

# The Proposed Auckland Unitary Plan (notified 30 September 2013)

## 6.4 Sustainable development

### 1. Introduction

The purpose of these rules is to ensure all new development containing five or more dwellings within a site and large-scale office and industrial buildings are designed to:

- operate efficiently to minimise the use of energy and water resources
- minimise adverse environmental effects
- create healthy and comfortable living and working environments.

Assessment tools developed by the New Zealand Green Building Council will be used to establish whether a building achieves these outcomes. The tools have been developed with the building industry to benchmark the sustainability of buildings while providing flexibility in design. This is achieved through a point scoring system based on various aspects of sustainable design.

Other tools, such as the Living Building Challenge, are recognised as providing the equivalent or greater sustainable building standards. Tools from LEED and BREEM do deliver sustainable outcomes, however they have not been created for a New Zealand context and therefore a resource consent would be required if these were to be used.

#### **Office and industrial**

Office and industrial buildings with gross floor area of 5000m<sup>2</sup> or more need to obtain a 4-star rating. Credits are awarded in the following categories:

- building management
- indoor environment quality
- energy use
- transport
- water
- materials
- ecology
- emissions
- design innovation.

Applicants can select from a variety of credits in these categories to achieve the required star rating.

#### **Dwellings**

Any new development containing five or more dwellings needs to achieve a 6-star rating. Credits are awarded in the following categories:

- energy
- health and comfort
- water
- waste

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- management
- materials
- stormwater, ecology, food production and transport.

Additionally, minimum levels are required for:

- thermal performance based on the specification and orientation of the building.
- moisture control and ventilation
- water efficiency.

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## 2. Land use controls

### 2.1 Dwellings

1. In new developments containing five or more dwellings, each dwelling must be designed and constructed to achieve:
  - a. a minimum 6-star level from the New Zealand Green Building Council Homestar Tool (2013), or
  - b. certification under the Living Building Challenge (2013).
2. This control does not apply to:
  - a. extensions and alterations to existing dwellings
  - b. converting an existing building to a dwelling
  - c. new developments containing four or fewer dwellings.

### 2.2 Offices

1. A new building with a GFA of 5000m<sup>2</sup> or greater and where 80 per cent or more of the GFA is to be used as an office, must be designed and constructed to achieve:
  - a. a minimum 4-star level from the New Zealand Green Building Council Green Star Office Tool (2009), or
  - b. certification under the Living Building Challenge (2013), or
  - c. a minimum 4 star level using the Australian Green Building Council Green Star Office tool (2008).
2. This control does not apply to:
  - a. extensions and alterations to existing office buildings
  - b. converting an existing building to an office use
  - c. offices accessory to another use.

### 2.3 Industrial activities

1. A new building with a GFA of 5000m<sup>2</sup> or greater and where 60 per cent of the GFA is to be used for industrial activities, must be designed and constructed to achieve:
  - a. a minimum 4-star level from the New Zealand Green Building Council Green Star Industrial Tool (2009), or
  - b. certification under the Living Building Challenge (2013), or
  - c. a minimum 4-star using the Australian Green Building Council Green Star Industrial tool (2011).
2. This control does not apply to:
  - a. extensions and alterations to existing industrial buildings
  - b. converting an existing building to industrial activities
  - c. industrial activities accessory to another use.

## 3. Assessment - Development control infringements

### 3.1 Matters of discretion

In addition to the general matters of discretion in [clause 2.3](#) of the general provisions, the council will restrict its discretion to the matters below for the listed development control infringement.

1. Dwellings, offices and industrial activities
  - a. energy efficiency/passive environmental design

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- b. water efficiency
- c. internal amenity
- d. renewable energy
- e. stormwater management
- f. materials and building adaptability
- g. waste.

### 3.2 Assessment criteria

In addition to the general assessment criteria in [clause 2.3](#) of the general provisions, the council will consider the relevant criteria below for the listed development control infringement.

#### 1. Dwellings, offices and industrial activities

Where a development does not achieve required sustainable building standard, the applicant should demonstrate that the aspects of sustainable design have been incorporated in the development in the following order of priority:

- a. Energy efficiency
  - i. Whether the building is designed, located and constructed to achieve optimum thermal efficiency (approximately 30 MJ/m<sup>2</sup> per year) through passive environmental design, in particular by:
    - orienting and designing the buildings to achieve maximum possible benefit from solar gain from low level sun in winter months and minimum solar gain from high level sun in summer months
    - locating internal surfaces with a high thermal mass in areas exposed to direct low-level sunlight in winter months
    - incorporating insulation in the walls, floor and roof space along with airtightness
    - prioritising natural, non-mechanical techniques for cooling and venting along with heat transfer and consider the integration of heat recovery systems
    - reducing the size of the dwelling, smaller buildings are more efficient to heat.
- b. Water efficiency
  - i. Whether water sensitive design principles are used to minimise water usage, including:
    - maximising localised water collection, retention and re-use
    - using water efficient building features and systems
    - recycling of grey water.
- c. Comfort and health
  - i. Whether the design, location and construction of the development provides for efficient, warm and healthy living and working environments, demonstrated through:
    - passive environmental design
    - thermal and acoustic insulation
    - appropriate ventilation.
- d. Renewable energy
  - i. Whether renewable energy generation is provided in the development.
  - ii. Whether the building enables distributed networks or district heating schemes to be established.
  - iii. Where renewable energy equipment is provided it should be sited to maximise efficiency, while

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ensuring the effects from visual intrusion will not be detrimental to the amenity of an area, particularly those of historic or landscape value.

- e. Stormwater management
  - i. Whether the development minimises stormwater runoff over and above the relevant impervious area and stormwater management rules of the Unitary Plan
- f. Materials and building adaptability
  - i. Whether the following materials have been used in the development:
    - recycled materials including those from demolition or earthworks on the site
    - low embodied-energy materials, except for elements that support thermal mass
    - low maintenance materials
    - volatile organic compound free materials.
  - ii. Whether the development has been designed to be adaptable to a range of uses over time.
- g. Waste
  - i. Whether the residential development manages waste over and above that required by the servicing and waste rule in the relevant zone.
  - ii. Whether commercial and industrial development integrates waste management into the design of the building, including the provision of a storage area for waste.

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