

Grease Interceptor Sizing, Design & Installation Requirements

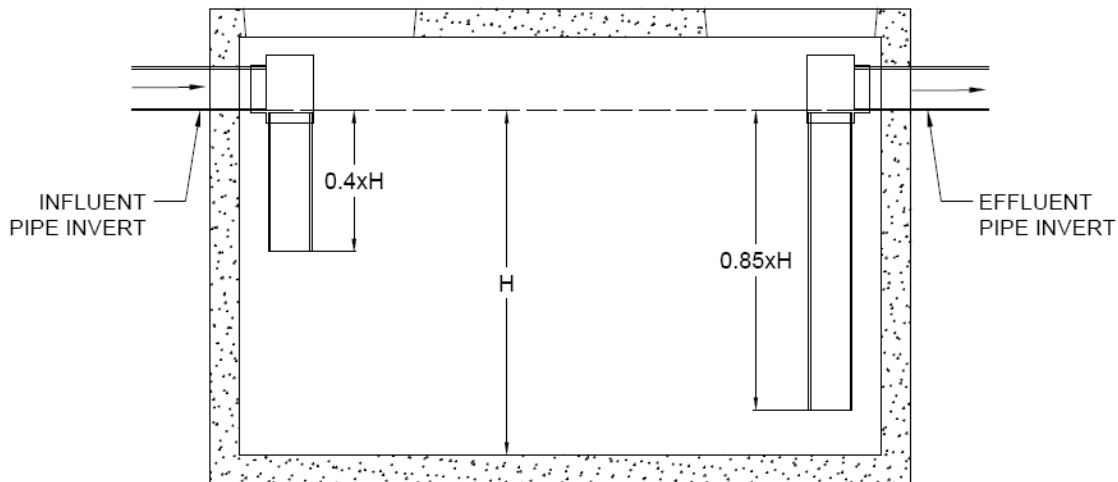
INSTALLATION:

Marion Utilities requires the installation of a grease interceptor at facilities discharging fats, oil, and grease generated at food service establishments.

- Each interceptor should be installed and connected so that, at all times, it is easily accessible for inspection, cleaning and maintenance.
- External interceptors should be constructed in such a manner so as to exclude the entrance of surface water and storm water.
- The interceptor should be situated on the premises of the food service establishment.
- All grease-bearing drains should discharge to the grease interceptor. These may include mop sinks, woks, wash sinks, prep sinks, utility sinks, pre-rinse sinks, can washes, dishwashers, and floor drains in food preparation areas such as those near a fryer or tilt/steam kettle.
- Toilets, urinals, and other similar fixtures should not drain to the interceptor.
- All applicable state and local plumbing and building codes should be followed during installation of the interceptor.

DESIGN:

Marion Utilities recommends using the design recommendations presented in the Water Environment Research Foundation (WERF), FOG Interceptor Design and Operation Guidance Manual, 2008 (Document No. 03-CTS-16TB). Other design options may be submitted to the utility for consideration and approval. The drawing below depicts an approved WERF recommended interceptor design. H is the depth of the interceptor contents.



Modifications may be required for an approved interceptor if it fails to produce a discharge that complies with Marion's Sewer Use Ordinance.

Grease Interceptor Maintenance Requirements (cont.)

SIZING:

Marion Utilities recommends using the WERF sizing recommendations which are based on the flow rate into the interceptor and the desired grease and solids storage volumes. The following information is needed to calculate the interceptor size:

- (A) How many persons are or will be served in 1 hour during peak time? _____
- (B) How many hours are or will the facility be open each day? _____
- (C) What is the maximum flow rate to the interceptor using the table below? _____

Fixture or Drain Connected to Interceptor	Fixture or Drain Flow Rate in gpm	Number of Fixture or Drain at Facility	Flow Rate X Number of Fixture or Drain
Sink with 1.5 inch drain to wash pots, pans and other kitchen utensils, often 3 compartments.	15		
Sink with 2 inch drain to wash pots, pans and other kitchen utensils, often 3 compartments.	30		
Sink with 2.5 inch drain to wash pots, pans and other kitchen utensils, often 3 compartments.	60		
Sink used for preparation of meats, vegetables, and seafood.	2.5		
Sink for rinsing of ware prior to washing.	2.5		
Automatic dishwasher or clothes washer.	5		
Cooking equipment with 1.5 inch drains, such as tilt skillets, brazing pans, rotisserie ovens, and woks.	15		
Cooking equipment with 2 inch drains, such as tilt skillets, brazing pans, rotisserie ovens, and woks.	30		
Cooking equipment with 2.5 inch drains, such as tilt skillets, brazing pans, rotisserie ovens, and woks.	60		
Equipment cleaning fixtures, such as can washes, mop sinks, automated hood cleaning systems, and washing stations.	5		
Waste food grinder or garbage disposal.	2.5		
Floor drains in food preparation and serving areas.	5		
(C) Sum of all Fixture or Drain Flow Rates = Maximum Flow Rate			

Using the above information, the recommended grease interceptor size in gallons may be calculated using the values for (A), (B) and (C) above and the following equation.

Size in gallons =

$$\begin{aligned}
 & [10 \times \text{maximum flow rate (C)}] \\
 & + [0.04 \times \text{persons served (A)} \times \text{hours open (B)}] \\
 & + [0.9 \times \text{hours open (B)} \times \text{maximum flow rate (C)}]
 \end{aligned}$$

Calculated Interceptor Size = _____ Next Standard Size Interceptor = _____

