

# Rainwater Tanks & Stormwater

*What you need to know before installing a tank or managing stormwater on your property*

## THE SHORT VERSION

A rainwater tank with a capacity greater than 5,000 litres requires a Building Permit in WA. The tank, its foundation/supports, location, overflow and connection to the property's stormwater system all need to be considered together. Even when a Building Permit is not required, planning, plumbing and stormwater requirements may still apply.

## YOUR PROJECT IN 5 SIMPLE STEPS

| 1                                                                                                                                        | 2                                                                                                          | 3                                                                                      | 4                                                                                                 | 5                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Check the tank</b><br>Confirm capacity, location, height, support and whether a Building Permit and/or Planning Approval is required. | <b>Check the site</b><br>Consider boundaries, buildings, septic systems, sewer, easements, slope and soil. | <b>Plan overflow</b><br>Work out where tank overflow and all other stormwater will go. | <b>Get approval</b><br>Obtain Building and Planning approvals where required before installation. | <b>Install &amp; finish</b><br>Use appropriately licensed people and complete required notices. |

## Do I need a Building Permit?

| 5,000 L OR LESS                                                                                                                                      | MORE THAN 5,000 L                                                                         | UNUSUAL / COMPLEX SITE                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Generally no Building Permit</b><br>Schedule 4 of the Building Regulations 2012 exempts a rainwater tank with a capacity of 5,000 litres or less. | <b>Building Permit required</b><br>This applies to tanks installed above or below ground. | <b>Check first</b><br>Planning, structural, plumbing, bushfire or site-specific requirements may still apply. |

## The tank is only part of the job

- A large tank can be a significant structural load. The tank, stand, footings and supporting ground must be suitable for the full tank - not just when it is empty.
- An elevated tank or a tank on a slope may require additional structural engineering and site-specific design.
- Tank overflow is stormwater. It must be incorporated into the property's overall stormwater management system.
- A tank can alter existing drainage patterns. Connecting a downpipe to the tank does not automatically solve the site's stormwater requirements.
- Planning approval may also be required. If planning approval applies, the tank must meet the required setbacks from property boundaries - the same setback requirements that apply to other structures on the property.

## IMPORTANT

The Shire of Denmark requires a minimum clearance of 1.8 m from leach drains and 1.2 m from septic tanks. Show these clearances on the site plan and confirm them for your site.

# Stormwater management

*Keep water on your property — including when the tank overflows*

## Your responsibility as the property owner

The Shire requires stormwater from buildings, hardstand and other impervious areas to be managed and detained on the property. A rainwater tank may form part of the stormwater system, but it does not remove the need to manage overflow and runoff during heavy rain.

## Shire of Denmark stormwater requirements

### CLASS A LOTS - SANDY / FREE DRAINING

- Attenuate and infiltrate stormwater into the surrounding sand.
- Design allowance: 1 m<sup>3</sup> per 100 m<sup>2</sup> of impervious area.
- Perforated soak wells and/or rain gardens may be used.

### CLASS S to P LOTS - CLAY / REACTIVE GROUND

- Provide stormwater storage.
- Design allowance: 1 m<sup>3</sup> per 65 m<sup>2</sup> of impervious area.
- Sealed soak wells, rainwater tanks and/or rain gardens may be used.
- Stormwater discharge to the Shire road drainage network or stormwater easements may be permitted where available and suitable.

## Commercial & industrial sites

### ADDITIONAL REQUIREMENTS

Commercial and industrial sites are required by the Shire to provide stormwater storage at 1 m<sup>3</sup> per 65 m<sup>2</sup> of impervious area. Discharge to the Shire road drainage network or stormwater easements may be permitted where suitable. Contact Development Services before design to confirm site-specific conditions or restrictions.

## Think about the overflow

- Connect roof downpipes to the tank where the tank is being used as part of the stormwater system.
- Provide a defined overflow route that can safely handle heavy rainfall.
- Do not direct overflow towards buildings, retaining walls, septic systems, over boundaries or onto adjoining properties.
- Consider erosion, flooding, waterlogging and over land flow - particularly on sloping sites.
- Where an overland flow route is identified, show it on your site plan.

### DURING EXTREME RAIN

Tank and stormwater storage capacities can be exceeded. Consider what happens when every tank, soakwell and other storage component is full. A well designed overflow route can prevent water being directed into buildings or neighbouring land.

## Stormwater is not just rainwater from the tank

The site stormwater system should consider the combined effect of roof areas, paved areas, driveways, decks and other impervious surfaces. Installing a large tank does not automatically mean the remainder of the property has adequate stormwater management.

# Application & installation checklist

*Tick these off before submitting your Building Permit application*

## Building Permit application - tanks over 5,000 litres

- ☐ Completed BA2 Uncertified Building Permit application, signed by the required owners.
- ☐ Accurate estimated value of the work.
- ☐ Site plan showing the tank location, property boundaries, existing buildings, septic/sewer systems, easements and relevant setbacks.
- ☐ Tank dimensions, capacity, materials, height and installation details.
- ☐ Foundation, footing, stand and support details.
- ☐ Structural engineering/certification for the tank and supporting structure where required - particularly elevated tanks, tanks on slopes or non-standard installations.
- ☐ Details of proposed earthworks, retaining walls or other site works associated with the tank.
- ☐ Stormwater management information showing where roof runoff, tank overflow and other site runoff will be contained or discharged.
- ☐ Planning approval or confirmation that planning approval is not required, where applicable.

## Plumbing & rainwater connections

- Water supply plumbing from a rainwater tank to a building must be carried out by an appropriately licensed plumber or a person otherwise authorised under the WA plumbing licensing system.
- If the tank is connected to scheme water, approved backflow protection is required to protect the public drinking water supply.
- Rainwater services must be installed to the applicable Plumbing Code of Australia and referenced plumbing standards.
- Do not assume the company supplying the tank is authorised to perform all plumbing work associated with the installation.

### A CHANGE SINCE 2025

WA expanded the scope of regulated rainwater water-supply plumbing work from 10 February 2025. Some existing rainwater system installers may hold a restricted plumbing permit for work from a rainwater storage system to a building. That permit does not authorise plumbing work inside the building.

## If you intend to drink the rainwater

Rainwater can be suitable for drinking when collected and stored correctly, but it can be contaminated by animals, debris, smoke, chemicals or unsuitable roof materials. Keep roof catchments and gutters clean, screen tank inlets and overflows, keep the tank sealed and use products suitable for drinking water. If the tank is connected to scheme water, backflow protection is required.

- Avoid collecting water from roof areas affected by unsuitable coatings, treated timber, lead-based products or certain roof-mounted appliance discharge points.
- Consider a first-flush diversion device and leaf/debris screening.
- Keep the tank covered and protected from mosquitoes, insects, vermin and sunlight.
- After bushfire or flood contamination, do not use tank water for drinking, food preparation, bathing or other sensitive uses until it has been assessed, tested and made safe.

## Useful links

- Building and Energy - [Plumbing Licensing](#)
- Building and Energy - [Rainwater System Installer Requirements](#)
- HealthyWA - [Water Tanks On Your Property](#)

**GUIDE ONLY** This information sheet is a plain-English guide based on and current WA requirements. It does not replace the Building Regulations 2012, applicable planning requirements, the NCC, plumbing legislation or site-specific design. Additional information may be requested during assessment.