

Part 6

RESZ – Residential zones

APP41 – Daylight admission

1. Overview

Daylight controls have been included in the Nelson Plan to ensure adequate minimum daylight standards, where the site in question is located in any RESZ – Residential zone, or adjoins any RESZ – Residential zone properties or MUZ – Mixed use zone properties, or any PREC10 – Neighbourhood park precinct.

2. Introduction

- a. The controls are to ensure equitable access to daylight for residential properties and neighbourhood parks and to ensure that minimum building separation, open space and amenity are maintained. The daylight controls define angles within which a complying building must fit in order to allow adequate daylight onto adjoining sites.
- b. The provisions in this appendix apply to buildings as defined in Interpretation – Definitions.

3. Where they apply

- a. The daylight controls apply:
 - i. to all properties within a RESZ – Residential zone (inclusive of the GRZ – General residential zone and MRZ – Medium density residential zone); and
 - ii. to properties in other zones, where those properties adjoin a RESZ – Residential zone, MUZ – Mixed use zone, or a PREC10 – Neighbourhood park precinct.
- b. The purpose of APP41-3.a.ii. is to ensure that the daylight admission on the common boundary with a RESZ – Residential zone, MUZ – Mixed use zone or PREC10 – Neighbourhood park precinct is the same as if the site in question was located within a RESZ – Residential zone. Where new boundaries are proposed, the rule also applies to the proposed boundary.

4. Where to take measurements from

- a. In a RESZ – Residential zone:
 - i. Boundaries between sites, including nominated boundaries in the case of multiple residential units where no subdivision is occurring. This does not apply to:
 - A. Party (common) walls; or
 - B. Boundaries that adjoin any other zone (with the exception of any PREC10 – Neighbourhood park precinct). In other words, a site in a RESZ – Residential zone does not have to provide daylight amenity to an adjoining site in the GIZ – General industrial zone, for example; or
 - C. Road boundaries (refer to APP41-4.a.ii.).
 - ii. Road boundaries, where a building is located within 4 metres of the road boundary, in which case a recession plane inclined into the residential site of 45° applies in all instances only to that part of the building that intrudes into the 4 metre setback. The recession plane is measured from 2.5 metres vertically above the road boundary. Where a road widening

designation is shown on the Nelson Plan Maps this is considered the road boundary. The 'daylight over' method must be utilised in relation to road boundaries. The 'daylight around' method does not apply. This rule ensures the public amenity of the street environment is protected.

- iii. Boundaries with a private access or right of way which serves no more than four actual or potential residential units, where the measurement may be taken from the centre line of that private access or right of way. If the measurement is taken from the centre line the 'daylight-over' method must be used. This approach can be taken regardless of whether or not the property has rights over the access or right of way.
- b. In the LIZ – Light industrial zone:
 - i. Any boundary with a RESZ – Residential zone or MUZ – Mixed use zone.
 - c. In all other zones:
 - i. Any boundary with a RESZ – Residential zone or PREC10 – Neighbourhood park precinct.
 - ii. Where a road runs along the boundary between two zones, the zone boundary is the centre of the road. (This applies with respect to rules in other zones, which require that any site adjoining a RESZ – Residential zone, MUZ – Mixed use zone or PREC10 – Neighbourhood park precinct complies with the daylight controls. "Adjoining" includes across the road from a residential site, since the centreline of the road is the zone boundary.)

5. What to show on building plans

- a. An accurate true north point.
- b. The applicable 'daylight over' or 'daylight around' angle applying to the structure.
- c. Accurate original ground levels at the boundary and at the building, and finished floor levels at the points being tested (refer to definition of Ground level).
- d. Accurate original (natural) ground levels at the boundary and at the building.

6. Additions to buildings

- a. Additions to buildings must comply with the daylight controls in the Nelson Plan.

