



Installation of Potable Water Storage Tanks on Private Property (For Properties in Unincorporated Stanislaus County Only)

Installing a potable water storage tank on private property can be an effective solution to supplement water needs. However, certain permitting and safety requirements must be considered.

Key Installation Guidelines

1. Tank Size and Placement

- **Tanks under 5,000 gallons are preferred**, as tanks exceeding this size require a formal building permit process, including engineered plans, structural calculations, and a detailed plan review.
- Submit tank specifications—**make, model, and volume**—to [Stanislaus County Building Permit Services](#) for review online or in person.
- Tanks must be installed on a **stable, level base**, and **must be located at least five feet from all property lines**.
- Tanks installed on slopes may require **shoring or anchoring** to prevent tipping and ensure safety.
- **Homeowners Associations (HOAs)**: If applicable, verify whether your HOA imposes **restrictions or design standards** regarding the tank's placement or appearance.

2. Pumps and Electrical

- Use of a **“plug-and-play” 120V pump** that connects to a standard outlet is recommended.
- Any **modification to a home's electrical system**—such as hard-wiring or installing a new circuit will need to be included in the building permit with the tank.

3. Plumbing and Backflow Prevention

- If connecting the tank to the **potable water supply**, an **approved ANSI/ASSE Standard 1024 “potable water double check valve backflow prevention device”** is required. Approval may be issued by the appropriate Water District and/or the Building Division.
- **Plumbing modifications** will need to be included in the building permit with the tank. Clearly describe the **method of connection** and type of **backflow device** in the permit application.



4. Tank Construction Standards

- Tanks must be **NSF/ANSI 61 certified**, in accordance with [California Title 22, Section 64591](#).
 - To **minimize algae growth**, tanks must be opaque. Acceptable colors include **black, green, brown, blue, or white** (transparent/clear tanks are not permitted).
 - **Darker colors** are recommended for outdoor installations due to their **light-blocking properties**.
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Permit Process Overview

1. Application

- The applicant (homeowner or contractor) can apply [online](#) or **in person** at the Stanislaus County Building Division: 1010 10th Street, Suite 3400 (third floor) in Modesto.
 - For an online submittal, [register for an account](#) or [log in](#). Once logged in, visit the [County Building tab](#) to “Create Application” for a “Residential and Commercial Building Permit.”
- The application submittal should include:
 - Tank size and manufacturer specifications
 - Electrical configuration (e.g., plug-in vs. hard-wired)
 - Plumbing connection details, including the proposed backflow prevention device

2. Review

- The Stanislaus County Building Division will route relevant information to the Department of Environmental Resources (DER) for review.

3. Approval

- Once approved, a **permit will be issued**, and installation can begin.

4. Final Inspection

- After installation is complete, the applicant must **request a final inspection** by the Building Division.

If you have questions about any of these requirements, please contact:
[Stanislaus County Building Division: \(209\) 525-6557 | \[building@stancounty.com\]\(mailto:building@stancounty.com\)](#)