

of the occupants of adjacent premises. Vibrations which do not exceed the limits referred to below as set out in the provisions of International Standard ISO 2631-2:1989. "Evaluation of human exposure to whole body vibration - Part 2 Continuous and shock-induced vibration in buildings (1 to 80 Hz)" will be deemed to meet this requirement. These particular limits are that the vibration levels (acceleration measured in metres per second) relative to the frequency shall not exceed the base curves of Figure 2a (z axis), 3a (x and y axes) and 4a (combined x, y, and z axes) of ISO 2631-2:1989.

- (b) The assessment of continuous, intermittent and transient (impulsive) vibrations shall be carried out by a suitably qualified and experienced person in accordance with Annex A and Table 2 of ISO 2631-2:1989 referred to above.
- (c) The instruments used to measure vibrations and the methods of measurement shall comply with a recognised standard such as Australian Standard AS 2973:1987 Vibration and Shock - Human response.
- (d) The Council may approve vibration levels above these standards where it is satisfied that they are necessary for construction or demolition work of a limited duration.
- (e) Vibration produced by explosive charges shall be controlled by Clause 8.8.2.7(a).

Explanation

Refer Clause 8.8.1.6 VIBRATION

8.8.3.10 REFUSE DISPOSAL

Refer to Bylaw.

Explanation

Refer Clause 8.8.1.8 REFUSE DISPOSAL.

8.8.3.11 CLAUSE DELETED BY COUNCIL DECISION

8.8.3.12 VISUAL AMENITY OF DEVELOPMENT

A high standard of visual amenity to the satisfaction of the Council is required on the external faces of all buildings in the development. All parking and loading areas must be landscaped to the satisfaction of the Council in order to contribute to the visual amenity of the site.

8.8.3.13 PLAZA AND OPEN SPACE AREAS

Plazas and/or open space areas within the proposed development will normally be required by the Council. The amount of plaza and/or open space to be provided will be determined taking into account the particular proposal, and will usually be an area of land approximating that which would be required in the Business 2 and 3 zones. Refer PART 4B - FINANCIAL CONTRIBUTIONS.

8.8.3.14 PARKING AND ACCESS

(Refer PART 12 - TRANSPORTATION).

REFERENCE SHOULD ALSO BE MADE TO THE FOLLOWING PARTS

Part 4	Refer Clause 4.5 signs Refer Clause 4.6 artificial lighting
Part 4A	General Rules
Part 4B	Financial Contributions
Part 5B	Coastal
Part 5C	Heritage
Part 5D	Natural Hazards
Part 5E	Hazardous Facilities
Part 11	Subdivision
Part 13	Interpretations and Definitions

8.8.4 DEVELOPMENT CONTROLS FOR THE BUSINESS 9 ZONE

The concept of the Business 9 zone approach precludes the existence of a set of basic development controls which can be applied to all parcels of land subject to the zone. Rather each parcel of land will be subject to a Concept Plan which prescribes the specific rules for that area. All sites and activities within a particular Business 9 zone are required to adhere to the rules of the predetermined Concept Plan for that zone.

refer to 7

8.8.10 DEVELOPMENT CONTROLS FOR MIXED USE ZONE

1. Height

Mixed Use Maximum Height -15m

The Special Height limits set out in Clause 5C.7.6 Views shall apply where relevant.

Explanation

The height limit applied in the Mixed Use zone is designed to enable both a vertical and horizontal mix of uses to occur in buildings and sites within the zone. Height limits combined with other development controls for the Mixed Use zone will provide protection for adjoining lower intensity zones from the effects of building bulk and dominance.



PART 8 - BUSINESS ACTIVITY

2. Site Intensity Controls

(a) Basic Floor Area Ratio

The site area multiplied by basic floor area ratio equals permitted gross floor area.

Basic floor area ratio in

Mixed Use - 2:1

(b) Bonus Floor Area

(Refer Clause 8.7.2(1)(i) and Clause 8.7.2.2 - criteria for conditions.)