7. Types of controls

There are two types of daylight controls to choose from. Both are related to actual sun angles in Nelson at midday in midwinter and are designed to ensure that daylight and/or sunlight will reach all properties at the shortest daylight time of year.

a. Daylight over method (refer to APP41-8, APP41-9 and APP41-10)

- i. Allows daylight over the top of low buildings. It requires taller buildings to be well set back from the boundary, as the maximum allowable height of a building decreases as it nears the boundary.

b. Daylight around method (refer to APP41-11 and APP41-12)

- i. Enables daylight to be received around the sides of taller buildings. This allows for taller, narrower buildings, and is useful on steeply sloping sites.

- ii. You may choose the control that is most advantageous to you depending on the type of development you are planning. You may apply either method to a site boundary. Both methods may be used on a site, but only one may be applied to any one boundary. All parts of a building must comply with the particular permitted standards of the daylight method used on each boundary.
- iii. If any future development on-site cannot comply with the daylight angles of the daylight control method used previously on that boundary or is not an exception listed under APP41-10, resource consent will be required.
- iv. The arms of the 'daylight around' angle must not pass over any other site.

8. How to use the 'daylight over' method

- a. At any site boundary, a building is allowed to be a maximum of 2.5 metres high.
- b. Within the site, the building is allowed to reach 2.5 metres plus the additional height indicated by the relevant angle on the elevation indicator in APP41 – Figure 1: Elevation indicator measured at any point along the boundary (e.g. 2.5 metres plus 35° measured from the boundary).
- c. To find this angle, orient the building plan towards North, and place the elevation indicator on the plan so that it is touching the inside of the site boundary concerned.
- d. Make sure the central control arrow is pointing due North as shown in APP41 – Figure 2: Elevation indicator - example plan. The angle where the indicator touches the boundary is the angle to be applied 2.5 metres above ground level at the boundary. This is illustrated in APP41 – Figure 3: Calculating allowable height and APP41 – Figure 6: Daylight over diagram.

APP41 – Figure 1: Elevation indicator

APP41 – Figure 2: Elevation indicator - example plan

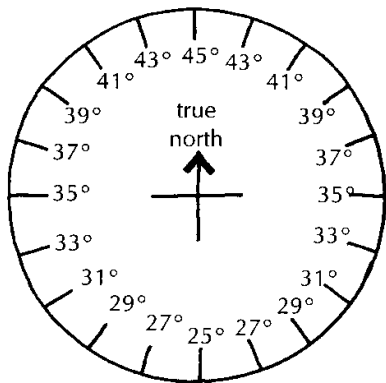


figure 1

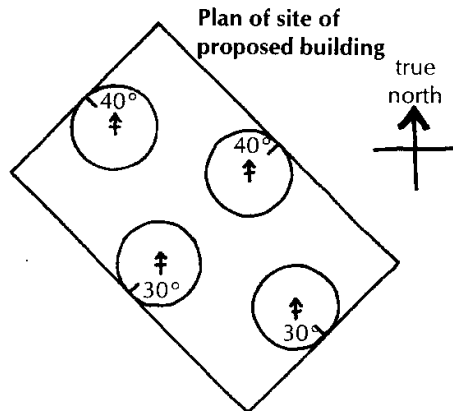


figure 2

Advice note: The daylight over provisions may have an additional benefit of protecting, to some degree, the privacy of neighbouring properties, as well as to avoid shading.

9. Calculating allowable height

- a. To calculate the allowable building height from the angle on the elevation indicator, use the following formula:

Allowable height = Tan of the angle (refer to **Table 1**) x distance from the boundary + 2.5m

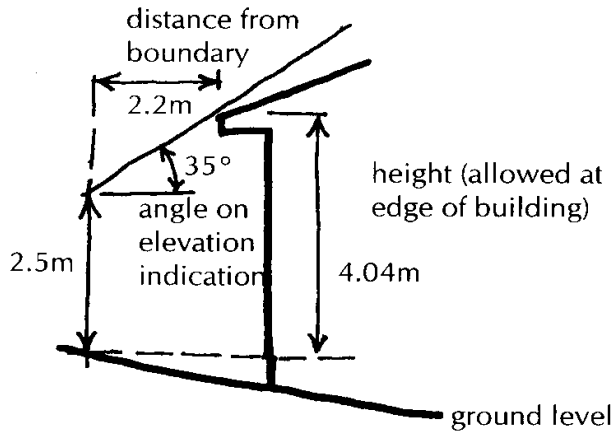
E.g. Allowable height 2.2m from boundary, with 35° angle
 = (0.7002 x 2.2m) + 2.5m
 = 4.04m

