

FILE NOTE:

Air conditioning controls in development assessment

Dear Emma,

This File Note offers an outline of how Council assesses the use, location and amenity impacts of air conditioning for new developments in the Cairns Region. In particular, reference is made to Council’s Planning Schemes, CairnsPlan and the Planning Scheme for the Douglas Shire 2006. These two documents are the primary planning tools under which development assessment is undertaken.

CairnsPlan

CairnsPlan is divided into 4 types of Codes which apply to development assessment:

- Planning Area Codes;
- Overlay Codes;
- Land Use Codes; and
- General Codes.

Within these Codes, the use of air conditioning is specifically assessed in relation to its amenity impacts only. However, there are ways in which the use of air conditioners can be minimised through energy efficient building design. Where and how these provisions are incorporated in CairnsPlan is summarised below.

Amenity Related Impacts

Screening of air conditioners and other mechanical equipment is encouraged to minimise their visual offensiveness, particularly where they are provided as “banks” of mechanical units. To avoid the visual and noise related amenity impacts, the following Performance Criteria and Acceptable Measures are provided:

Dual Occupancy Code	
<p>P6 Service structures and mechanical plant (including air conditioners and split system air conditioners) are located or insulated such that dwelling units within the development, and in residential buildings on adjoining properties are not affected by the noise source.</p>	<p>A6.1 Service structures and mechanical plant are: a) screened and baffled; or b) otherwise incorporated into the building form to maintain and uphold the amenity of dwelling units within the development, and of residential buildings on adjoining properties.</p>
Multiple Dwelling (Small Scale Development) Code,	
<p>P18 Services structures and mechanical plant (including air conditioners and split system air conditioners) are screened or otherwise incorporated as part of the building form.</p>	<p>A18.1 Services structures and mechanical plant are not visible from: a) the street, and b) adjoining properties, and c) public open space; and</p> <p>A18.2 Mechanical plant is not located: a) on balconies or adjacent to other liveable areas; and b) near multiple reflective surfaces such as walls and eaves</p>

Multiple Dwellings and Holiday Accommodation Code	
P8 Services structures and mechanical plant (including air conditioners and split system air conditioners) are screened or otherwise incorporated as part of the building form.	<p>A8.1 Services structures and mechanical plant are not visible from:</p> <ul style="list-style-type: none"> a) the street, and b) adjoining properties, and c) public open space; and <p>A8.2 Mechanical plant is not located:</p> <ul style="list-style-type: none"> a) on balconies or adjacent to other liveable areas; and b) near multiple reflective surfaces such as walls and eaves <p>A8.3 Services and mechanical plant are located in building recesses or service areas such as parking and driveway areas.</p>
Retirement Village Code	
P5 Services structures and mechanical plant (including air conditioners and split system air conditioners) are screened or otherwise incorporated as part of the building form.	<p>A5.1 Services structures and mechanical plant are not visible from:</p> <ul style="list-style-type: none"> a) the street, and b) adjoining properties, and c) public open space; and <p>A5.2 Mechanical plant is not located:</p> <ul style="list-style-type: none"> a) on balconies or adjacent to other liveable areas; and b) near multiple reflective surfaces such as walls and eaves <p>A5.3 Services and mechanical plant are located in building recesses or service areas such as parking and driveway areas.</p>
Special Residential Accommodation Code	
P10 Services structures and mechanical plant (including air conditioners and split system air conditioners) are screened or otherwise incorporated as part of the building form.	A10.1 No acceptable measures are specified.

Notably, these provisions are all for multiple dwelling developments. The visual impact of air conditioning on particular commercial and other developments is addressed in a more general manner. Where specific provisions relating to air conditioning units are not reflected by Land Use or other Codes there is a Performance Criterion which is applicable in the Planning Area Codes, except for Sport & Recreation Open Space and Conservation Planning Areas. It reads as follows:

Development does not adversely affect the amenity of the:

- a) *Planning Area; and*
- b) *Adjoining Land Uses*

This criterion can be used to assess the impact of air conditioning units in relation to visual and noise related impacts that a development may cause.

Also noteworthy, is that all matters (except for height) for individual Houses are dealt with by the Queensland Development Code and not CairnsPlan.

Energy Efficient Building Design

As a means of encouraging the minimisation of air conditioning use, energy efficient building design is strongly encouraged. In particular, the following performance criterion is contained in the Planning Area Codes, excluded only from the Sport & Recreation Open Space and Conservation Planning Areas:

Buildings and Structures are:

- a) *responsive to the tropical climate by taking into account prevailing breezes and solar orientation; and*
- b) *designed to minimise energy consumption*

More specific detail is provided for particular land uses through the Land Use Codes. Those included are:

- Dual Occupancy Code;
- Multiple Dwelling (Small Scale Development) Code;
- Multiple Dwelling and Holiday Accommodation Code;
- Retirement Village Code;
- Shopping and Business Facilities Code
- Special Residential Accommodation Code.

Planning Scheme for the Douglas Shire

The Planning Scheme for the Douglas Shire is divided into 5 types of Codes which apply to development assessment:

- Locality Codes;
- Planning Area Codes;
- Overlay Codes;
- Land Use Codes; and
- General Codes.

