PART 29 – SUSTAINABLE BUILDINGS

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Purpose

To ensure *Class 1* buildings and sole-occupancy units in *Class 2* buildings are designed and built to be energy and water efficient.

Application

Performance criteria P1 to P5 apply to all new *Class 1* (houses) buildings.

Performance criteria P1, P3 and P4 apply to all *sole-occupancy units* in new *Class 2* (multi-residential units) buildings.

Performance criteria P1 applies where bathrooms are being renovated in existing *Class 1* buildings or in *sole-occupancy units* in existing *Class 2* buildings.

Performance criteria P3 applies where toilets are being replaced in existing *Class 1* buildings or in sole-occupancy units in existing *Class 2* buildings.

Performance criteria P1 and P2 only apply in a service area for a retail water service under the *Water Act 2000*.

Referral Agency

There is no referral agency for this standard. The building certifier must assess any application that does not comply with the acceptable solutions of this standard.

Associated Requirements

- *Standard Building Regulation 1993.*
- *Building Act 1975.*

Referenced standards

- AS/NZS 3500 – 2003 Plumbing and Drainage
- AS/NZS 6400 – 2004 Water Efficient Products – rating and labelling

Definitions

Note: *Italicised* words in the text of the standard are as defined below.

Class 1 - means one or more buildings which in association constitute—

(a) **Class 1a** —a single dwelling being—

(i) a detached house; or

(ii) one of a group of two or more attached dwellings, each being a building, separated by a *fire-resisting* wall, including a row house, terrace house, town house or villa unit; or

(b) **Class 1b** —a boarding house, guest house, hostel or the like-

(i) with a total area of all floors not exceeding 300 m^2 measured over the enclosing walls of the Class 1b; and

(ii) in which not more than 12 persons would ordinarily be resident,

which is not located above or below another dwelling or another class of building other than a *private garage*.

Class 2 - means a building containing 2 or more sole-occupancy units each being a separate dwelling.

Floor area – means-

(a) For a class 1 building-
the area of the building measured within the finished surfaces of the external walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting and any associated garage; and

(b) For the sole occupancy unit a class 2 building-
the area of all rooms within the sole occupancy unit measured within the finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting and any associated garage.

Sole-occupancy unit - means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes a dwelling.

	PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS
	Water Conservation		
P1	In a service area for a retail water service under the *Water Act 2000*, water saving shower roses must be installed in a new *Class 1* building and a *sole–occupancy unit* of a new *Class 2* building, and in existing *Class 1* buildings and in *sole-occupancy units* in existing *Class 2* buildings where bathrooms are renovated.	**A1**	In a service area for a retail water service under the *Water Act 2000*, shower roses in a new *Class 1* building and a *sole-occupancy unit* of a new *Class 2* building, and in renovated bathrooms in an existing *Class 1* building and a *sole-occupancy unit* of an existing *Class 2* building have: (a) An AAA rating when assessed against AS/NZS 6400:2004; or (b) A three star rating under the Water Efficiency Labelling scheme (WELS).
P2	In a service area for a retail water service under the *Water Act 2000*, the pressure level of water supplied to a new *Class 1* building does not exceed the levels necessary for the proper functioning and operation of a fixture or fitting.	**A2**	(a) In a service area for a retail water service under the *Water Act 2000*, the water supplied to a new *Class 1* building does not exceed pressure levels set out in AS/NZS 3500.1:2003; and (b) If mains water pressure exceeds or could exceed 500 kPa, a water pressure limiting device is installed to ensure that the maximum operating pressure at any outlet within the boundaries of the property does not exceed 500 kPa.
P3	The volume of water used in toilet cisterns in a new *Class 1* building and a *sole–occupancy unit* of a new *Class 2* building and in an existing *Class 1* building or a *sole-occupancy unit* of an existing *Class 2* building where toilets are replaced does not exceed the volume necessary for the proper functioning and operation of the toilet.	**A3**	In a new *Class 1* building and a *sole–occupancy unit* of a new *Class 2* building, and in an existing *Class 1* building or a *sole-occupancy unit* of an existing *Class 2* building where toilets are replaced, toilet cisterns have dual flush capability that does not exceed 6 litres on full flush and 3 litres on half flush.
	Energy Efficient Lighting		
P4	Acceptable levels of energy efficient lighting, of sufficient quality not to adversely impact on the operation or normal functioning of other electric equipment in the house, must be	**A4**	In a new *Class 1* building and the *sole-occupancy unit* of a new *Class 2* building, fluorescent lights or compact fluorescent lights (CFLs) are used in at least 40% of the total *floor area.*

	PERFORMANCE CRITERIA		ACCEPTABLE SOLUTIONS
	used in a new *Class 1* building and the *sole-occupancy unit* of a new *Class 2* building.		
	Hot Water Supply		
P5	A new *Class 1* building must use hot water systems that have a low greenhouse gas emissions impact.	**A5**	In a new *Class 1* building, a hot water supply is provided by: (a) A heat pump or a solar hot water system that is eligible to receive: (i) In a building with 3 or more bedrooms, at least 22 Renewable Energy Certificates; or (ii) In a building with 1 or 2 bedrooms, at least 14 Renewable Energy Certificates; or (b) A gas hot water system with a five star energy rating. Note: Renewable Energy Certificates are issued under the Commonwealth Government's Mandatory Renewable Energy Target.