

**9.2 BULK AND LOCATION OF BUILDINGS**

**9.2.1 HEIGHT AND DAYLIGHT CONTROL**

**9.2.1.1 Discussion, Purpose and Reasons**

The height and daylight controls are physical standards, that when combined with other controls such as yards and separation distance seek to achieve the environmental results in 9.2.1.2.

Other "civil" remedies are available to control the height of objects such as trees, which can have a similar effect to that of buildings.

**9.2.1.2 Environmental Results**

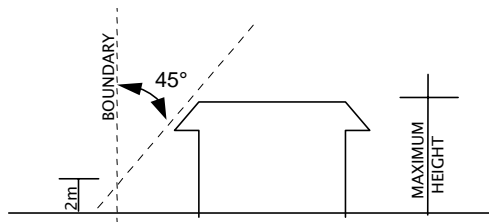
To ensure that the height of buildings is compatible with the activities permitted in the zone as well as the landscape, amenity and character of both the zone that the building is located in and any adjoining zone.

To ensure no building or structure unreasonably overshadows any neighbouring property, thereby restricting daylight and ventilation between buildings.

To allow light into adjoining properties, thereby enabling the use of passive heating, creation of sunny outdoor areas and energy for solar receptors. This contributes to reducing the use of non-renewable energy sources.

To ensure that in combination with other standards, the privacy of adjoining properties is protected.

**9.2.1.3 Standard**



No building shall exceed the heights specified below:

<u>Zone</u>	<u>Maximum Height</u>	<u>Daylight Control</u>
Residential	7.0 metres	2.0 metres high at any property boundary and then a 45° plane into the property until maximum height.
Rural Residential	9.0 metres	2.0 metres high at any property boundary and then a 45° plane into the property until maximum height.
Town Centre	10.0 metres	2.0 metres high at any Residential zone boundary and then 45° plane into the property until maximum height.
Industrial (Light)	15.0 metres	2.0 metres high at the Industrial (Light) zone boundary (except where it adjoins an

Industrial (Heavy)	N/A	2.0 metres high at the Industrial (Heavy) zone boundary (except where it adjoins an Industrial (Light) zone and then 45° plane into the property.
Reserve (Passive)	4.0 metres	2.0 metres high at Residential zone boundary (only) and then 45° plane into the property until maximum height.
Reserve (Active)	9.0 metres	2.0 metres high at Residential zone boundary (only) and then 45° plane into the property until maximum height.
Flood Ponding	9.0 metres	At the boundary with any other zone, the maximum height of building permitted on the boundary in that other zone and then a 45° plane into the property until maximum height.
Conservation (Wetland)	N/A	N/A.
Conservation (Indigenous Forest)	6.0 metres	N/A.
Rural	11.0 metres	At the boundary with any other zone, the maximum height of building permitted on the boundary of the adjoining zone and then a 45° plane into the property until maximum height.
Marae Development	9.0 metres	At the boundary with any other zone, the maximum height of building permitted on the adjoining boundary and then a 45° plane into the property until maximum height.
Township	7.0m	2.0 metres high at any zone boundary and then a 45° plane into the property until maximum height.

- Notes:
- (1) Height is measured from actual ground level at that point. (Actual ground level means the level of the ground at that point after completion of subdivision earthworks, but prior to the commencement of any development earthworks).
  - (2) The property boundary or zone boundary shall be the lot boundary, or the centreline of an adjoining internal access or drainage reserve.
  - (3) Chimneys, flag poles, aerials or other such projections shall be excluded from the height measurement (see also Section 8.1 Network Utilities).
  - (4) The height restrictions do not apply to aerials that comply with the following dimensions and standards:
    - maximum cross-section is 100mm
    - must be un-guyed at all times
    - must not exceed a height of 20 metres above ground level or 5 metres above the height of the roofline if erected on a building
    - may contain two microwave dishes or similar attachments, not exceeding 2 metres in diameter each
    - no more than 2 aerials are permitted per site

- (5) Projections measuring not more than 2.0 metres in a horizontal plane and projecting not more than 1.5 metres above the maximum permitted height shall be excluded from the height measurement.
- (6) For buildings to be constructed within the side or rear yard requirement of a site, the daylight control standard shall not apply where the neighbour(s) (both owners and occupiers) of the adjoining property(s) has given their consent.

