



RESIDENTIAL GRAY WATER SYSTEMS

Gray water systems have been approved for use in California. By diverting waste water from certain plumbing fixtures to lawns and planted areas, water and sewage usage can be decreased.

A plumbing permit is required to install a gray water system. A plan from a licensed plumber or engineer must accompany the permit application. All work must be inspected by the Building & Safety Department.

The installation of gray water systems is regulated by Appendix G-A of the California Plumbing Code. Some of the regulations are listed below.

If you have any questions or require additional information, please call the Beverly Hills Building & Safety Department at (310)285-1141.

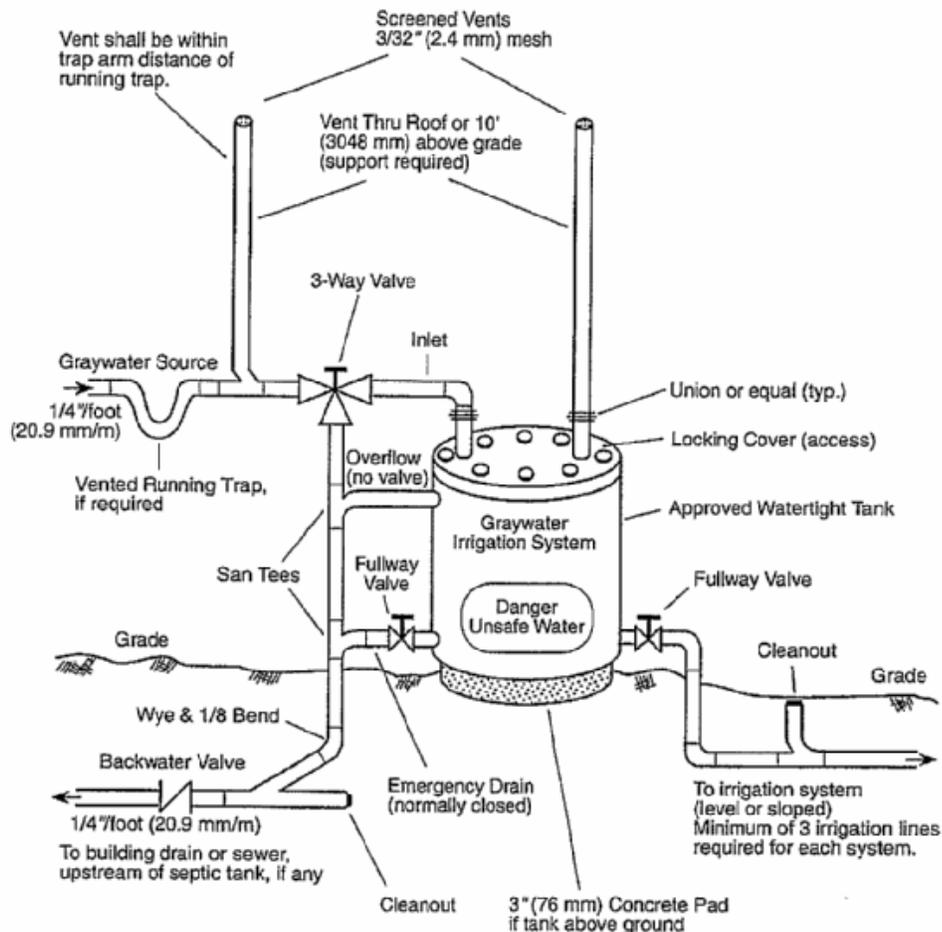
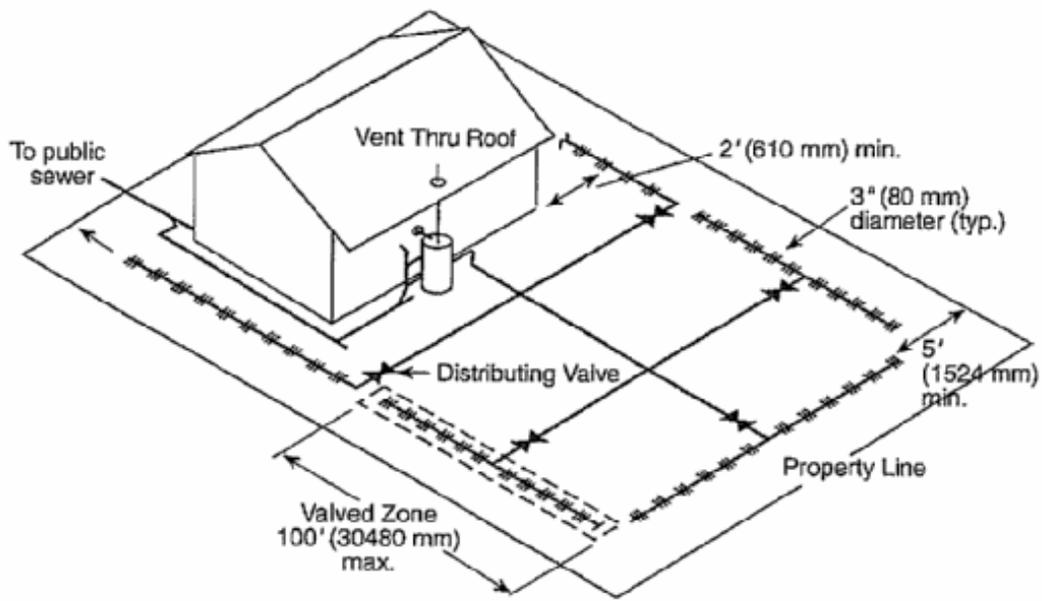