The amount of bonus floor area that may be achieved is determined by multiplying the area of the bonus element provided by the bonus floor area ratio for the zone.

Zone	Bonus Element	Bonus Floor Area Ration
Mixed Use	Landscaped Area	1:1
	Plaza	2:1
	Cycle and pedestrian ways*	2:1

* Applies where the Council is not prepared to purchase an easement across the affected land

(c) Maximum Floor Area

Except that Permitted Gross Floor Area plus Bonus Floor Area may not exceed the following maximum total floor area ratio.

Mixed Use - 4:1

Explanation

These site intensity controls limit gross total floor area achievable on a site to a form and scale considered appropriate for the Mixed Use zone and its proximity to both residential and business areas.

Bonus floor area is offered in the form of a controlled resource consent to encourage the provision of features that are particularly beneficial to the community by improving the physical and natural qualities of the environment in which the activity is located.

3. Streetscape Improvement

Where a site is opposite land zoned Mixed Use, Business or Special Purpose, no front yard is required.

Where a site is opposite land zoned residential or open space, a 2m yard is required adjoining the road boundary. No less than 60% of the front yard shall be landscaped and maintained to the satisfaction of the Council at all

times and in such a manner as to create and preserve a good standard of amenity.

Explanation

Developments where activities address/front arterial roads create visual interest for pedestrians and provide informal surveillance creating a safe pedestrian environment. Landscaping where setbacks are provided contributes to the amenity of the area and streetscape.

4. Building in Relation to Boundary

(i) Where a proposed activity is located on a site adjoining or abutting land zoned;

- Residential (Other than Residential 7a, 7b or 7c) Clause 7.8.1.3(b) shall apply on the common boundary
- Residential 7a, 7b or 7c Clause 7.8.1.3(c) shall apply on the common boundary
- Open Space, the following shall apply on the common boundary. No part of any building may exceed a height equal to 3m plus the shortest horizontal distance between that part of the building and the common boundary.

(ii) Where a Mixed Use zoned site or part of a site has a boundary to a collector or local road and the land on the other side of the road from that site is zoned Residential 1, 2a, 2b, 5 or 6a, no part of any building on that part of a site which is directly opposite the residential zoned land may exceed a height equal to 6 metres plus the shortest horizontal distance between that part of the building and the road boundary.

Allowable encroachments and setbacks

Eaves, fascias, gutters, down pipes, masonry chimneys, flues, pipes, domestic fuel tanks, cooling or heating appliances or other services may extend beyond the building envelope as defined in the rule, provided that the distance to the boundary is not less than 0.5 metres from the boundary and relevant fire protection requirements of the building code are satisfied.

5. Daylight to existing habitable room windows of residential units

Walls higher than 3 metres opposite existing walls containing habitable room windows of residential units are limited in height to twice the horizontal distance between the two walls for a distance defined by a 55° arc from the centre of the existing window. The arc may be swung to within 35° of the plane of the wall containing the window.

Where the existing window is above ground level, the height restriction is calculated from the floor level of the room containing the window.



Provided that:

- This rule shall not apply to development opposite residential units approved for resource consent or constructed after 25 July 2002.
- This rule shall not apply to development opposite residential units located on the top floor of a building.
- This rule shall not apply to development opposite the first 5m of a residential unit which faces the street, measured from the front corner of the residential unit.

Bonus Floor Area

Bonus floor area of 2:1 is offered for compliance with this rule. The amount of bonus floor area that may be achieved is determined by multiplying the area of the bonus element by a ratio of 2:1. The area eligible for the bonus is that plan area of required set backs from the boundary resulting from application of the daylight rule.

Explanation:

Building in Relation to Boundary and Daylight Rules

Admission of light to living and work areas is fundamental to our existence. It is an amenity which we are not able to forego without compromising health and a sense of well-being. In addition, admission of sunlight to sites gives property owners the opportunity to use sunlight as a renewable energy source. Access to sunlight can enable sunny outdoor spaces to be created or provide a means of passively heating homes. If sunlight is available it can also be used actively by solar receptors and water heaters.

