



**City of Gresham**  
**Wastewater Services Division**  
Fats, Oils and Grease Program:  
Gravity Grease Interceptor (GGI) Sizing and  
Plan Review Requirements



**REQUIREMENT:**

Commercial and industrial food establishments which cook or prepare food or beverages are required to install a Gravity Grease Interceptor (GGI) where pretreatment of wastewater effluent is determined to be necessary to capture grease, oil or food solids.

A triple (3 compartment) sink triggers the need for installation of a GGI.

This requirement applies to all new construction, tenant improvements, remodels and existing systems in need of upgrading.

GGI's are to be sized, installed and maintained per the Oregon Plumbing Specialty Code (OPSC).

**PLAN DETAILS NEEDED:**

At the time of submittal of plans to the City for review, the following minimum information is required;

- Food preparation area plumbing detail (clearly indicate all plumbing, fixtures and GGI locations)
- Indicate GGI sizing calculations per OPSC, Section 1014.3.
- Provide GGI cut sheets and GGI internal plumbing configuration that verifies compliance with OPSC.

**SIZING CRITERIA:**

- List all fixtures and their associated drainage fixture units (DFU's) that will be connected to the GGI utilizing the OPSC.
- Do not connect black water (restrooms) and other non-grease potential sources to the GGI.
- Total up the DFU's and utilize the Gravity Grease Interceptor Sizing table.

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Gravity Grease Interceptor Sizing\*\*

<u>DFUs (1)</u>	<u>Interceptor Volume (2)</u>
8.....	500 gallons
21 (3).....	750 gallons
35.....	1,000 gallons
90 (3).....	1,250 gallons
172.....	1,500 gallons
216.....	2,000 gallons
307 (3).....	2,500 gallons
342.....	3,000 gallons
428.....	4,000 gallons
576.....	5,000 gallons

Notes:

- (1) The maximum allowable DFUs plumbed to the kitchen drain lines that will be connected to the grease interceptor
- (2) This size based on: the DFUs, the pipe size from OPSC ; Table 7-3 of OPSC; Useful Tables for flow in half-full pipes (ref: *Mohinder Nayyar Piping Handbook, 3<sup>rd</sup> Edition, 1992*)
- (3) Based on 30-minute retention time (ref.: *Metcalf & Eddy, Inc. Small and Decentralized Wastewater Management Systems, 3<sup>rd</sup> Ed. 1998*). Rounded up to nominal interceptor volume.

\*\*Adapted from Table 10-3 of the Oregon Plumbing Specialty Code (OPSC)

<u>Example:</u>	
3 floor drains at 2 DFUs	6 DFUs
Mop sink at 3 DFUs	3 DFUs
Food prep sink at 3 DFUs	3 DFUs
Dishwasher at 4 DFUs (per Discharge Capacity Table)	<u>4 DFUs</u>
<b>Total:</b>	<b>16 DFUs</b>
 Using above sizing table, GGI will be:	 <b>750 Gallons</b>

**DESIGN:**

All potential grease discharges shall be plumbed to the GGI.

No black water wastes are to be plumbed to the GGI.

Grease storage area drains are to be plumbed to the GGI.

Facilities required to install GGI's and/or sample monitoring stations shall install units of approved design per the OPSC.

All required GGI's shall be installed and properly maintained with all internal required plumbing of proper design and length in place at all times.

Any Questions?

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