

INDOOR GREASE TRAP/ INTERCEPTOR SIZING GUIDE

Depending on your specific grease capturing needs, an indoor grease trap/interceptor may be an effective measure for preventing the discharge of fats, oils or grease into the sanitary sewer system. Manufactured interceptors come in varying sizes, usually based on a flow rate of gallons per minute, or GPM. We recommend consulting with a licensed plumber when determining the size of your interceptor. But for basic guidance, the following steps could be useful in determining the appropriate size of your new indoor grease trap/interceptor:

Step 1:

Determine the cubic size of your sink(s) by multiplying its length, width, and depth together (L x W x D).

Step 2:

Convert that number into gallons using the following conversion: 1 gallon = 231 cubic feet.

Step 3:

Estimate the capacity of the sink(s) measured in Step 1. Usually, 75% of the sink(s) will be filled with water; the remaining 25% will be dishes, utensils, etc. Multiply that factor as a percentage (e.g. 75% = 0.75, 25% = 0.25, etc.) by the number you calculated in Step 2. This will also serve as your flow rate.

Step 4:

Select a trap/interceptor that is the next size higher than your calculated flow rate. Example: your calculated flow rate is 78 GPM. Available interceptors are sized for 70 and 80 GPM. The most appropriate choice is the latter, an 80 GPM device.

Additional sizing guidelines can be found in the most recent addition of the California Plumbing Code. A licensed plumber will be familiar with its provisions and can offer solutions unique to your needs.

This guide and other helpful information can be found on the District's website: www.opud.org.

Best Management Practices	BENEFITS
Post "No Grease" signs above sinks and on the front of dishwashers.	Reminders help minimize grease discharge to the sewer or grease removal device.
Check grease Interceptor solids depth routinely. The combined thickness of the floating grease and the bottom solids should not be more than 25% of the total Interceptor depth.	This will keep grease Interceptor working at peak performance.
Collect and recycle waste cooking oil.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the system.
"Dry wipe" pots, pans, and kitchen equipment before cleaning.	This will reduce cleaning frequency and maintenance costs for grease removal devices and reduce the amount of grease entering the drain.
Maintain a routine grease trap cleaning schedule.	This reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.
Use absorbent paper under fryer baskets.	The amount of grease entering the drain is reduced, which protects the sewer system from grease blockages and overflows.
Use absorbents, such as paper towels and cat litter, to pick up oil and grease spills before mopping.	Reduces the amount of grease entering the drain and protects sewers from grease blockages and overflows.

OUTDOOR GREASE INTERCEPTOR SIZING GUIDE

Outdoor, in-ground or above-ground grease interceptors are ideal for restaurants and other food service facilities that produce large amounts of fats, oil, and grease during food preparation. The District allows for the use of two methods when sizing an outdoor interceptor. The first is based on criteria defined in the California Plumbing Code. A licensed plumber can provide excellent interceptor solutions to meet your needs based on this method. The second is the application of the Manning Formula, which is described here in greater detail:

The Manning Formula:

Interceptor Size (in gallons) = Flow rate (GPM)/sink or fixture x sum of fixture Ratings + the Discharge rate from any mechanical washers (i.e. dishwashers, glass washers, laundry machines, etc.) x a 24 minute retention Time.

Flow Rates
0.5" pipe = 0.8 GPM/fixture
1.0" = 5.0 GPM/fixture
1.5" = 15 GPM/fixture
2.0" = 33 GPM/fixture
2.5" = 59 GPM/fixture
3.0" = 93 GPM/fixture

Fixture Ratings
2,3, or 4 compartment sink = 1.0
1 or 2 compartment meal prep sink = 0.75
Pre-rinse sink = 0.5
1 or 2 compartment vegetable prep sink = 0.25
Can wash = 0.25
Mop sink = 0.25
Floor drain = 0.00

Using the charts above, you can calculate the size of the interceptor you need. Just plug them into the Manning Formula:

Interceptor Size= [(Flow Rate) x (Fixture Ratings)] + Discharge Rate] x 24 minute retention time

Direct flow from dishwashers, laundry washers, glass washers, etc. is the discharge rate as determined by the manufacturer. This information should be available in your user's manual or by contacting the manufacturer directly.

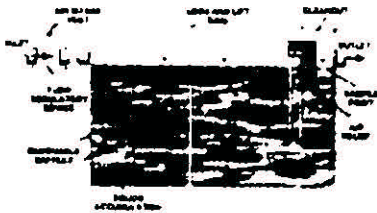
24 minute retention time is the minimum amount of time needed for grease to cool, condense, and separate from liquid. It is a constant for the purposes of this calculation. This guide and other helpful information can be found on the District's website:

Grease Removal Devices

Grease Trap

A grease trap is a small reservoir built into the wastewater piping, a short distance from a grease producing area. Baffles in the reservoir retain the wastewater long enough for the grease to congeal and rise to the surface. The grease can then be removed and disposed of properly as seen in Figure 1

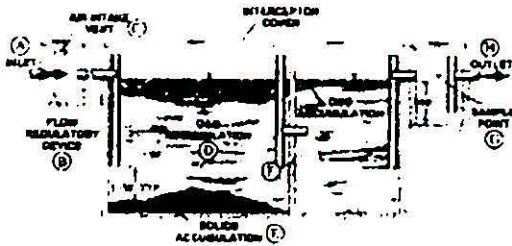
Figure 1



Grease Interceptor

A grease interceptor is a vault with a minimum capacity of between 500 and 750 gallons, located on the exterior of the building. The capacity of the interceptor provides adequate residence time so that wastewater has time to cool, allowing the remaining grease not collected by the traps time to congeal and rise to the surface, where it accumulates until the interceptor is cleaned. Figure 2 illustrates a typical grease interceptor.

Figure 2



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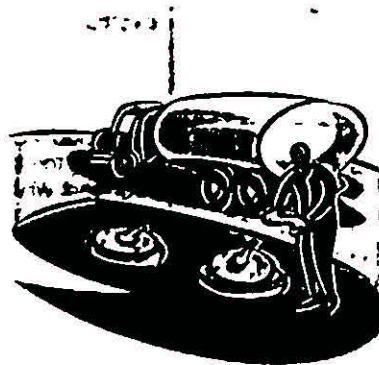
Olivehurst Public Utility District

For answers to your FOG Program questions or to discuss your particular issue, please contact the District's Department of Public Works to schedule an appointment.

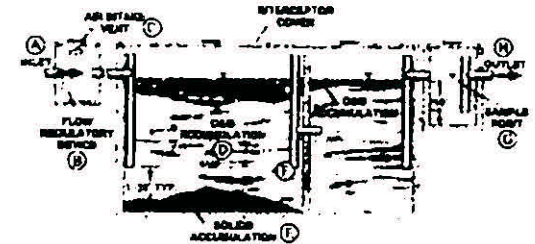
fogcontrol@opud.org

OR

530-743-8132



FATS, OILS AND GREASE (FOG) PROGRAM



Interceptor Sizing Guide

Olivehurst Public Utility District

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