Almost any development on a site will have an effect on the adjacent site in terms of access to light and the prospect of over-dominance. That is why these rules require the position of habitable rooms on adjacent sites to be considered. The extent of this effect will differ depending on the proximity of buildings to boundaries in relation to their size and the orientation of the boundary being assessed.

Within the Mixed Use zone higher height limits will result in greater building bulk. Protection of sites within this zone has been balanced with the need to allow permitted height limits to be achieved.

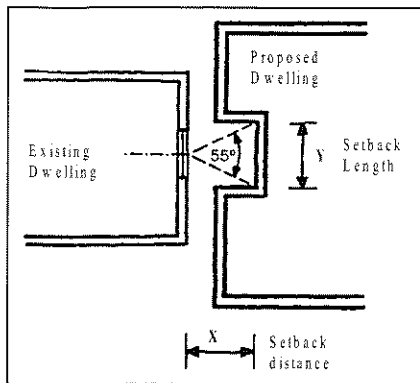
A building in relation to boundary control applies to Mixed Use zoned land located opposite and adjacent to land zoned Residential and Open Space. This recognises that a sensitive interface exists between the Mixed Use zone which enjoys relatively generous height limits and these Residential and Open Space zones which have reduced height limits and building bulk. A building in relation boundary control will result in a reduced building bulk within 30 metres of these residential zones while still allowing two storey development near the

residential interface. This will result in a guarantee of access to daylight, a reduction in visual dominance and retention of privacy for the residential zoned land.

Distance of wall from existing window (x)	Maximum height of wall	Length of wall restricted if 55 ⁰ arc is perpendicular to window (y)
1.5m	3.0m	1.5m
2.0m	4.0m	2.0m
2.5m	5.0m	2.5m
2.7m	5.4m	2.7m
3.0m	6.0m	3.0m
3.5m	7.0m	3.5m
4.0m	8.0m	4.0m
4.5m	9.0m	4.5m
5.0m	10.0m	5.0m
5.5m	11.0m	5.5m
6.0m	12.0m	6.0m

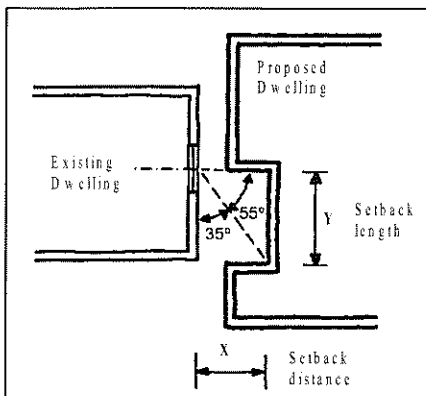
This table provides the restrictions to walls where a new wall is built opposite an existing habitable room window. The wall height is restricted to a height related to the distance from the existing window, and for a length defined by a 55⁰ arc from the centre of the window. The arc may be swung to within 35⁰ of the window. However, as an arc is swung away from the centre line the length of wall which will be restricted will increase.





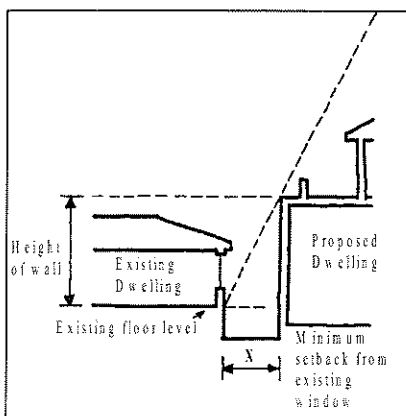
Daylight to existing windows

The daylight to windows in the existing building is protected by the setback of the proposed building; this is determined in relation to its height.



Daylight to existing windows

Flexibility is provided within the daylighting requirements by allowing the 55° arc to be swung to within 35° of the plane of the wall containing the existing window. Swinging the 55° arc does however increase the setback length (Y).



