildings are built close to the Stanley Street frontage, however landscape and building design elements are incorporated, such as:</p> <ul style="list-style-type: none"> ▪ Separation between podiums to accommodate the pedestrian link;

<p>e. variation in the building facade, in addition to balconies; f. varying the building shape and form from that of neighbouring buildings; g. significant vegetation between the road and the building.</p> <p>Note—A transport air quality corridor report prepared in accordance with the Transport air quality corridor planning scheme policy can assist in demonstrating achievement of this performance outcome.</p>		<ul style="list-style-type: none"> ▪ Separation between towers; ▪ Landscaping at ground level and within the podium; ▪ Varying building shape/podium design compared to neighboring buildings; ▪ Variation in building façade.
<p>Section C—If within the Tunnel ventilation stack sub-category</p>		
<p>PO4 Development does not:</p> <p>c. expose the occupants of a sensitive use to an air pollutant that exceeds the air quality planning criteria in Table 8.2.23.3.C, due to the operation of a tunnel ventilation outlet;</p> <p>d. affect the dispersion of air pollutants to the extent that existing sensitive uses will be exposed to air pollutants that exceed the air quality (planning) criteria in Table 8.2.23.3.C.</p> <p>Note—An air quality impact report prepared in accordance with the Air quality planning scheme policy can assist in demonstrating achievement of this performance outcome.</p>	<p>AO4.1 Development has a building height which is at least 10m lower than the height of the tunnel ventilation outlet.</p> <p>AO4.2 The development does not include a childcare centre.</p>	<p>N/A</p>

Table 8.2.23.3.B—Air quality corridor minimum separation distances

Route type	Minimum separation distance measured from the kerb (m)	
	Horizontal distance	Vertical distance
Category 1	10	5

Category 2	15	10
Category 3	20	10
Category 4	25	10
Category 5	30	15
Category 6	35	15
Category 7	40	15
Category 8	45	15
Category 9	50	15
Category 10	55	15

Table 8.2.23.3.C—Air quality (planning) criteria

Pollutant	Averaging time	Health outcome protected	Criteria including background ($\mu\text{g}/\text{m}^3$)	Criteria including background (ppm)
Nitrogen dioxide	1 hour	Health and wellbeing	250	0.12
	Annual	Health and wellbeing	62	0.03
Particulate matter (PM) as total suspended particulates (TSP)	Annual	Health and wellbeing	90	-
PM less than $10\mu\text{m}$ (PM_{10})	24 hours	Health and wellbeing	50	-
	Annual	Health and wellbeing	25	-
PM less than $2.5\mu\text{m}$ ($\text{PM}_{2.5}$)	24 hours	Health and wellbeing	25	-
	Annual	Health and wellbeing	8	-
Dust deposition as insoluble solids	Annual	Protecting aesthetic environment	$4\text{g}/\text{m}^2/\text{month}$	-
1,3-butadiene	Annual	Health and wellbeing	2.4	0.001

Benzene	1 hour	Health and wellbeing	29	0.009
	Annual	Health and wellbeing	10	0.003
Benzo(a)pyrene (as marker for PAH)	Annual	Health and wellbeing	0.3ng/m ³	-
Formaldehyde	1 hour	Protecting aesthetic environment	96	0.07
	24 hours	Health and wellbeing	54	0.04
Toluene	1 hour	Odour	958	0.23
	24 hours	Health and wellbeing	4,100	1
	Annual	Health and wellbeing	410	0.1
Xylenes (as a total of ortho, meta and para isomers)	24 hours	Health and wellbeing	1,200	0.25
	Annual	Health and wellbeing	950	0.2

Note—

- d. Criteria that are stated in µg/m³ are to be referenced to 0°C.
- e. Criteria that are stated in ppm are to be expressed as volume/volume.
- f. Averaging times of 1 hour or less are to be presented using the modelled 99.9th percentile concentration of the total site impact from dispersion modelling and background concentration for all pollutants in the above table, or the maximum concentration from dispersion modelling if no background concentration is available.
- g. Averaging times of greater than 1 hour are to be presented using the maximum concentration of the total site impact from dispersion modelling and background concentration.
- h. Dust deposition is the maximum allowable level from new and existing sources, calculated from annualised modelling data.
- i. Polycyclic aromatic compounds (PAH) are assessed as benzo(a)pyrene equivalent using potency equivalency factors as listed in the Air quality planning scheme policy.
- j. ng nanograms.

