Queensland Government
Building Codes Queensland
Department of Local Government, Planning, Sport and Recreation

Building Newsflash

APPROVAL OF SUSTAINABLE HOUSING MEASURES

Purpose

To provide information on measures which facilitate compliance with the *Queensland Development Code – Part 29 Sustainable Buildings*[1].

Background

From 1 March 2006, development applications for building work in new Class 1 buildings and sole-occupancy units in Class 2 buildings will be subject to new water and energy efficiency measures including:

- *3 Star rated or AAA rated shower roses;*
- *Pressure-limiting devices;*
- *Dual flush toilets;*
- *Energy-efficient lighting; and*
- *Greenhouse-efficient hot water systems*

3 Star Rated or AAA Rated Shower Roses

This measure applies to new Class 1 buildings, sole-occupancy units in Class 2 buildings, or where the bathrooms of these building classifications undergo renovations. The measure only applies in areas that have reticulated mains water supply.

A shower rose must achieve at least a 3 Star rating under the Water Efficiency Labelling Scheme or a AAA rating when assessed against *AS/NZS 6400: 2005 Water Efficient Products – Rating and Labelling*. These ratings are shown at point of sale, but may not be marked on the fittings. The plumber who installed the fittings can advise on compliance.

Water Pressure Limiting

This measure applies to new Class 1 buildings in areas that have reticulated mains water supply. The maximum pressure level of water from any outlet within the property boundaries of a new Class 1 building must not exceed 500kPa.

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[1] The sustainable building initiatives are complemented by the *Queensland Development Code –Part 25 – Rainwater Tanks*, which will also commence on 1 March 2006.

Compliance can be achieved through the installation of a water pressure limiting device in line with the water meter. Where it is known that the pressure level of the water supply does not exceed 500kPa, a water pressure limiting device is not needed.

A water pressure-limiting device falls within the ambit of 'regulated plumbing work' and, as such, a plumbing approval is also required.

Dual Flush Toilets

This measure applies to new Class 1 buildings, sole-occupancy units in Class 2 buildings, or where toilets are replaced in the bathrooms of these building classifications undergo renovations.

A toilet must have a dual flush capability that does not exceed 6 litres on a full flush and 3 litres on a half flush. The plumber who installed the toilet can advise on compliance.

Energy Efficient Lighting

This measure applies to new Class 1 buildings and sole-occupancy units in Class 2 buildings.

Energy efficient lighting includes fluorescent and compact fluorescent lights. It does not include incandescent or halogen lights.

Compliance is achieved when energy efficient lighting is used for at least 40 percent of the total floor area of the building or sole occupancy unit (refer to definition of floor area in Part 29 of the Queensland Development Code). This area includes associated garages.

Where a part of a house is lit by more than one light source, and one or more of those sources is not deemed to be efficient lighting, then that part of the house is not considered to have efficient lighting and therefore does not qualify towards the 40 percent efficient lighting requirement. For example, if a kitchen has a fluorescent light as its central light source and halogen lights providing task lighting for a kitchen bench, then the floor area of the kitchen bench should be subtracted from the kitchen floor area when calculating floor area lit by efficient lighting.

Final assessment upon completion of the building will require confirmation that the correct lighting has been installed in the appropriate light fittings. It is reasonable to accept this confirmation from the electrician who installed the light fittings.

Hot Water Supply

This measure applies to new Class 1 buildings.

Under the measure, a new Class 1 building must use hot water systems that have a low greenhouse gas emission impact. Suitable hot water systems include:

(a) a gas hot water system that has a five star energy rating; or

(b) either a heat pump or solar hot water system where:

  (i) In a building with 3 or more bedrooms, the hot water system must be eligible to receive at least 22 Renewable Energy Certificates; or
  (ii) In a building with 1 or 2 bedrooms the hot water system must be eligible to receive at least 14 Renewable Energy Certificates.

Renewable Energy Certificates are a standard measure of performance of heat pump and solar hot water systems. The plumber who installs the hot water system can confirm whether the hot water system complies with the minimum standards for gas, heat pump or solar hot water systems.

Building Certifier to assess compliance with these measures

A building certifier must assess compliance with these measures as part of the assessment for compliance under the Building Act. Compliance is required for plans that are lodged for approval as of 1 March 2006. Compliance is not required for building plans that were lodged prior to 1 March 2006.

In order to satisfy themselves that the correct measures have been installed in a house or unit, the certifier may:

(a) accept confirmation from the electrician, which may be provided through the builder, that energy efficient lights have been installed; and

(b) either:

  (i) accept advice from the plumber, which may be provided through the builder, that the correct plumbing fixtures (ie dual flush toilet, water efficient shower rose, pressure reducing device and greenhouse efficient water heater) have been installed; or

  (ii) sight the Compliance Certificate for the Plumbing Final.

References:

Legislation and standards:

- *AS/NZS 3500.1:2003 Plumbing and drainage - Water services*
- *AS/NZS 6400: 2005 Water Efficient Products – Rating and Labelling*
- *Queensland Development Code – Part 29 Sustainable Buildings*
- *Queensland Development Code – Part 25 Rainwater Tanks*
- *Plumbing and Drainage Act 2002*
- *Standard Plumbing and Drainage Regulation 2003*

Publications:

- Department of Local Government and Planning and Environmental Protection Agency, *Towards Sustainable Housing in Queensland Discussion Paper* (December 2004).
- Department of Local Government and Planning and Environmental Protection Agency, *Regulatory Impact Statement: Proposed amendments to building and plumbing regulations to improve sustainability of new housing* (December 2004).

Websites:

- Sustainable Housing Website: http://www.lgp.qld.gov.au/sustainableliving
- Copy of amendment regulation http://www.lgp.qld.gov.au/sustainableliving
- Queensland Development Code: http://www.lgp.qld.gov.au/?id=247
- Waterrating Website: http://www.waterrating.gov.au
- Plumbing Website (incl. Fact Sheets): http://www.lgp.qld.gov.au/?id=258

Enquiries

- For advice on sustainable building: Dr David Mills
- For specific advice on plumbing matters: Mr Michael McGuinness
- Phone: (07) 32370368

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