



City of El Cajon
Building and Fire Safety Division
 200 Civic Center Way
 El Cajon, CA 92020
 Phone: (619) 441-1726

GREASE TRAP/INTERCEPTOR INSTALLATION

Submittal requirements for grease traps/interceptors

1. Sizing calculations must be included for all grease traps/interceptors based on the manufacturer criteria or CPC (most restrictive sizing takes precedence).
2. Show the size, location, model number, and manufacturer on the plans.
3. Include a piping diagram of both grease and non-grease lines.
4. Total capacity in gallons shall not exceed 2-1/2 times the certified GPM rate of the trap (see table 10-2 below).
5. The volume of Interceptors shall be determined by table 10-3 (see below).

Table 10-3
Gravity Grease Interceptor Sizing

DFUs (1)	Interceptor Volume (2)	DFUs (1)	Interceptor Volume (2)
8	500 gallons	307 (3)	2,500 gallons
21 (3)	750 gallons	342	3,000 gallons
35	1,000 gallons	428	4,000 gallons
90 (3)	1,250 gallons	576	5,000 gallons
172	1,500 gallons	720	7,500 gallons
216	2,000 gallons	2112	10,000 gallons
		2640	15,000 gallons

Table 10-2
HYDROMECHANICAL INTERCEPTOR SIZING USING GRAVITY FLOW RATES¹

DIAMTER OF GREASE WASTE PIPE	MAXIMUM FULL PIPE FLOW (GPM) ²	ONE-MINUTE DRAINAGE PERIOD (GPM)	TWO-MINUTE DRAINAGE PERIOD (GPM)
2"	20	20	10
3"	60	75	35
4"	125	150	75
5"	230	250	125
6"	375	500	250

1. For interceptor sizing by fixture capacity see the examples below.
2. 1/2" (.240) slope per foot based on Manning's formula with friction factor N = 0.012

Example for sizing hydromechanical interceptor using fixture capacity

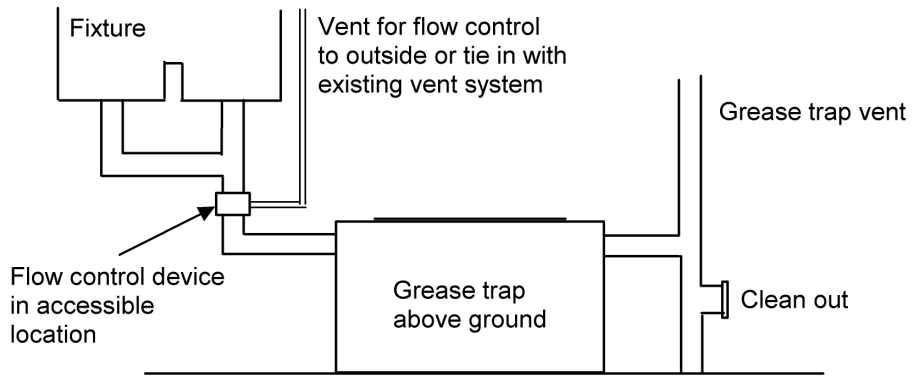
Step 1. Determine flow rate from each fixture –

$$[\text{length}] \times [\text{width}] \times [\text{depth}] / [231] = \text{Gallons} \times [.75 \text{ fill factor}] / [\text{drain period (1 or 2 min.)}]$$

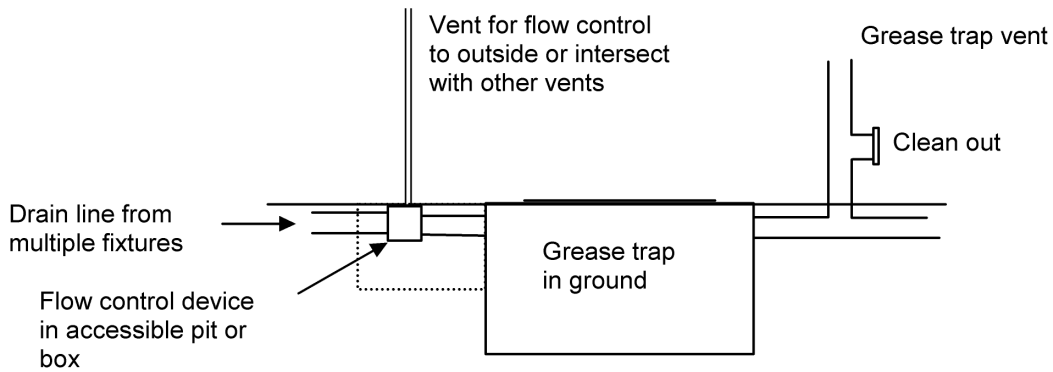
Step 2. Calculate total load of all fixtures the discharge to the interceptor

Fixture size	Compartments	Load (gallons)	Size of interceptor based on 1 min.	Size of interceptor based on 2 min.
24"x24"x12"	2	44.9		
Rated Appliance		5		
Total		49.9	50	25

Typical single fixture grease trap installation



Typical multiple fixture grease trap installation



Typical Indirect fixture grease trap installation