Daylight to existing windows

The vertical component of the daylight rule demonstrates how a building could be stepped back at upper levels to allow light to principal windows of habitable rooms in adjacent existing dwellings.

6. Noise

(a) Noise control at the Residential Zone interface

The L10 noise level and maximum level (Lmax) arising from any activity measured at or within the boundary of any residential zoned property shall not exceed the following limits:

Monday Saturday	to 7:00 am - 10:00 pm	L 10 50dBA
Sunday & Public Holidays	9:00 am - 6:00 pm	
At all other times	L10 40dBA Lmax 75 dBA,	

Where an applicant can prove that background noise levels (L95) significantly exceed these limits then the Council may set noise levels higher than these subject to such conditions as are considered appropriate.

(b) Noise Control within the Mixed Use Zone

The L10 noise levels and maximum level (Lmax), arising from any activity, measured at or within the boundary of any adjacent site (not held in common ownership) within the same mixed use zoning shall not exceed:

Mixed Use Zone	
7:00 am to 10:00 pm	L10 60dBA
10:00 pm to 7:00 am	L10 55dBA Lmax 75dBA

The above noise levels in A and B shall be measured and assessed in accordance with the requirements of the NZS 6801:1991 "Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sound" or their replacement.

The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meters, Type 1.

Explanation

Excessive noise occurring for a continuous period or duration can be damaging to public health and can have an adverse effect on the amenity of the receiving environment.



In the past, the close proximity of non-residential zones to residential zoned land has resulted in complaints about unreasonable or excessive noise levels. These complaints often related to the operation of machinery (e.g. compressors or extraction fans not properly located or insulated) or to the entry or exiting of customers from sites (particularly at night). Controlling people-generated noise is difficult as it is often spontaneous and intermittent. However, controlling the location of parking areas and the hours of operation of activities that attract large numbers of people to sites, may effectively control such noise.

As well as providing noise protection on residential boundaries it is also appropriate that some acoustic privacy is provided between sites within Mixed Use zones. A mixture of uses is highly likely within these zones and some activities may require appropriate levels of acoustic privacy.

Setting noise limits at site boundaries should assist in preventing the City's background noise level from rising and should maintain a reasonable acoustic environment within a zone.

To provide some acoustic privacy between sites within the Mixed Use zone, noise levels are imposed at the site boundary of every site (not held in common ownership) within the Mixed Use zone. (This control is in addition to, and not in substitution for Clause 6A).

(c) Noise control for Residential Units, residential hospitals, rest homes and retirement villages in the Mixed Use Zone

For all residential units, residential hospitals, rest homes and retirement villages within the Mixed Use Zone the building shall be designed and constructed so as to provide an indoor design level of Balanced Noise Criterion (NCB) 30 in any habitable room assuming the building is exposed to a noise level of 60dBA L10 at the boundary of the site. Such design level being achieved with windows and doors open unless adequate alternative ventilation is provided (the buildings must comply with the minimum ventilation rates, which comply with the New Zealand Building Code G4).

These levels shall be achieved whilst adequate ventilation (to the requirements of the Building Regulations 1992) is achieved.

Building elements which are common between activities shall be constructed to prevent noise transmission to the requirements of Clause G6 of the Building Regulations 1992.

Measurement and assessment shall be in accordance with the requirements of the NZS 6801:1991

"Measurement of Sound" and NZS 6802:1991 "Assessment of Environmental Sounds".

The noise shall be measured with a sound level meter complying at least with the International Standard IEC 651 (1979): Sound Level Meter, Type 1.

Explanation

Residential development within the Mixed Use Zone is to be designed to ensure that a level of acoustic amenity is provided within the bedrooms and other habitable rooms of residential activities from other residential activities within the same development and activity in the surrounding area.