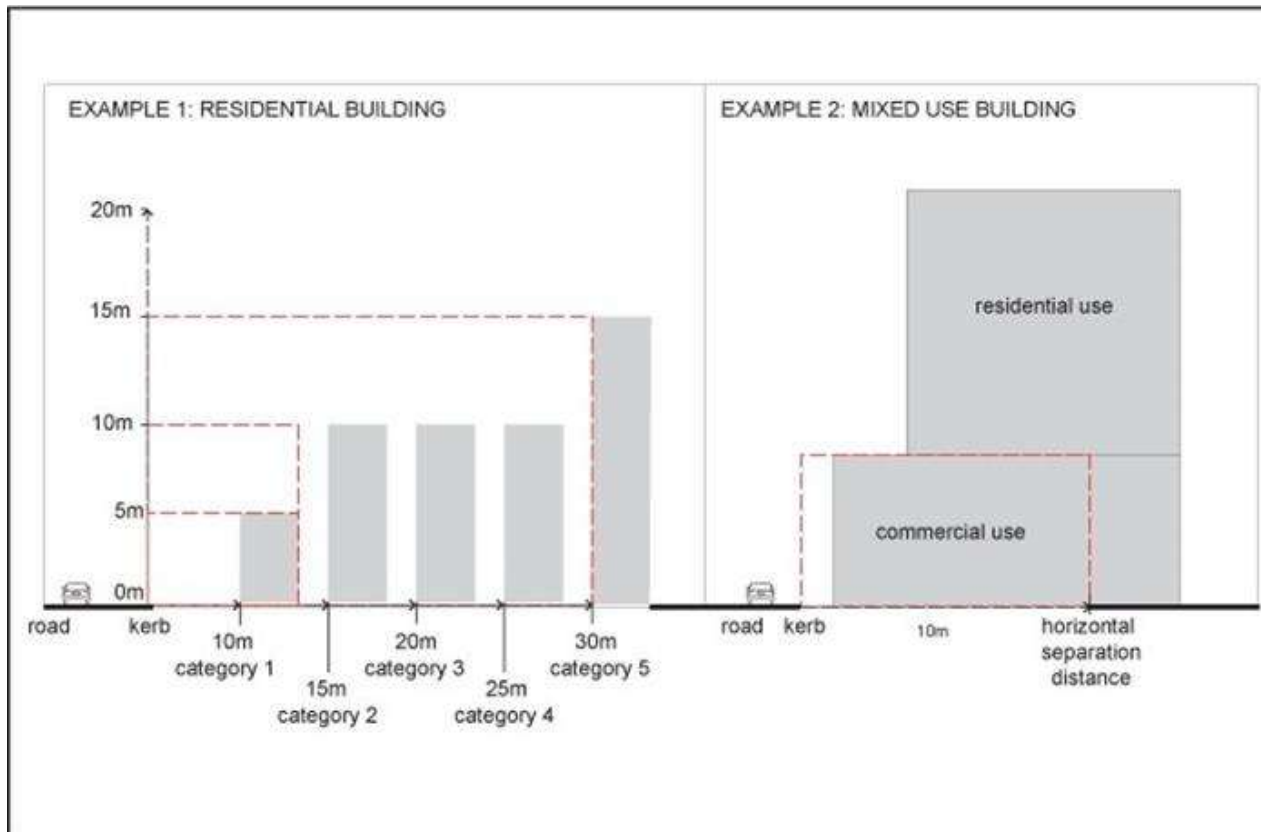


Figure a—Measurement of distance from the kerb, shown in both horizontal and vertical planes

