



## 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 10<sup>th</sup> 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 | \[building@stancounty.com\]\(mailto:building@stancounty.com\)](#)