

PRIVATE SEWAGE DISPOSAL SYSTEMS

Appendix G

- (B) In order to determine the absorption qualities of seepage pits and of questionable soils other than those listed in Table K-6, the proposed site shall be subjected to percolation tests acceptable to the Authority Having Jurisdiction.
- (C) When a percolation test is required, no private disposal system shall be permitted to serve a building if that test shows the absorption capacity of the soil is less than $34\text{L}/\text{m}^2$ ($0.83\text{ gal.}/\text{ft.}^2$) or more than $209\text{L}/\text{m}^2$ ($5.12\text{ gal.}/\text{ft.}^2$) of leaching area per 24 hours. If the percolation test shows an absorption rate exceeding $209\text{L}/\text{m}^2$ ($5.12\text{ gal.}/\text{ft.}^2$) per 24 hours, a private disposal system shall be permitted if the site does not overlie groundwaters protected for drinking water supplies, a thickness of not less than 60cm (2 ft.) of the native soil below the entire proposed system is replaced by loamy sand, and the system design is based on percolation tests made in the loamy sand.

G 5.0 Septic Tank Construction.

- (A) Plans for all septic tanks shall be submitted to the Authority Having Jurisdiction for approval. Such plans shall show all dimensions, reinforcing, structural calculations, and such other pertinent data as required.
 - (B) Septic tank design shall be such as to produce a clarified effluent consistent with accepted standards and shall provide adequate space for sludge and scum accumulations.
 - (C) Septic tanks shall be constructed of solid durable materials not subject to excessive corrosion or decay and shall be water-tight.
 - (D) Septic tanks shall have not less than two compartments. The inlet compartment of any septic tank shall be not less than $2/3$ of the total capacity of the tank, nor less than a 2m^3 (500 gal.) liquid capacity, and shall be not less than 90cm (3 ft.) in width and 15cm (6 in.) in length. Liquid depth shall be not less than 60cm (2 ft.) and 15cm (6 in.) nor more than 1.8m (6 ft.). The secondary compartment of any septic tank shall have a capacity of not less than 1m^3 (250 gal.) and a capacity exceeding $1/3$ of the total capacity of such tank. In septic tanks exceeding a 5.7m^3 (1,500 gal.) capacity, the secondary compartment shall be not less than 1.5m (5 ft.) in length.
 - (E) Access to each septic tank shall be provided by not less than two manholes not less than 50cm (20 in.) in dimension or by an equivalent removable cover slab. One access manhole shall be located over the inlet and one access manhole shall be located over the outlet. Wherever a first compartment exceeds 3.7m (12 ft.) in length, an additional manhole shall be provided over the baffle wall.
 - (F) The inlet and outlet pipe openings shall not be larger in size than the connecting sewer pipe. The vertical leg of round inlet and outlet fittings shall be not less in size than the connecting sewer pipe nor less than 100mm (4 in.). A baffle-type fitting shall have the equivalent cross-sectional area of the connecting sewer pipe and not less than a 100mm (4 in.) horizontal dimension when measured at the inlet and outlet pipe inverts.
 - (G) The inlet and outlet pipe or baffle shall extend 100 mm (4 in.) above and not less than 30cm (12 in.) below the water surface. The invert of the inlet pipe shall be at a level not less than 50mm (2 in.) above the invert of the outlet pipe.
 - (H) Inlet and outlet pipe fittings or baffles and compartment partitions shall have a free vent area equal to the required cross-sectional area of the house sewer or private sewer discharging therein to provide free ventilation above the water surface from the disposal field or seepage pit through the septic tank, house sewer, and stack to the outer air.
 - (I) The sidewalls shall extend not less than 23cm (9 in.) above the liquid depth. The cover of the septic tank shall be not less than 50mm (2 in.) above the back vent openings.
 - (J) Partitions or baffles between compartments shall be of solid, durable material and shall extend not less than 100mm (4 in.) above the liquid level. An inverted fitting equivalent in size to the tank inlet, but in no case less than 100mm (4 in.) in size, shall be installed in the inlet compartment side of the baffle with the bottom of the fitting placed midway in the depth of the liquid. Wooden baffles are prohibited.
- (G) Structural Design.**
- (1) General. Each such tank shall be structurally designed to withstand all anticipated earth or other loads. Septic tank covers shall be capable of supporting an earth load of not less than $2500\text{kg}/\text{m}^2$ (500 lbs./ft.²) when the maximum coverage does not exceed 90cm (3 ft.).
 - (2) Flood Loads. In flood hazard areas, tanks shall be anchored to counter buoyant forces during conditions of the design flood. The vent termination and service manhole of the tank shall be not less than 60cm (2 ft.) above the design flood elevation or fitted with covers designed to prevent the inflow of floodwater or the outflow of the contents of the tanks during conditions of the design flood.
- (L) Septic tanks installed under concrete or blacktop paving shall have the required manholes accessi-