7. Visual Privacy

Protection to windows of existing residential uses

In any building within the Mixed Use zone proposed to contain a residential unit, where the residential unit has habitable room windows less than 6 metres away from the habitable room windows of an existing residential use on an adjacent site, or where there are habitable room windows less than 6 metres away from the habitable room windows of another residential unit within the same development and with direct views of habitable rooms of other residential use within the same development, they shall:

- be offset a minimum of 1m from the edge of one window to the edge of the other; or
- have sill heights of 1.6m above floor level; or
- have fixed obscure glazing in any part of the window below 1.6m above floor level;
- be on the ground floor level and separated by a fence of 1.6m minimum height

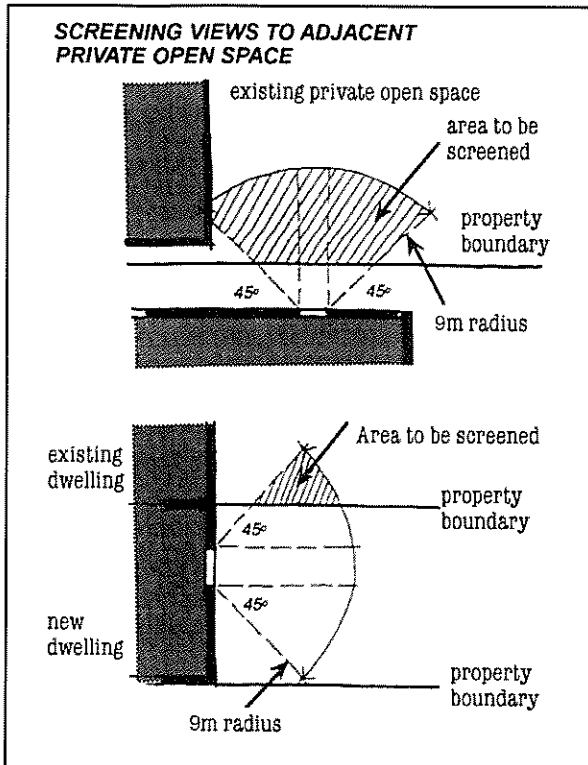
Protection of neighbours private open space

Direct views from habitable rooms of buildings in the Mixed Use zone into the principal areas of adjoining private open space of residential units should be screened or obscured within a 9m radius and 45 degrees of the wall containing the window by either:

- a solid wall or screen not less than 1.8m in height constructed of concrete, timber, stone; or
- planting

Any such screening shall be established in a workmanlike manner.





Explanation

This rule limits the direct overlooking of habitable rooms or private open space areas of existing residential units on adjacent sites. This will have the effect of creating and maintaining visual privacy for occupants of residential units.

8. Odour

The Council recognises its responsibilities to deal with odour problems and will be guided by any national or regional standards or rules relating to odour and will at the appropriate time consider promoting changes to the Plan and introduction of district rules to deal with odours.

Pending the adoption of District Plan rules the Council will control odours using the provisions of Sections 17 and 104(1)(i) of the Resource Management Act 1991.

9. Vibration

Vibration in Buildings

(a) Activities shall not generate vibrations which may cause discomfort or adversely affect the health and well being of the occupants of adjacent premises. Vibrations which do not exceed the limits referred to below as set out in the provisions of International Standard ISO 2631-2:1989. "Evaluation of human exposure to whole body vibration - Part 2 Continuous and shock-induced vibration in buildings (1 to 80 Hz)" will be deemed to meet this requirement. These particular limits are that the vibration levels

(acceleration measured in metres per second) relative to the frequency shall not exceed the base curves of Figure 2a (z axis), 3a (x and y axes) and 4a (combined x, y and z axes) of ISO 2631-2:1989.

- (b) The assessment of continuous, intermittent and transient (impulsive) vibrations shall be carried out by a suitably qualified and experienced person in accordance with Annex A and Table 2 of ISO 2631-2:1989 referred to above.
- (c) The instruments used to measure vibrations and the methods of measurement shall comply with a recognised standard such as Australia Standard AS 2973:1987 Vibration and Shock - Human response vibration-measuring instrumentation.
- (d) The Council may approve vibration levels above these standards where it is satisfied that they are necessary for construction or demolition work of a limited duration.
- (e) Vibration produced by explosive charge will be controlled by Clause 8.8.2.7(a).