#### 9.2.1.4 Assessment Criteria

1. The extent that topographical and site conditions (including easements) restrict the area or shape of the site that is available and suitable for building.
2. The desirability of maintaining consistency in design and appearance with existing buildings on the site.
3. The need to preserve existing trees, vegetation or important physical characteristics of the site.
4. Whether the boundary to which the standard relates is a common boundary with an area of permanent open space, the use of which will not be detrimentally affected by any increased shading.
5. Whether the property adjoining the site is higher and therefore the property will not be detrimentally affected.
6. Where the standard is penetrated by a dormer window, gable or similar roof feature, whether that will have a minor effect on the amenities of the neighbouring site.
7. The extent to which it is necessary to minimise the physical disturbance to the landscape and the landforms.
8. The degree to which matters such as wind tunnelling, shading, loss of daylight, amenity value and privacy of adjoining properties is affected.
9. The extent to which the building or structure visually intrudes on any significant ridgeline or skyline or significant landscape and what measures are proposed to reduce the visual effects of that intrusion.
10. Whether the building or structure will detract from any view or vista, which contributes to the aesthetic coherence of a locality, and if it does, what measures can and will be taken to reduce the detraction to an acceptable level or remove it completely.
11. The extent to which the safe and efficient functioning of the street or road is affected.
12. The extent to which the addition or alteration to a scheduled feature will assist with its protection.

## 9.2.2 YARDS

### 9.2.2.1 Discussion, Purpose and Reasons

Yards are used in different zones and for different activities to achieve specific purposes. Care in siting of buildings is of considerable importance to the protection of the landscape character of the rural areas.

In residential areas, privacy, noise reduction and visual amenity can be enhanced for adjoining properties by a separation distance.

Yards also provide the opportunity for landscaping and screening, thereby enhancing the amenities of the zone.

In situations where a zone allows for taller buildings than the adjoining zone (eg industrial and residential), yards, combined with height restrictions contribute to the admission of daylight to adjoining properties and reduce the visual impact of buildings.

Within part of the Industrial (Heavy) zone at Kerepehi (within the Amenity Protection Area) a 12 metre yard for landscaping purposes has been created. This is in order to protect the visual amenity for the residents in the Rural and Residential zones to the west of the Industrial (Heavy) zone west of State Highway 2 and north of Kerepehi Town Road.

The siting of buildings back from the front boundary serves a number of functions in terms of landscape protection. The front yard reduces the visual impact of buildings, and protects and enhances the existing spacious character of the rural landscape or the streetscape in residential areas. It also provides space for tree planting.

The front yard provides space between the building and the road for vehicle access, parking and loading. Visibility for motorists along roads can be restricted by buildings sited too near to a road.

Buildings may contain activities (eg industrial, factory farming) which can cause a nuisance to neighbouring properties especially where dwellings are nearby. In the rural zone, yards other than front yards are less for residential buildings than for other sorts of buildings because there is less likelihood of nuisance being generated from this activity.

In some cases the amenities of neighbouring properties will not be affected by a closer location. For this reason the yard setback from the boundary of a neighbouring property may be reduced in whole or in part, with the written consent of the owners and occupiers of the adjoining property.

Ngatea has developed an open streetscape through the use of a 7.5 metre front yard. In order to protect this amenity, the community has indicated a desire to retain this yard and therefore the open streetscape.

### 9.2.2.2 Environmental Results

To maintain the open appearance and character of rural, rural-residential and conservation zones.