APP41 – Table 1: Tan of the angle

Tan of the angle																					
Degree	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Tan	4663	4887	5095	5317	5543	5774	6009	6249	6494	6745	7002	7265	7536	7813	8098	8391	8693	9004	9325	9657	1.0

b. This equation only works for flat sites. For sloping sites the difference between the ground level at point A and ground level at the point being measured must be added or subtracted, as shown in APP41 – Figure 3: Calculating allowable height.

APP41 – Figure 3: Calculating allowable height

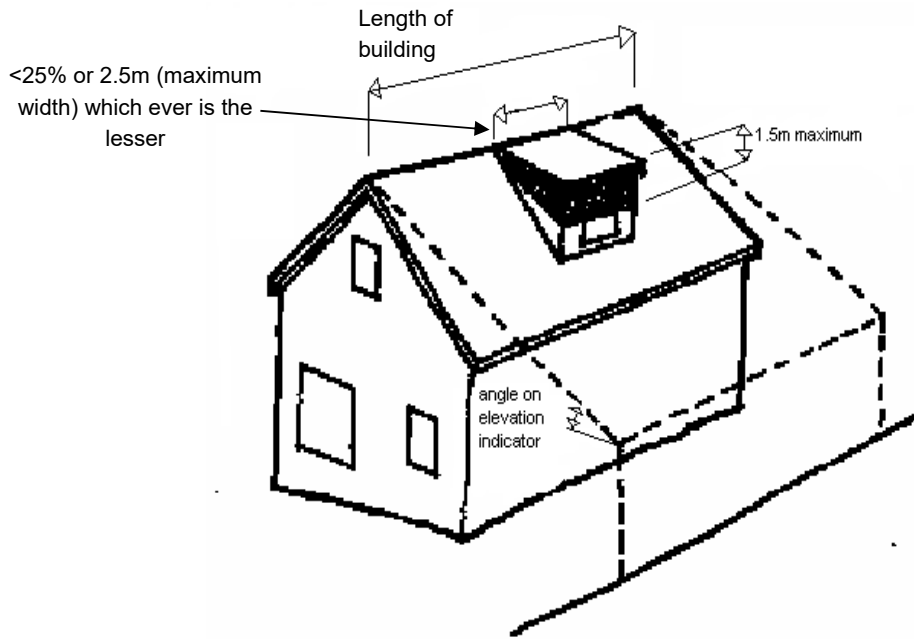


10. Exceptions to the ‘daylight over’ provisions

As well as those items mentioned in the definition of buildings (such as fences less than 2 metres high, scaffolding, masts and poles), the following are permitted intrusions into the daylight angle:

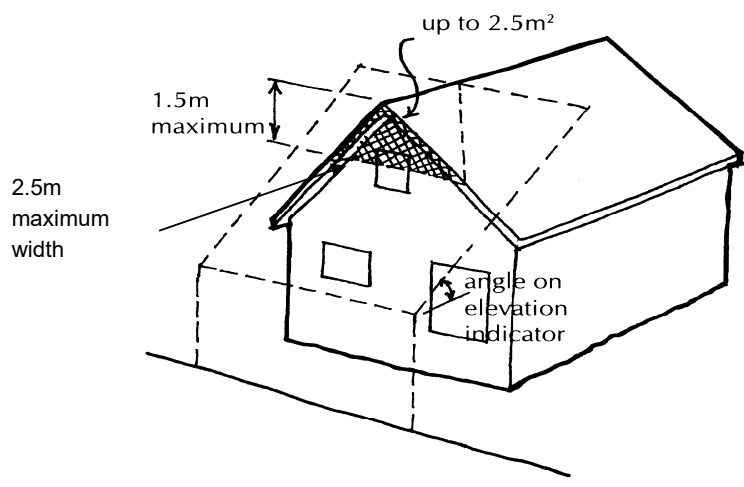
- a. Solar panels up to a total of 7m² in size may intrude into the daylight plane on the northern site boundary (defined for the purpose of this rule as being in a quadrant of 45 degrees east and west of North).
- b. Aerials except for dish antennas greater than 1 metre in diameter (refer to EIT-R36).
- c. Dormer windows provided they are not more than 1.5 metres higher than the height permitted by the elevation indicator and make up not more than 25% of the length of the building (measured parallel to the boundary) or a maximum length of 2.5 metres, whichever is the lesser.