Explanation

Vehicles and machinery expose people to mechanical vibration which can interfere with comfort, working efficiency and in some instances, health and safety. Vibration at frequencies below 1Hz occurs in many forms of transport and produces effects such as motion sickness, which are completely different in character from the higher frequencies dealt with here. This control deals with human response to building vibration, i.e. levels that may cause annoyance or discomfort, not those that may affect health or structural integrity. Building vibration is most commonly transmitted to the body as a whole through the supporting surface, namely the feet when standing, the buttocks when seated, or the supporting area when reclining.

Standards formulated to control vibration are generally related to the tolerance of a sitting or standing person. Tolerance of vibration to the head (by reclining for example) is usually significantly reduced. People are most sensitive to longitudinal vibration, (i.e z axis-foot to head), between 4 and 8 Hz and to transverse vibration below 2Hz (x axis: back to chest and y axis: right side to left side).

Annex A and Table 2 of the standard gives consideration to the time of the day and the use made of the occupied space in the building. Below these magnitudes of vibration the probability of human reaction is low.

These levels should facilitate the proper balancing and/ or insulation of machinery. Vibration caused by vibratory equipment, and by machinery impactive in nature can often be reduced by altering the operating conditions of the equipment.



Situations may exist where motion magnitudes above the levels specified can be tolerated particularly for temporary disturbances and infrequent events of short term duration, e.g. blasting, construction or excavation projects.

10. Parking and Access

Refer to Part 12 - Transportation with the exception that in place of the parking standards for residential units indicated in 12.8.1.1 the following shall apply:

Unit Size	Car Parks
Studio/One bedroom <75m ² gfa	1 park per residential unit
Two bedrooms or more and/or 75m ² gfa (includes 1 bedroom with gfa of 75m ² or more	Maximum 2 parks per residential unit, minimum 1 park per residential unit
Visitor Spaces	1 space for every 5 residential units (to the nearest whole number)
Loading spaces	1 space for 10 residential units or more

11. Screening

Where any outdoor storage, refuse disposal area, service or parking area adjoins, abuts or directly faces land that is open space or residentially zoned, a solid wall screen shall be erected, to the following heights which is densely planted behind with vegetation and shrubs that will screen the areas during the year.

Front boundary 1.2m

Side and rear boundaries 1.8m

Explanation

Activities in the Mixed Use zone need to ensure that they limit the adverse effects of their operation to their site.

12. Private Open Space

Where a development in the Mixed Use zone has a residential unit(s), the following must be complied with:

- a) All new residential units shall have outdoor living areas consisting of at least:
 - An area at ground level of 25m² and a minimum width of 3m which has convenient access from a living room; or
 - A balcony with an area of 8m² and a minimum width of 1.6m which has convenient access from a living room; or
 - A rooftop space with an area of 10m² and a

minimum width of 2m which has convenient access to a living room.

The exception to this rule is where a residential unit is provided within an existing building (i.e. through conversion) and it is not possible because of the form, location or layout of the building, to provide one of the above outdoor living areas. In that instance, an outlook area complying with the following standards will be required:

- 80m² in area
- minimum dimension – 6 metres
- 50% of outlook area must be contained within the site to which it relates, 50% may be over a road, public open space or the harbour
- the outlook area shall adjoin glazing of the dwellings unit to which it relates

Note: Obstructions – private open space or outlook areas shall not be obstructed by buildings, parking spaces or vehicle access and manoeuvring areas.

REFERENCE SHOULD ALSO BE MADE TO THE FOLLOWING PARTS:

- Parts 4** Refer Clause 4.5 Signs
Refer Clause 4.6 Artificial Lighting
- Part 4A** General Rules
- Part 4B** Financial Contributions
- Part 5B** Coastal
- Part 5C** Heritage
- Part 5D** Natural Hazards
- Part 5E** Hazardous Facilities
- Part 11** Subdivision
- Part 12** Transportation
- Part 13** Interpretations and Definitions