To allow flexibility in residential site layout and increased density, while still maintaining the residential amenities of the site and adjoining sites and the function of the street.

To provide an open streetscape that allows for planting, but at the same time ensures the traffic function of the road is not compromised.

To set yard requirements in the Town Centre zone which define, reinforce and enclose the commercial activities in order to promote enhanced pedestrian amenities.

**9.2.2.3 Standard**

No yard shall have a width less than that specified for the relevant zone below:

<u>Zone</u>	<u>Standard</u>
Residential (excluding Ngatea)	Front Yard - 4.5 metres. Other Yards - 1.5 metres.
	<u>Except that in the Residential Zone (excluding Ngatea):</u>
	1. Garages and carports as a discretionary activity may be built in the front yard, provided that the entrance to the garage shall not be directly onto the street; sufficient manoeuvring space shall be available on-site to ensure vehicles do not have to reverse from the site; and that the length of the front wall of the garage or carport shall not exceed 33% of the front boundary length or 6 metres, whichever is the lesser; and
	2. Any building may be built in the side and/or rear yards, provided that the length of building(s) does not exceed 10 metres or 25% of the length of the yard, whichever is the lesser; and the written approval of the adjoining owner and occupier has been obtained.
Residential In Ngatea	Front Yard - 7.5 metres. Other Yards - 1.5 metres.
Rural-Residential	Front Yard - 7.5 metres. Other Yards - 6.0 metres.
Town Centre	Front Yard - Nil. Other Yards - Nil.
	Except that where the boundary of the Town Centre zone adjoins a Residential or Reserve zone, the yard shall be 3.0 metres.
Industrial (Light) and Industrial (Heavy)	Front Yard - Nil. Other Yards - Nil.
	Except that:
	<ul style="list-style-type: none"> <li>• Where the boundary of the Industrial zone adjoins a Residential or Reserve zone, the yard shall be 3.0 metres.</li> <li>• At Kerepehi, west of State Highway 2 and north of Kerepehi Town Road, and within the 20 metre Amenity Protection Area a 12 metre yard along the western zone boundary will apply. This yard will be for landscaping purposes only (refer to Rule 9.3.12 Landscaping).</li> </ul>
	(Note: The provisions of the Amenity Protection Area also apply within a 20 metre distance from the zone boundary. See Sections 5.9, 5.10 and 5.11).
Reserve (Passive)	Front Yard - Nil. Other Yards - Nil.
Reserve (Active)	Front Yard - 5.0 metres. Other Yards - Nil, except that where the boundary of the Reserve (Active) zone adjoins a

Residential zone, the yard shall be 3.0 metres.

Flood Ponding	Front and Other Yards	- -	At the boundary with any other zone the yard shall be the yard required in the adjoining zone. (Buildings are provided as a discretionary activity only).
Conservation (Wetland)		N/A	
Conservation (Indigenous Forest)	Front Yard Other Yards	- - -	12 metres. 6 metres for residential purposes. 12 metres for other purposes.
Rural (Buildings)	Front Yard Other Yards	- - -	12 metres. 6 metres for residential purposes. 12 metres for other purposes.
			Any building or enclosure used for the housing and keeping of any animals (including milking sheds) is not permitted within 50 metres of the boundary of the holding.
Rural (Shelter Belts and Forestry)	Front Yard Other Yards	- -	10 metres 10 metres
			Except that where the boundary of the Rural Zone adjoins a Rural Residential, Residential, Marae Development or Township Zone, the yard shall be 20 metres.
Rural (Produce Stalls)	Front Yard Other Yards	- -	20 metres 10 metres
Marae Development	Front Yard Other Yards	- -	4.5 metres Nil
			Except that at the boundary with any other zone the yard requirement shall be 1.5 metres.
Township	Front Yard Other Yards	- -	4.5 metres. 1.5 metres.