APP41 – Figure 4: Daylight over method exceptions - dormer windows

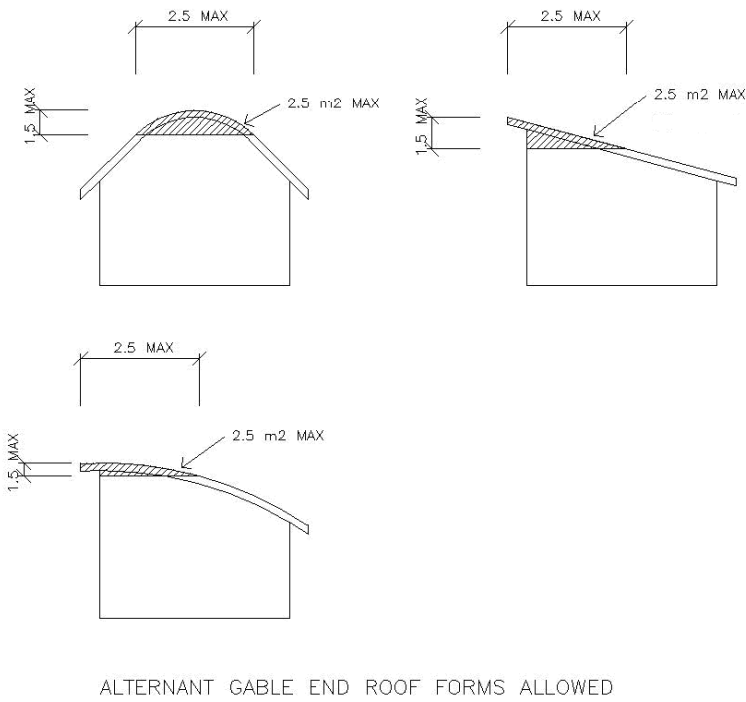
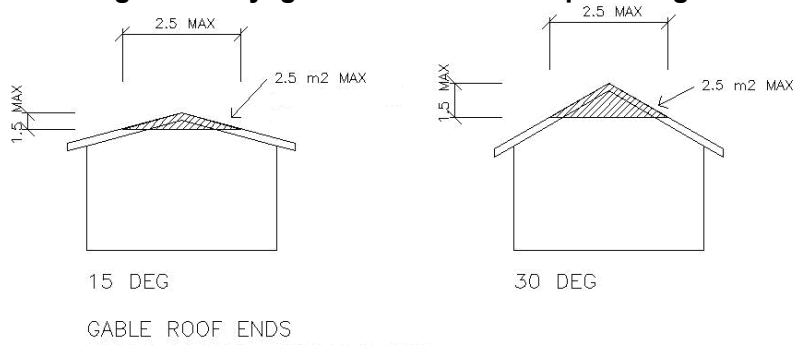


d. Gable and other roof ends where the roof ridge is generally at right angles to the site boundary. The end of the ridge may be up to 1.5 metres above the indicator height, and the end area, when viewed in elevation, is allowed to be up to 2.5m² in area and up to 2.5 metres in width. Up to one intrusion is permitted per boundary. The rule provides for gable roof ends, and other alternative roof forms as shown in APP41 – Figure 5: Daylight over method exceptions - gables and roof ends and APP41 – Figure 6: Daylight over method exceptions - gables and roof ends - elevations.

