

PIMA COUNTY
2012 International Plumbing Code
Section 1003.3 Grease interceptors.

DELETE section and Table 1003.3.4.1 and REPLACE with the following:

A Fixtures to be connected to a grease interceptor^{1,2}:

- pre-rinse and or pre-wash sinks;
- two or three compartment sinks;
- meat prep sink;
- wok stoves;
- self cleaning stove ventilation/exhaust hood;
- kitchen floor drains;
- floor sinks;
- mop sinks;
- food prep sinks;
- hand sinks³;
- dishwasher; and
- food waste disposal units⁴.

¹A valid Industrial Wastewater Discharge Permit issued by the Pima County Regional Wastewater Reclamation Department (RWRD) may eliminate the need to comply with this section.

² Depending on use and context, the requirement for above listed fixtures to drain through an interceptor may be appealed to RWRD.

³ A hand wash sink located in the kitchen area shall either discharge through a grease interceptor or have a sign posted above it stating: "HANDWASH SINK ONLY! NO FOOD PREPARATION OR DISHWASHING ALLOWED."

⁴ Discharges from food waste disposal units must drain through a minimum 3/8 inch screen.

B Hydromechanical grease interceptors^{1,2}

Hydromechanical grease interceptors (HGI), which are generally installed inside, may be used when there are four (4) or fewer fixtures. The minimum size HGI to be installed shall be rated no smaller than 25 gallon per minute with a 50 pound grease capacity. Flow Control devices shall be designed and installed so that the total flow through such devices shall at no time be greater than the rated flow of the HGI.

Exception: dishwasher and food waste disposal units shall not drain through a hydromechanical grease interceptor.

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² Depending on use and context, the requirement for above listed fixtures to drain through an interceptor may be appealed to RWRD.

C Grease interceptor sizing criteria

$$V_{(\min)} = F \times R \times S$$

Where:

- $V_{(\min)}$ = Minimum Gravity Grease Interceptor Operating Volume, gallons
- F = Flow Rate (maximum), gallons per minute
- R = Retention Time = 30 minutes
- S = Storage Factor = 25%

Thus: $V_{(\min)} = F \times 30 \times 1.25$

The flow rate shall be determined based on the total flow rate from all equipment and plumbing fixtures connected to the gravity grease interceptor using one of the following equations:

- Drainage Fixture Units (DFU) **less than or equal to 40**: $F = (0.8 \times \text{DFU})$
- Drainage Fixture Units **greater than 40**: $F = (0.3 \times \text{DFU}) + 20$

Where: DFU = Drainage Fixture Units per Table 709.1

- The minimum retention time of 30 minutes is based on Wastewater Engineering, Treatment, Disposal and Reuse, Third Edition, Metcalf and Eddy, Inc., McGraw-Hill, Inc., page 1028.
- A minimum of **25%** storage is required for floatable fats, oil and grease and settled solids is required for gravity grease interceptors.
- The minimum sized GGI to be installed shall be 300 gallons.

Note: Providing additional interceptor capacity can reduce an interceptor's maintenance frequency. However, solid accumulation and low flows in an interceptor can, over an extended period of time, produce a corrosive environment which can damage the structural integrity of the interceptor. An oversized interceptor may also generate odor problems.