Provided that in all zones:

1. In any yard, building eaves may encroach into the yard by 0.6 metres.
2. Yards specified above may be reduced in whole or part subject to the written consent of the owners and occupiers of the property adjoining the relevant yard and provided that compliance with Building Act requirements for fire separation and building line restrictions are met, other than:
  - front yards; and
  - the 12 metre yard (within the APA) west of State Highway 2 and north of Kerepehi Town Road at Kerepehi.

No resource consent is required to be obtained from Council.

**9.2.2.4 Assessment Criteria**

1. The extent that topographical and site conditions restrict the area or shape of the site that is available and suitable for building.
2. The degree to which the functioning of the site and or the activity can be improved.
3. Whether there is a need to preserve existing trees, vegetation or important physical characteristics of the site.
4. The extent to which the provision of daylight and sunlight into the neighbouring properties and the visual and aural privacy of neighbouring sites will be affected.
5. The extent to which the safe and efficient functioning of the street or road will be significantly compromised.
6. Whether the detrimental effects of building in the yard can be reduced or avoided.
7. Whether the yard functions (including separation, landscaping and service provision) will be provided on the site by other means, or are they unnecessary.
8. With respect to the 12 metre wide yard at Kerepehi, whether the adverse effects (especially visual effects due to the loss of landscaping) of building or undertaking activities in the yard can be avoided or mitigated by alternative methods of screening and/or landscaping.

**9.2.3 SITE/ZONE COVERAGE****9.2.3.1 Discussion, Purpose and Reasons**

Along with other standards (eg height), a restriction on the area of a site or zone that buildings cover is designed to keep buildings to a scale that is complementary to the amenities and characteristics of the zone.

For some situations (eg unserviced sites), the restriction on building coverage is designed to ensure that on-site servicing with respect to stormwater and sewage can be met. The Flood Ponding zone has a specific function, which requires restrictive limits on building.

**9.2.3.2 Environmental Results**

To limit the scale and intensity of building development to a level appropriate to the character and amenity of an area.

To enhance residential qualities by providing land free of buildings to allow potential for outdoor residential activities and gardening.

To prevent large buildings from changing the visual character of the residential and recreation areas.

To ensure an area of permeable surface remains on-site to mitigate against the negative environmental effects that may result from stormwater runoff.

In areas not served by sewerage disposal systems, an adequate area for on-site effluent disposal is required to be maintained.

To protect the urban resource of Paeroa from the detrimental effects of flooding.

**9.2.3.3 Standards**

No building shall exceed the coverage or size limits specified below:

<u>Zone</u>	<u>Standards</u>
Residential	Sewered - 45% of the site. Unsewered - 30% of the site.
Rural-Residential	30% of the site.
Town Centre	N/A.
Industrial (Light) and Industrial (Heavy)	85% of the site.
Reserve (Passive)	1% of the site or zone area or 250m <sup>2</sup> gfa, whichever is the greater.
Reserve (Active)	50% of the site.
Flood Ponding	N/A (Building is only provided for as a discretionary activity).
Conservation (Wetland)	N/A.
Conservation (Indigenous Forest)	N/A.
Rural	N/A.
Marae Development	N/A.

Township	Sewered	-	45% of the site.
	Unsewered	-	30% of the site.

#### 9.2.3.4 Assessment Criteria

1. The ability of the existing stormwater and/or sewerage systems or on-site disposal methods to cope with additional stormwater and/or disposal of septic tank effluents.
2. Whether there are known stormwater/sewerage effluent disposal problems in the area.
3. The degree to which any negative effects in terms of changing the character or visual amenity of the area can be mitigated or removed through the use of such techniques as landscaping, building design, exterior finish, set back from boundaries or reduced height.
4. The extent to which open space in the near vicinity can reduce the impact of the building(s) in terms of character or visual amenity.