APP41 – Figure 5: Daylight over method exceptions - gables and roof ends



APP41 – Figure 6: Daylight over method exceptions - gables and roof ends - elevations



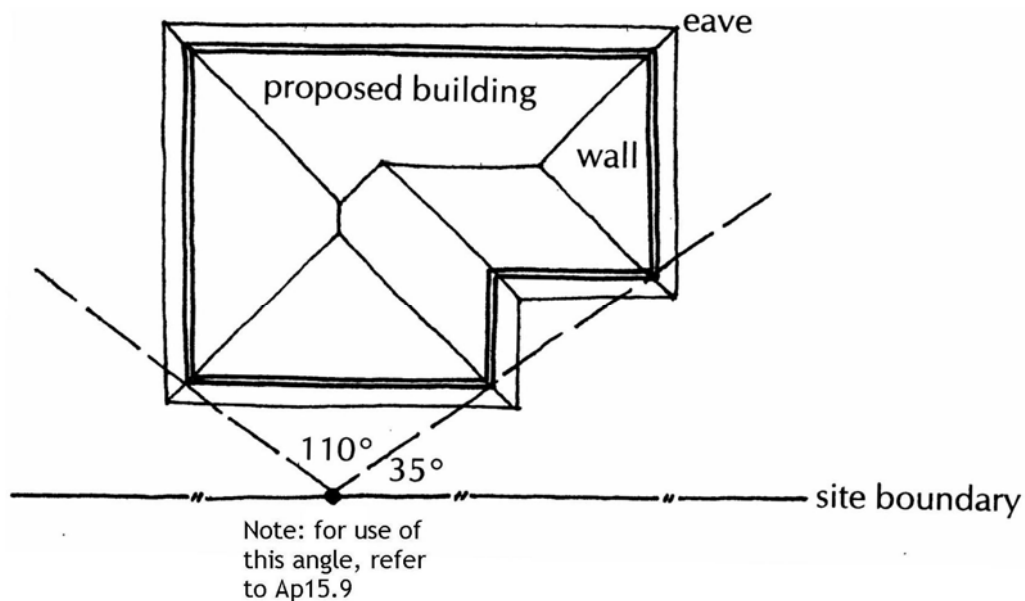
For all diagrams – Permitted intrusions:

- e. Maximum 1.5 metres high; and
- f. Maximum width of 2.5 metres; and
- g. Maximum area of 2.5m²

11. How to use 'daylight around' method

- a. Place a 110° angle 35° from the boundary (as shown in APP41 – Figure 7: How to use daylight around). A complying building will fit within the arms of this angle and may be up to or average 7.5 metres high (see definition of 'height measurement'). Only one angle may be used on any one boundary.
- b. 'Ground level', 'height' and 'height measurement' are determined by their definitions.
- c. Any portion of a building or accessory building not contained within the arms of the angle must **comply**, with the exception of the permitted intrusions set out in APP41-12.
- d. If daylight around is the method by which compliance with the permitted standard is shown for a site boundary, then the daylight over method cannot be used for that site boundary in any future developments to establish compliance with the permitted standards. If any future development on site cannot be located within the established daylight around angle, or is not an exemption listed under APP41-12, resource consent will be required.

