



The McCandless Township Sanitary Authority
418 Arcadia Dr. Pittsburgh, PA 15237

SIZING OF FATS, OILS & GREASE (FOG) CONTROL DEVICES

Type of Facility:

Residential

Commercial

Institutional

Applicant Information:

Name/Owner: _____

Business Name: _____

Phone No.: _____

Address: _____

Email Address: _____

Instructions:

- 1) Review MTSA FOG Control Device Guidelines
- 2) Complete application information above
- 3) If proposing to install interior grease traps (Flow \leq 35 GPM), then complete a Part A for each device to be installed
- 4) If proposing to install exterior grease interceptor (Flow $>$ 35 GPM), then complete Part B
- 5) Submit completed package to MTSA for review and approval

Acknowledgement:

Submitted by: _____

On behalf of: _____

Date: _____

For MTSA Use:

Reviewer: _____

Date: _____



PART A - SIZING OF GREASE TRAPS

Complete this form for each FOG Control Device you install.

Fixture Connected to FOG Control Device:

MAKE/MODEL	FIXTURE CAPACITY (GALLONS)	ACTUAL DRAINAGE LOAD* (GALLONS)

* For example if a fixture is normally filled to about 75% of capacity with water, the items being washed displace about 25% of the fixture content, therefore actual drainage load = 75% of fixture capacity.

Review Sample Procedure for Sizing FOG Control Device chart.

Total Capacity

Sum of Actual Drainage Load to a single FOG Control Device _____ Gallons

Determine Flow Rate :

$$\frac{\text{Actual Drainage Load}}{\text{Drainage Period**}} = \text{Flow Rate} \quad \text{_____ GPM}$$

** Drainage Period is typically 1 or 2 minutes

Sizing a Hydromechanical Grease Interceptor (Grease Trap)

Recommended Capacity : _____ GPM
 (See Table 2 of FOG Control Device Design Guidance)

Flow Control Device Rating: _____ GPM
 (≤ Flow Rate of FOG Grease Trap)

Sizing a Gravity Grease Interceptor (Grease Interceptor)

Desired Detention Time : _____ Minutes
 (30 minutes is the minimum allowable)

Calculated Capacity : _____ Gallons
 (Flow Rate x Detention Time)

Recommended Capacity : _____ Gallons
 (Calculated Capacity Rounded to the next largest Standard Size, See FOG Control Device Guidelines)



PART B - SIZING OF GREASE INTERCEPTOR

If flow rate > 35 GPM an exterior grease interceptor is required.

Meals per Peak Hour	Waste Flow Rate	Retention Time	Storage Factor	Calculated Interceptor Size, Gallons	Grease Interceptor Gallons
<input type="text"/>	x <input type="text"/>	x <input type="text"/>	x <input type="text"/>	= <input type="text"/>	<input type="text"/>

Number of Meals Per Peak Hour (Recommended Formula):

Seating Capacity x Meal Factor = Meal per Peak Hour

STEP 1

Establishment Type:	Meal Factor
Fast Food (45 min)	1.33
Restaurant (60 min)	1.00
Leisure Dining (90 min)	0.67
Dinner Club (120 min)	0.50

STEP 2 **Waste Flow Rate (condition):**

With a Dishwashing Machine	Flow Rate 6 Gallons
Without a Dishwashing Machine	5 Gallons
Single Service Kitchen	2 Gallons

STEP 3 **Retention Time**

Commercial Kitchen	2.5 Hours
Single Service Kitchen	1.5 Hours

STEP 4 **Storage Factor**

Kitchen Hours of Operation	Storage Factor
8 Hours	1.00
12 Hours	1.50
16 Hours	2.00
24 Hours	3.00

STEP 5 **Calculated Interceptor Size**

Multiply the value obtained from step 1, 2, 3, and 4. The result is the approximate** grease interceptor size for this application.

STEP 6 **** MTSA and ACHD will approve the final size of the grease interceptor**

Contact MTSA for sizing requirements if proposed facility is not a restaurant and produces FOG at a flow rate > 35 GPM