#### 9.2.4 DENSITY

##### 9.2.4.1 Discussion, Purpose and Reasons

Density through the use of the unit site area criteria, is a mechanism that controls the number of residential dwellings that can be accommodated in a given area. The purpose is to ensure services (water, roading, sewerage) can be planned and provided for and to provide a form of development which enables privacy, visual amenity, peacefulness and recreational amenity to be promoted.

##### 9.2.4.2 Environmental Results

To ensure that the qualities that contribute to the residential environment sought by residents are able to be provided for each dwelling.

To enable an intensity of residential development that is appropriate to the character of the existing residential environment (one dwelling per section), while allowing for higher density living in those areas where it is appropriate.

To reduce the demand for urban areas to expand onto rural land, thereby protecting that resource for future generations.

To match the level of services with the likely demand to be placed on them, thereby remedying any negative effects on the natural environment or amenities of an area.

##### 9.2.4.3 Standards

Every household unit (dwelling, multiple dwelling) shall be contained within the net lot area specified below:

<u>Zone</u>	<u>Minimum Standard</u>
Residential, Rural-Residential and Township	Single Dwelling (infill lot) 350m <sup>2</sup> Single Dwelling (other) 450m <sup>2</sup> Multiple Dwelling 350m <sup>2</sup> / unit.
Town Centre, Industrial (Light) and Reserve (Active)	Accessory Single Dwelling 350m <sup>2</sup>
Industrial (Heavy), Reserve (Passive), Flood Ponding, Conservation (Wetland), Conservation (Indigenous Forest), Rural and Marae Development	N/A

**(Net Lot Area:** The net lot area must be shown on the site plan when a building consent application is made and on the lots to be created on a plan of subdivision. It shall contain the unit, outdoor living court, service court, and any vehicle parking and manoeuvring space which is for the exclusive use of that unit, but shall exclude any communal open space and communal parking and any internal access or right-of-way).

##### 9.2.4.4 Assessment Criteria

1. The degree to which the design of the development allows for a smaller net lot area while still meeting the required standards relating to privacy, outdoor living, sunlight, parking and other residential amenity needs.
2. Whether there is sufficient permanent open space adjoining the site (excluding streets, accessways) to reduce the impact of the higher density on the surrounding residential environment.

3. Whether the housing development is designed to meet the needs of specific resident(s), not requiring the specified net lot area due to smaller units, or parking or other factors, and the development is unlikely to convert to a residential form of living that would require greater net lot areas.

### 9.2.5 OUTDOOR LIVING COURT

#### 9.2.5.1 Discussion, Purpose and Reasons

As the density of residential living is increased, it is important that an area of useable, accessible open space is available on sites for recreation and leisure.

"Space" is a resource that needs to be managed in the residential situation, to enable people to provide for their wellbeing and health, as well as that of future generations.

#### 9.2.5.2 Environmental Results

To provide the opportunity for private outdoor space associated with the dwelling suitable for active or passive leisure purposes.

To contribute to the amenity of each household unit thereby enhancing the overall amenity of the residential environment.

#### 9.2.5.3 Standards

Every household unit shall be provided with an outdoor living court to the size, shape and location as specified below:

<u>Zone</u>	<u>Standard</u>	
Residential, Rural-Residential and Township	Minimum Area	60m <sup>2</sup> plus 10m <sup>2</sup> for each additional bedroom over 2.
	Minimum Dimensions	Can contain an 8 metre diameter circle.
Town Centre, Industrial (Light), Reserve (Active)	Minimum Area	25m <sup>2</sup> plus 10m <sup>2</sup> for each additional bedroom over 2.
	Minimum Dimensions	Can contain a 4 metre diameter circle.
Industrial (Heavy), Reserve (Passive), Flood Ponding, Conservation (Wetland), Conservation (Indigenous Forest), Rural and Marae Development	N/A	