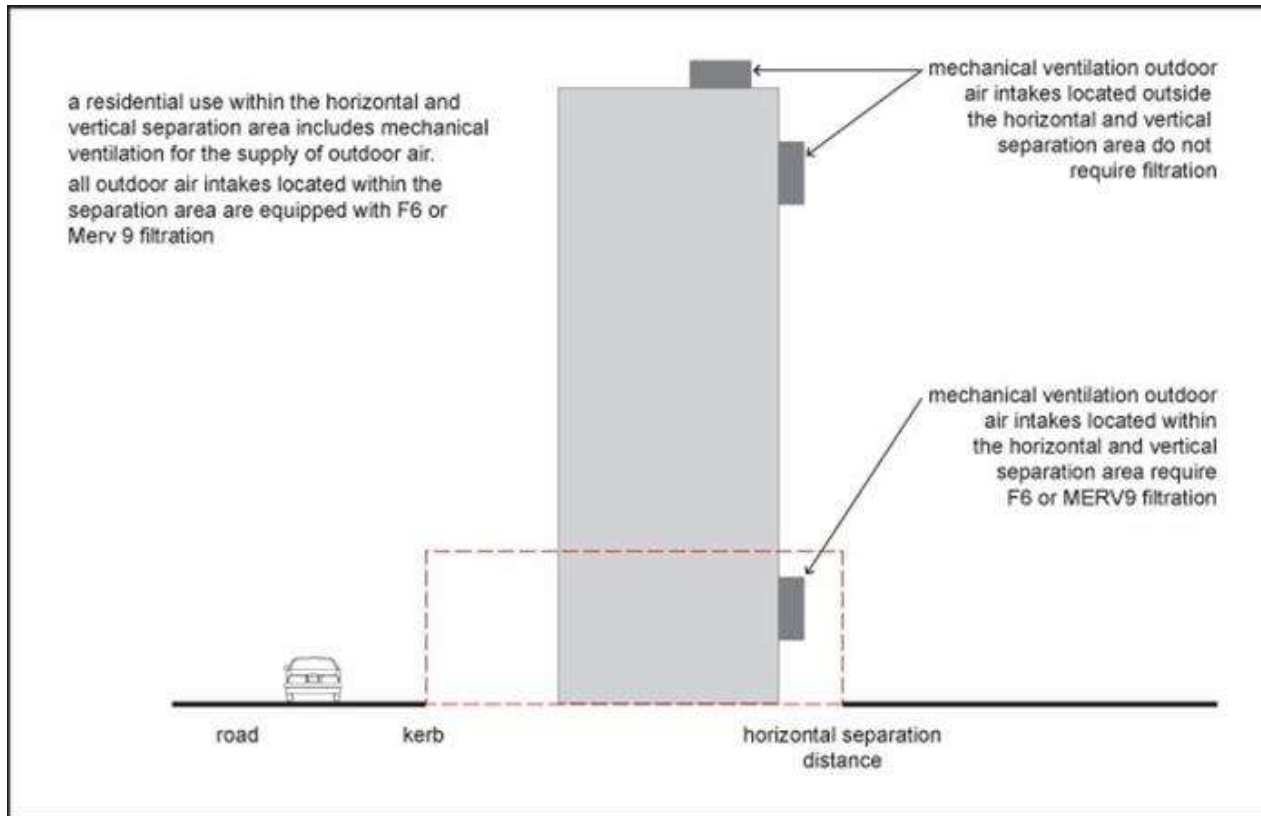


Figure b—The setback area with relation to requirement for mechanical ventilation and location of air intakes

4. Transport Noise Corridor Overlay

1. This code applies to assessing development in the Transport noise corridor overlay, if:
 - a. assessable development where this code is an applicable code identified in the assessment benchmarks column of a table of assessment for an overlay (section 5.10); or
 - b. impact assessable development.
2. Land in the Transport noise corridor overlay is identified on the Transport noise corridor overlay map and is included in the following sub-categories:
 - a. Noise corridor — Brisbane:
 - i. Queensland Development Code MP4.4 Noise Category 1;
 - ii. Queensland Development Code MP4.4 Noise Category 2;
 - iii. Queensland Development Code MP4.4 Noise Category 3;
 - iv. Queensland Development Code MP4.4 Noise Category 4.
 - b. State designated noise corridor - State-controlled road (mandatory area):
 - i. Category 0: Noise Level < 58 dB(A);
 - ii. Category 1: 58 dB(A) - 63 dB(A);
 - iii. Category 2: 63 dB(A) - 68 dB(A);
 - iv. Category 3: 68 dB(A) - 73 dB(A);
 - v. Category 4: Noise Level > 73 dB(A).
 - c. State designated noise corridor - State-controlled road (voluntary area):
 - i. Category 0: Noise Level < 58 dB(A);
 - ii. Category 1: 58 dB(A) - 63 dB(A);
 - iii. Category 2: 63 dB(A) - 68 dB(A);
 - iv. Category 3: 68 dB(A) - 73 dB(A);
 - v. Category 4: Noise Level > 73 dB(A).
 - d. State designated noise corridor - rail network:
 - i. Category 0: Noise Level < 70 dB(A);
 - ii. Category 1: 70 dB(A) - 75 dB(A);
 - iii. Category 2: 75 dB(A) - 80 dB(A);
 - iv. Category 3: 80 dB(A) — 85 dB(A);
 - v. Category 4: Noise Level > 85 dB(A).
3. When using this code, reference should be made to section 1.5 and section 5.3.3.

Note - The following purpose, overall outcomes, performance outcomes and acceptable outcomes comprise the assessment benchmarks of this code.

8.2.24.2 Purpose

- The purpose of the Transport noise corridor overlay code is to:
 - Implement the policy direction in the Strategic framework in particular:
 - Theme 3: Brisbane’s clean and green leading environmental performance and Element 3.2—Brisbane’s environmental quality and sustainable design;
 - Theme 5: Brisbane’s CityShape and Element 5.8 — Brisbane’s Growth Nodes on Selected Transport Corridors.
 - Provide for the assessment of the suitability of development in the Transport noise corridor overlay.
- 2. The purpose of the code will be achieved through the following overall outcomes:
 - a. Development ensures that the intrusion of transport noise on a passive recreation space of a dual occupancy, multiple dwelling, residential care facility, or retirement facility located in a transport noise corridor is appropriately managed.
 - b. Development ensures that each dwelling has access to an outdoor space for passive recreation where transport noise has been minimised.

8.2.24.3 Performance outcomes and acceptable outcomes

Table 8.2.24.3—Performance outcomes and acceptable outcomes

Performance outcomes	Acceptable outcomes	Comments
<p>PO1 Development provides outdoor space for passive recreation in a manner where transport noise has been minimised.</p>	<p>AO1 Development ensures that each dwelling:</p> <ul style="list-style-type: none"> ▪ has a balcony or outdoor recreation area shielded by the building from direct transport noise; or ▪ with a balcony exposed to transport noise has a solid gap-free balustrade. 	<p>Proposed lower level units have solid balustrades to courtyard/terrace areas. At the upper levels, balconies comprise glazing; however, upper level balconies (from 5 and above on the West Tower and Levels 10 and above on the East Tower are significantly set back from Stanley Street.</p>