
PART 25 – RAINWATER TANKS

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Purpose

To specify the standards for the installation of a rainwater tank for particular buildings in areas that, under the *Building Regulation 2006*, have been designated as rainwater tank areas.

Under the *Building Regulation 2006*, the local planning instrument designating the area must state whether the rainwater tank is to be used for:

- external use only, or
- external use and internal connection for water closet (WC) flushing and the cold water tap for laundry washing machines.

Commencement

This version of Part 25-

- (a) commences on 1 September 2006; and
- (b) replaces the version of Part 25 published on 1 March 2006.

Application

- (1) This part applies if-
 - (a) on, or after 1 September 2006, a building development application is made for the construction of a class 1 building: and
 - (b) has, under the *Building Regulation 2006*, been designated as a rainwater tank area.
- (2) This part does not apply to a building development application for alterations to an existing Class 1 building.

Referral Agency

There is no referral agency for this part, however, the local government must decide alternative solutions. (see the *Integrated Planning Regulation 1998*, Schedule 2, Table 1, Item 23)

Other Relevant Legislation

- *Plumbing and Drainage Act 2002*
- *Integrated Planning Act 1997*
- *Integrated Planning Regulation 1998*
- *Building Act 1975, s32*
- *Building Regulation 2006*
- *Health Regulation 1996*

- *Local government planning schemes*

Referenced Standards

AS/NZS 3500:2003- Plumbing and Drainage

AS/NZS4766(Int):2002- Polyethylene storage tanks for water and chemicals

AS1397:2001- Steel sheet and strip - Hot-dipped zinc-coated or aluminium/zinc-coated

ASTM A240/A240M-05- Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

AS3735:2001- Concrete structures retaining liquids

AS/NZS1170.1:2002- Structural design actions - Permanent, imposed and other actions

AS/NZS1170.2:2002- Structural design actions - Wind actions

Definitions

Rainwater tank – means a covered tank used to collect rainwater from a building roof. It may be made of galvanised steel, concrete, fibreglass, plastic, or other materials.

External use – means the use of collected rainwater for outdoor application, such as gardening, irrigation, ponds, filling swimming pools and outdoor cleaning.

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 m² 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*.

**PERFORMANCE
CRITERIA**
ACCEPTABLE SOLUTIONS
**Rainwater tank installation
requirement and capacity
and water quality protection
measures**

- | | | | |
|-----------|---|-----------|--|
| P1 | The building work must include the installation of a rainwater tank for the building of sufficient storage capacity to provide an acceptable contribution to meet water use demand having regard to: <ul style="list-style-type: none"> (a) whether the water is used for external, or internal and external use; (b) local rainfall pattern; (c) roof catchment area; and (d) area available to site the rainwater tank. | A1 | The rainwater tank has the following minimum storage capacity- <ul style="list-style-type: none"> (a) the minimum storage capacity specified by the local government in a planning scheme; or (b) Where the local government has not specified a minimum capacity in a planning scheme, a storage capacity of at least 3000 litres where used for external use only, or 5000 litres where used for external and internal use; or (c) The rainwater tank must be installed in such a way that it receives the rainfall from a roof catchment area of at least 50 square meters; or (d) Where rainwater tank water is required to be used internally, it is connected to all toilet cisterns and to washing machine cold taps. |
| P2 | A rainwater tank must have suitable measures to prevent contaminants from entering the rainwater tank having regard to the nature and level of contaminants within the locality. | A2 | <ul style="list-style-type: none"> (a) A screened downpipe rainhead, is installed on each downpipe. The screen mesh is to be 4 - 6mm and designed to shed leaves; and (b) A minimum of 15 litres of the first flush of roof catchment must be diverted/discarded before entering the rainwater tank. |
| P3 | A rainwater tank must have suitable measures to prevent mosquitos breeding in the tank and vermin entering the tank. | A3 | <ul style="list-style-type: none"> (a) A rainwater tank is provided with: <ul style="list-style-type: none"> i. mosquito-proof screens of brass, copper, aluminum or stainless steel gauze not coarser than 1 mm aperture mesh; or ii. flap valves at every opening of the rainwater tank; and |

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS
<p>P4 Where a rainwater tank is used for sanitary flushing and laundry use, a means of allowing alternate use of water from the rainwater tank or the reticulated water supply must be installed.</p>	<p>(b) if a rainwater tank is provided with a manhole, the manhole must have a diameter of no more than 40 cm; and (c) a vermin trap.</p>
<p>P5 Water from a rainwater tank must not contaminate the potable water within a reticulated water supply.</p>	<p>A4 An automatic or manual interchange device that allows alternate use of water from the rainwater tank or the reticulated water supply must be installed to ensure that there is a continual supply of water for sanitary flushing and laundry use.</p> <p>A5 A suitable backflow prevention device must be installed to protect the potable water within the reticulated water supply in accordance with AS/NZS 3500:2003 Plumbing and Drainage.</p>
System materials	
<p>P6 Materials used in a rainwater tank must be suitable for its intended use.</p>	<p>A6 (a) Polyethylene tanks shall be in accordance with AS/NZS4766(Int):2002 polyethylene storage tanks for water and chemicals. (b) Galvanised steel sheet shall comply with AS1397:2001 steel sheet and strip - hot-dipped zinc-coated or aluminium/zinc-coated, and have a minimum coating of 550 g/m². (c) Stainless steel shall comply with ASTM A240/A240M-05 standard specification for chromium and chromium-nickel stainless steel plate, sheet, and strip for pressure vessels and for general applications. (d) Concrete tanks shall comply with AS3735:2001 concrete structures containing liquids.</p>
Rainwater tank stands	
<p>P7 Where a rainwater tank is supported on a stand or other structure, the supporting structure must be capable of</p>	<p>A7 A rainwater tank stand or other supporting structure must comply with AS/NZS1170.1:2002 permanent, imposed and other actions and</p>

**PERFORMANCE
CRITERIA**

withstanding any loads likely
to be imposed on it.

ACCEPTABLE SOLUTIONS

AS/NZS1170.2:2002 wind actions.