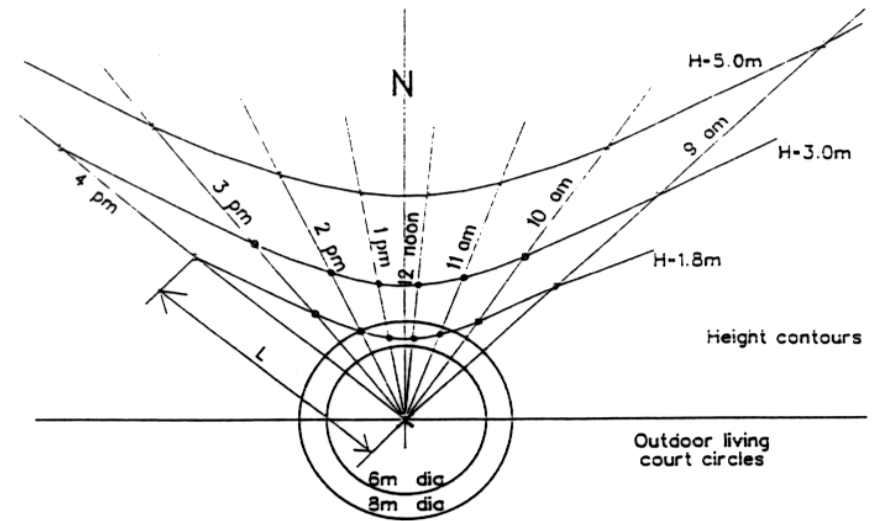
Each outdoor living court shall:

- Be exclusive to the unit.
- Be contained within the net lot area.
- Be free of driveways, drying facilities, manoeuvring areas, parking spaces and accessory buildings.
- Receive the sun over 50% of the living court area for at least 3 hours on the 21 June.
- Have a slope no greater than 10°.
- Where terraced, have each terrace is substantially level and with a minimum dimension of 3m and a maximum difference in level between terraces of 3 metres.

Note: Open decks (terraces) with a minimum dimension of 3 metres can be included within the outdoor living court, if they meet the requirements for terracing above.

**9.2.5.4 Assessment Criteria**

1. Whether there is communal outdoor space provided, which is accessible to the household unit and provides a similar level of amenity.
2. Whether there is adjoining open space (eg park, reserve) that is "usable" by the unit, thereby reducing the need to provide the court on-site.
3. The extent to which the court can be provided in a manner that may not meet the standards, but still provides a useable area to meet the purpose of the court and a similar level of amenity.



**TO USE SUNLIGHT DIAGRAM**

1. Plot on the site plan the position and height of potential obstructions such as fences or adjoining buildings in relation to the outdoor living court.
2. Place the centre point of the sunlight protection diagram on the centre of the outdoor living court circle and orientate to true north.
3. Identify those structures which encroach through the height contours on the sunlight protection diagram.
4. Determine the number of hours of unobstructed sunlight reaching the centre of the outdoor living court circle.

**NOTES:**

Sunlight diagram is for 21 June in Paeroa. Height of obstructions is to be measured relative to height of centre of outdoor living court circle. Three hours sunlight at centre of outdoor living court circle is accepted as compliance with Performance Standard 9.2.5. The Sunlight Diagram needs to be drawn to the same scale as the scale on the site plan.

**SHADOW DIAGRAMS**

As an alternative to using the sunlight diagram, shadow diagrams showing the effect of obstructions on the outdoor living court can be plotted. This involves determining the length of shadow for each specified time with the formula  $L = H \times \cotan Alt$  and plotting this along the azimuth of the sun.

The azimuth, altitude and cotan alt of the sun for each specified time on 21 June are set out in the following table.

- L = length of shadow
- H = height of obstruction
- Alt = angle of altitude of the sun
- Az = true bearing of the sun

TIME	9am	10am	12noon	2pm	3pm
Az	46°07'E	34°11'E	05°13'E	25°12'W	38°22'E
Alt	12°51'	20°30'	28°36'	24°25'	18°10'
<i>cotan Alt</i>	4.3838	2.6746	1.8341	2.2028	3.0474