APP41 – Figure 7: How to use daylight around



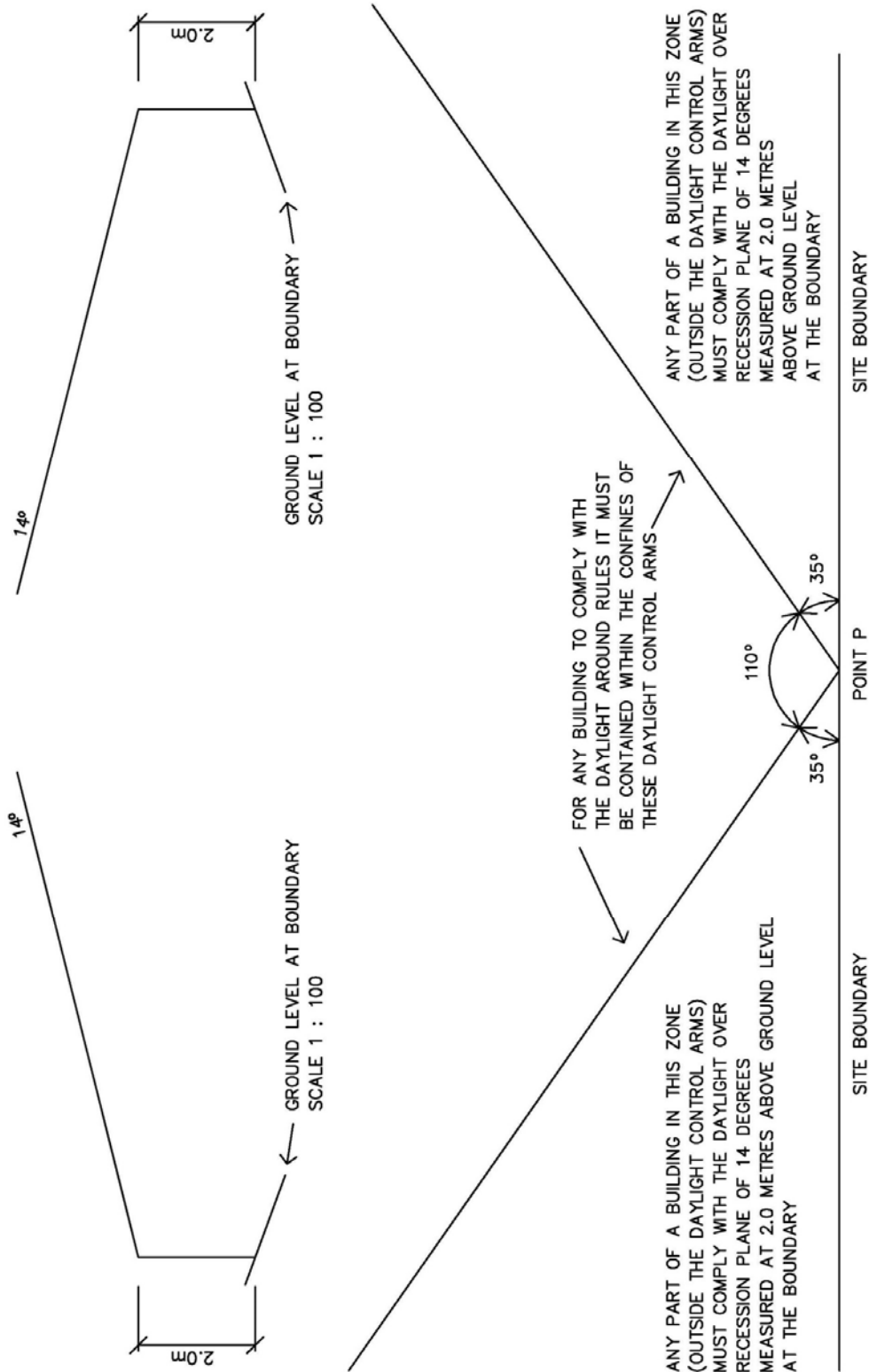
12. Exceptions to the 'daylight around' provisions

The following are permitted intrusions into the daylight around angle:

- a. Eaves (not more than 600mm), and
- b. Buildings complying with the special height limiting line outside the angle, as follows.
 - i. Parts of the building or detached outbuildings may be outside the angle but only up to a certain height. To find out how high a building outside the arms may be, use the following steps:
 - A. Apply APP41 – Figure 8: Daylight around diagram.
 - B. To find out how high intrusions may be, start at 2 metres above ground level at the boundary immediately adjacent to the point of consideration of the building.

- C. The maximum height then increases 0.5 metres for each 2 metres distance from the boundary. This is a recession plane of 14° inclined into the site, measured from a point 2 metres above ground level at all points along the relevant boundary.

APP41 – Figure 8: Daylight around



APP41 – Figure 9: Daylight over

