

Gravity Grease Interceptors

Gravity grease interceptors (GGI) are larger, volume-based grease-control devices that are typically installed outside and underground. GGIs can range in volume from 300 to 15,000 gallons. The flow of water through the GGI is controlled by the baffle tubes; therefore, it is critical that the baffle tubes are installed properly and kept in good condition for the GGI to function properly. A conceptual view or a typical GGI configuration is illustrated in Figure 3-1, *Typical Conceptual Gravity Grease Interceptor Design – Side View*, and in Appendix H, Grease Interceptor Standard Plan.

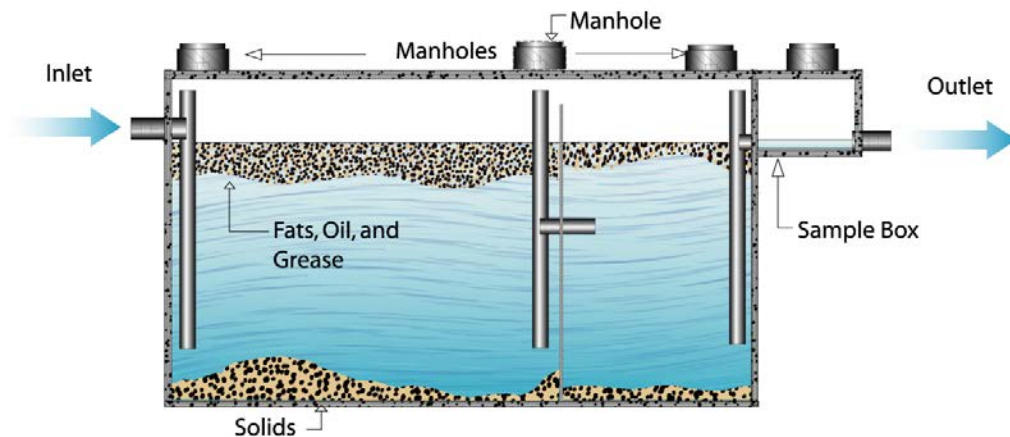


Figure 3-1: Typical Conceptual Gravity Grease Interceptor Design – Side View

The proper plumbing and placement of baffles will provide the non-turbulent conditions. The proper dimensions and volume of the interceptor will provide sufficient retention time to allow the particles to fully rise or settle before they pass-through to the outlet of the interceptor. Over time, the grease and solids layers thicken and will eventually fill the first chamber if they are not removed. If the grease and solids are not removed regularly, the interceptor no longer functions for its intended purpose, and FOG will be carried into the sewer system. Emulsified or partially emulsified particles will rise or settle slower, which is why soaps and other emulsifiers may cause some grease or solids to pass-through an interceptor and collect downstream of the interceptor.

Since an interceptor is not self-cleaning or free of maintenance, it is critical that an interceptor be suitably designed with manholes in the right locations to facilitate maintenance and that it be cleaned and pumped at a frequency that maintains its design removal efficiency.

Sizing Reviewed and Approved by City's Building Division

The City's Building Division will review and approve the sizing and installation of GGIs. This is accomplished by requirement of the permittee, by the appropriate Building Department, for the City's approval prior to issuance of the building permit.

The Building Division will base the design and sizing of the grease interceptors on the current version of California Plumbing Code. Chapter 10 of the California Plumbing Code sizes GGIs based

on the number of drainage fixture units within the FSE connected to the grease waste line. The FOG Control Program Manager will also consider the potential for large grease interceptors to become septic (which may create nuisance odors and corrosive conditions) due to excessively long retention times. Thus, the Code will be utilized with the following general considerations:

- 1) If the California Plumbing Code sizing calculation exceeds 1,500 gallons, the FOG Control Program Manager will utilize his/her best judgment based on other factors at the FSE (e.g., cooking equipment, menu, frequency of use of the drainage fixture units) to determine the final size of the interceptor.
- 2) The floor of the interceptor should not be too deep to allow for proper cleaning and/or the interceptor should not be larger than 3,000 gallons for most installations.
- 3) An FSE calculation of 375 to 750 gallons should require an interceptor of 750 gallons.