# 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

### 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:
(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-
(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** (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** (a) A rainwater tank is provided with:
   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

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<td><strong>P4</strong></td>
<td>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.</td>
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<td><strong>P5</strong></td>
<td>Water from a rainwater tank must not contaminate the potable water within a reticulated water supply.</td>
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### ACCEPTABLE SOLUTIONS

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<td><strong>A4</strong></td>
<td>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.</td>
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<td><strong>A5</strong></td>
<td>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.</td>
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### System materials

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<td><strong>P6</strong></td>
<td>Materials used in a rainwater tank must be suitable for its intended use.</td>
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| **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. |

### Rainwater tank stands

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<td><strong>P7</strong></td>
<td>Where a rainwater tank is supported on a stand or other structure, the supporting structure must be capable of</td>
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<td><strong>A7</strong></td>
<td>A rainwater tank stand or other supporting structure must comply with AS/NZS1170.1:2002 permanent, imposed and other actions and</td>
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<td>PERFORMANCE CRITERIA</td>
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<td>withstanding any loads likely to be imposed on it.</td>
<td>AS/NZS1170.2:2002 wind actions.</td>
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