



RAINWATER TANKS IN A WATER SERVICE AREA INSTALLATION GUIDELINES

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This Fact Sheet is limited to the installation of rainwater tanks at a domestic premise that is located in a water service area (reticulated system), where the stored water is a combination of roof water and town supply water. Typically, this stored water is used to supply external hose taps and some internal plumbing fixtures. In a conventional system town water is introduced into the top of the water tank via a mechanical valve and ball float that operates according to the water level in the tank. There are variations to this filling method, some of which are integrated into the tank design/manufacture or are a specifically manufactured item. Please contact Council to verify if such products are approved for installation.

IMPORTANT: This fact sheet should be read in conjunction with Council's Policy and Guidelines relating to the same and relevant sections of AS/NZS 3500.1.2.-1998 (Acceptable Solutions)

Components of Rainwater Tank Supply System

Essentially, the components can be described as follows:

- * Roof – *catchment area & alternate water supply for storage,*
- * Gutters, downpipes and s/water drainage – *transport system,*
- * Rainwater tank – *storage facility,*
- * Overflow pipe – *relief point,*
- * Town water supply – *primary water supply for storage,*
- * Rainwater tank supply – *Alternate water supply for domestic use.*

Responsibilities

Building Certifier – Design and installation aspects relating to eaves gutters, downpipes, stormwater drainage, overflow pipe and rainwater tank. This includes, however is not limited to the tank capacity, type of eaves gutter, placement and size of the downpipes and compliance with relevant Development Conditions when applicable,

Local Authority (Plumbing Assessment & Approvals) – Design and installation aspects relating to town water supply from the meter outlet to the device that fills the rainwater tank and then the domestic supply from the rainwater tank to the respective plumbing fixtures. This includes, however is not limited to pipe work and valves, pumps and all associated material,

Builder and/or Plumber – Installation of system and components is undertaken in accordance with respective approvals,

Homeowner – Maintenance of system and components.

Risks

Inappropriate installation and adequately maintained systems pose a genuine health risk to town water supply that can be rated as; *Medium hazard* – Any condition, device or practice which in connection with the potable water supply system has the potential to endanger health.

Installation Criteria

In consideration of the potential risks and Council's Policy, the following specific installation methodology applies:

- * A physical air gap of 100mm (min) is required between the device that fills the rainwater tank and the highest possible water level in the tank. (This is not the invert of the overflow pipe – it is the actual spill level in the tank). Please contact Council for approval should an alternate method be proposed.
- * A physical disconnection is required between the rainwater tank overflow pipe and the stormwater drainage system where there is a possibility of backflow from the stormwater drainage into the tank. This is very likely with in ground rainwater tanks and if a physical disconnection can not be achieved a reflux valve or similar is required.
- * The water supply from the rainwater tank should be clearly marked at intervals not exceeding 1m with the contrasted coloured wording "RAINWATER". Water outlets shall be identified as "RAINWATER" with a label or a rainwater tap identified with a green coloured indicator with the letters "RW".

IMPORTANT: Implementation of the above will reduce the risk to town water supplies and can then be rated a Low hazard – Any condition, device or practice which in connection with the portable water supply would constitute a nuisance but not enough to endanger health or cause injury.

Other design and Installation Recommendations

Other recommendations relating to design and installation include, however are not limited to:

- Provision of leaf guards to eaves gutters
- Provision of rain-head and leaf screen to downpipes
- Provision of first flush diversions system to stormwater inlet pipe of tank
- Provision of screens to all tanks inlets and outlets
- Provision of adequate ventilation for in-ground tanks

Rainwater Tank Supply For Plumbing Fixtures

The use of water supplied from a rainwater tank for drinking or other potable uses is not recommended.

The supply to external hose taps, toilets cisterns and washing machine cold water tap is considered as an acceptable installation practice.

TYPICAL ABOVE GROUND INSTALLATION

Figure 1

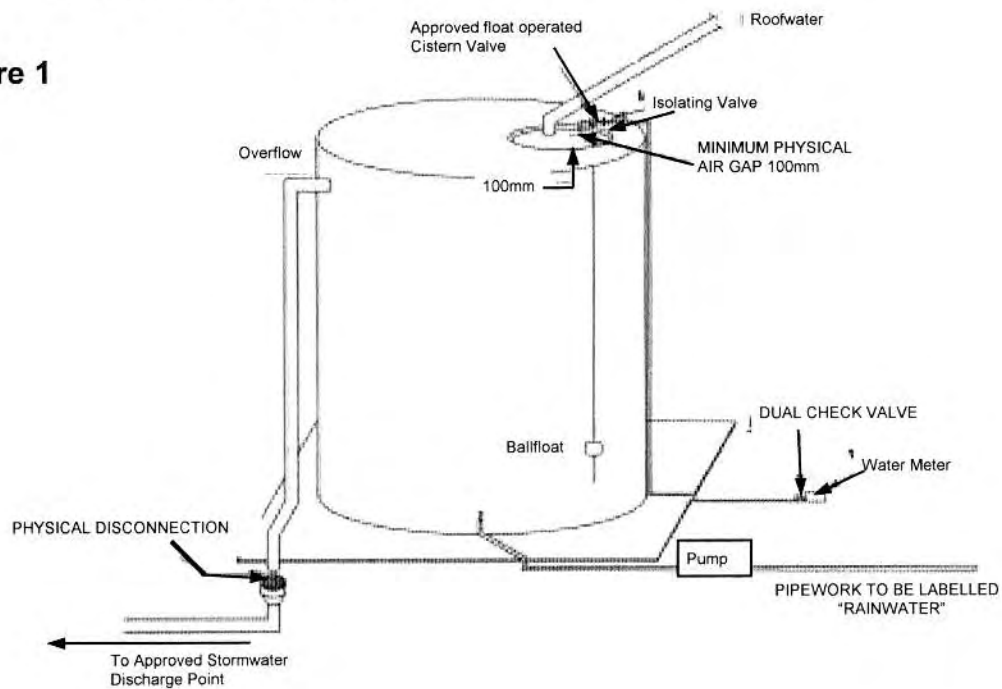
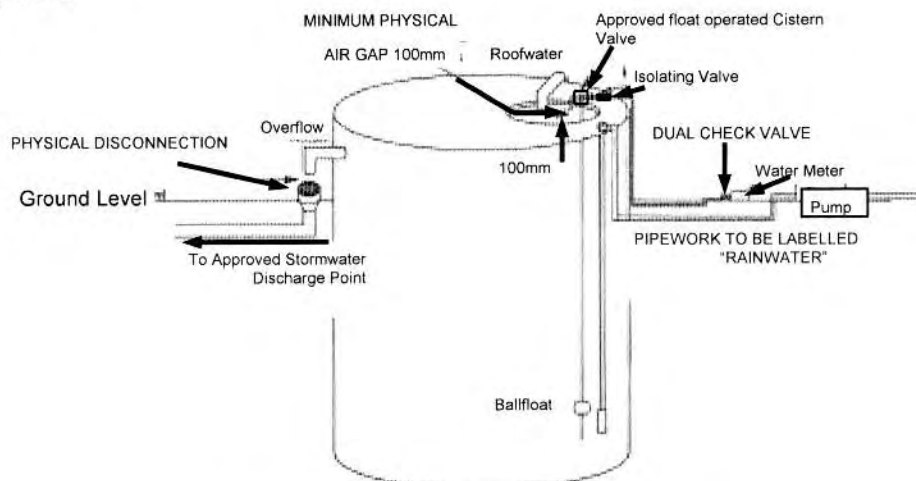


Figure 2



TYPICAL INGROUND INSTALLATION