Within these Codes, the use of air conditioning is specifically assessed in relation to its amenity impacts as well as the efficiency of the air conditioning appliance in residential and commercial developments. The planning scheme also encourages ways in which the use of air conditioners can be minimised through energy efficient building design. Where and how these provisions are incorporated in the Planning Scheme is summarised below.

Energy Efficiency of Air Conditioners

As part of the Sustainable Development Code, the following Performance Criteria and Acceptable Measures provide direction to the energy efficiency of air conditioning appliances.

<p>P5 All electrical appliances intended to be installed as standard into any residential building shall meet a minimum standard of 4 stars in accordance with the Australian Energy Rating Label.</p>	<p>A5.1 All: P1 Dishwashers; P2 Clothes dryers; P3 Clothes washers; P4 Air conditioners; and P5 Refrigerators/freezers where installed with the development, shall meet a minimum 4 star rating in accordance with the Australian Energy Rating Label.</p>
--	--

P7 Air conditioning, where not covered by an Australian Energy Rating Label, is energy efficient.	A7.1 Air conditioning units or systems comply with the minimum energy performance requirements specified in the Australian/New Zealand Standard AS/NZS 3823.2.2003.
---	---

The Code applies to all assessable Material Change of Use, involving new Building Work other than minor alterations to an existing building, excluding where it involves any of the following uses:

Caretaker's Residence, Car Park, Cemetery, Extractive Industry, Home Activity, Home Based Business (excluding Bed & Breakfast, Forest Stay & Host Farm Accommodation), Home Industry, House, Industry, Off Premise Advertising Device, Outstation/Seasonal Camp, Park & Open Space, Primary Industry, Private Forestry, Service Industry (excluding associated office), and Telecommunications Facility.

Amenity Related Impacts

Screening of air conditioners and other mechanical equipment is encouraged to minimise their visual offensiveness, particularly where they are provided as "banks" of mechanical units. To avoid the visual and noise related amenity impacts, the following Performance Criteria and Acceptable Measures are provided:

Mossman and Environs Locality Code	
P9 Display Facilities are appropriately located and designed to integrate with the street frontage and provide a proportional street facade to reflect the existing streetscape, with design elements such as glass shop fronts.	A9.4 Any air conditioning plant is screened from the street Frontage and the public view by the use of architectural features as referred to in Planning Scheme Policy No 2 – Building Design and Architectural Elements.
Landscaping Code	
P8 Undesirable features are screened with Landscaping.	A8.1 Landscaping of Dense Planting is planted along and near retaining walls, long blank walls of Buildings, mechanical and air-conditioning units, clothes drying areas, bin enclosures and other utility structures with appropriate trees, shrubs and groundcovers.

Other, more generalised Performance Criteria which aim to mitigate adverse impacts of visual offensiveness and noise are contained within the following Codes:

- Settlement Areas North of the Daintree River Locality Code;
- Mossman & Environs Locality Code;
- Port Douglas & Environs Locality Code;
- Coastal Suburbs, Villages & Townships Locality Code; and
- Landscaping Code.

These aren't necessarily specific to air conditioning, but can be applied where development can cause offence from air conditioning.

Energy Efficient Building Design

As a means of encouraging the minimisation of air conditioning use, energy efficient building design is also strongly encouraged in the Douglas Shire Planning Scheme. In particular, the following performance criterion is contained in the Sustainable Development Code:

Buildings are designed and sited to:

- a) *maximise the thermal comfort achieved within the building using passive design measures; and*
- b) *minimise the need for energy reliant cooling appliances to achieve accepted levels of thermal comfort.*

These provisions apply predominantly to residential and commercial development, as identified in the section above.

More generalised provisions for energy efficient building design is contained in the following Locality Codes:

- Settlement Areas North of the Daintree River Locality Code;
- Mossman & Environs Locality Code;
- Port Douglas & Environs Locality Code; and
- Coastal Suburbs, Villages & Townships Locality Code.

Environmental Protection (Noise) Policy 2008

The Environmental Protection Act 1994, through the Environmental Protection (Noise) Policy 2008 controls the level of noise that air conditioners are permitted to make.

Conditions on Development Approvals

Council often imposes the following condition on residential and other substantial developments:

Air-conditioning Screens

Air conditioning units located above ground level and visible from external properties and the street must be screened with appropriate materials to improve the appearance of the building. Such screening must be completed prior to the Commencement of Use.

Often when a commercial development is established in close proximity to existing and future residential development, Council will request noise reports to determine the necessary attenuation measures required to ensure the residential amenity is maintained.

Conclusions

- Both the Douglas Shire Planning Scheme and CairnsPlan have specific and general criteria to regulate visual and noise related impacts from air conditioning;
- Both planning schemes also encourage energy efficient building design;
- Only the Douglas Shire Planning Scheme has specific criteria to control the energy efficiency of air conditioning appliances;
- The Environmental Protection Act sets the standards for controlling noise from air conditioning; and
- Council imposes conditions to ensure the planning scheme and EP standards are reflected in development.