Figure G-1
Graywater System Tank – Gravity



Note: Each valved zone shall have a minimum effective absorption/irrigation area in square feet predicated on the estimated graywater discharge in gallons per day and on the type of soil found in the area. The area of the field shall be equal to the aggregate length of perforated pipe sections within the valved zone times the width of the proposed field.

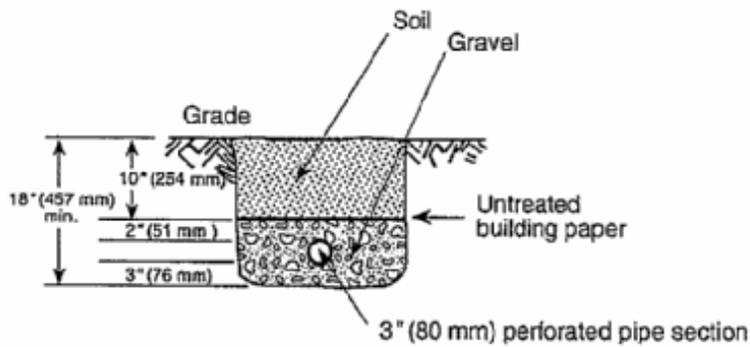


Figure G-5
Graywater System Typical Irrigation Layout

GRAY WATER SYSTEM FACT SHEET

- A gray water system drains relatively clean plumbing wastewater to a holding tank and then conveys it to a subsurface irrigation field (leach field) where the water is absorbed into the ground. See figures G- 1 (gray water system) and G-5 (subsurface irrigation field (leach field)).
- Only bathtubs, showers, lavatories, clothes washers and laundry tubs can drain through a gray water system.
- No toilets, kitchen sinks or dishwashers can be connected.
- Gray water can only be dispersed through a subsurface irrigation field. Gray water can not be allowed to surface.
- A licensed Soils Engineer must determine the property's soil type, its water absorption characteristics and the ground water level.
- The Soils Engineer can use test holes and soil percolation tests to determine the soil characteristics.
- A gray water system can not be utilized in areas not deemed suitable by the Soils Engineer including areas with high ground water and hillside areas susceptible to landslides.
- The system is sized using a design flow rate of 15 to 40 gallons per day per occupant depending on which plumbing fixtures are connected.
- The subsurface irrigation field (leach field) consists of perforated plastic pipes embedded in gravel covered with at least 9 inches of soil. The total depth of the trench is 18 inches and the width varies between 6 and 18 inches. The trenches are spaced horizontally a minimum of 4 ft.
- The leach field must be a minimum 5 ft. above groundwater level, 8 ft. from buildings, 5 ft. from property lines and 5 ft. from water pipes.
- Holding (surge) tanks can be gravity or pumped, above or below ground.
- The tank must have an overflow and bypass to the sewer and must vent through the roof or at least 10 ft. above grade.
- The tank must be a minimum 5 ft from buildings, property lines and water pipes.