



Grease Interceptor Sizing Guidelines

Sizing Procedure

Sizing Method Based on Pipe Diameter Size and Slope

When the final configuration of fixtures in a facility is not known or to allow for additional fixtures in the future, this method shall be used or to size the interceptor for the maximum flow that the drain line from the facility can carry.

Pipe Size (inches)	Full Pipe Flow @ 1/4 slope	Interceptor size 1 minute drain	Interceptor size 2 minute drain
2"	19.44 gpm	20 gpm	10 gpm
3"	58.67 gpm.	75 gpm	35 gpm
4"	125.77 gpm	-	75 gpm

Procedure for Sizing Grease Interceptors

Table 8.3.2 is provided to show the standard formula in steps for sizing grease interceptors to suit requirements of specific fixtures. An example of this sizing formula application is included to illustrate the steps.

Procedure for Sizing Grease Interceptors

Steps	Formula	Example
1	Determine cubic content of fixture. Multiply length x width x depth.	A sink 48" long by 24" wide by 12" deep. Cubic content $48 \times 24 \times 12 = 13,824$ cubic inches.
2	Determine capacity in gallons. 1 gal. = 231 cubic inches.	Content in gallons. $\frac{13,824}{231} = 59.8$ gallons
3	Determine actual drainage load. The fixture is normally filled to about 75% of capacity with water. The items being washed displace about 25% of the fixture content, thus actual drainage load = 75% of fixture capacity.	Actual drainage load $.75 \times 59.8 = 44.9$ gallons.
4	Determine flow rate and drainage period. In general, good practice dictates a one (1) minute drainage period; however, where conditions permit, a two (2) minute drainage period is acceptable. Drainage period is the actual time required to completely drain the fixture. Flow Rate = $\frac{\text{Actual Drainage Load}}{\text{Drainage Period}}$	Calculate flow rate for one (1) minute period: $\frac{44.9}{1} = 44.9$ GPM Flow Rate for two (2) minute period: $\frac{44.9}{2} = 22.5$ GPM Flow Rate
5	Select Interceptor. From Table 1 select Interceptor which corresponds to the flow rate calculated. Note: Select next larger size when Flow Rate falls between two sizes listed.	Select Interceptor. For one (1) minute period – 44.9 GPM requires PDI size 50. For two (2) minute period – 22.5 GPM requires PDI size 25.