



City of Dothan FOG Program Gravity Grease Interceptor Design and Installation

Piping Design

1. The inlet and outlet piping shall have 2-way cleanout tees installed.
2. The inlet piping shall enter the receiving chamber a minimum of 2 1/2" above the invert of the outlet piping.
3. On the inlet pipe, inside the receiving chamber, a sanitary tee of the same size pipe in the vertical position with the top unplugged shall be provided as a turndown. To provide air circulation and to prevent "air lock", a minimum 6" high pipe nipple (height as measured from the top of the tee collar) installed in the top tee shall extend to a minimum of 6" clearance from the interceptor ceiling, but not less than that of the inlet pipe diameter. The top of the nipple shall remain open (not capped). A pipe installed in the bottom of the tee shall extend to a point of 2/3 the depth of the water level. The inlet T should be made of Schedule 40 PVC or equivalent material. *See illustration.*
4. The outlet piping shall be no smaller than the inlet piping, but in no case smaller than 4" ID.
5. The outlet piping shall extend to 12" above the floor of the interceptor and shall be made of a non-collapsible material. The minimum requirement for outlet piping is Schedule 40 PVC.
6. The outlet piping shall contain a tee installed vertically with a minimum 6" high pipe nipple (height as measured from the top of the tee collar) installed in the top of the tee to extend to a minimum of 6" clearance from the interceptor ceiling, but not less than that of the pipe diameter. The top of the nipple shall remain open (not capped). The minimum requirement for the outlet tee is Schedule 40 PVC. *See illustration.*

Baffles

1. The grease interceptor shall have a non-flexing (i.e. concrete, steel, etc.) baffle the full width of the interceptor, sealed to the walls and the floor, and extend from the floor to within 6" of the ceiling. The baffle shall have an inverted 90-degree sweep fitting at least equal in diameter size to the inlet piping, but in no case less than 6" ID. The bottom of the sweep shall be placed in the vertical position in the inlet compartment 12" above the floor. The sweep shall rise to the horizontal portion, which shall extend through the baffle into the outlet compartment. The baffle wall shall be sealed to the sweep. *See illustration.*
2. The inlet compartment shall be 2/3 of the total liquid capacity with the outlet compartment at 1/3 liquid capacity of the interceptor.

Access Openings (Manholes)

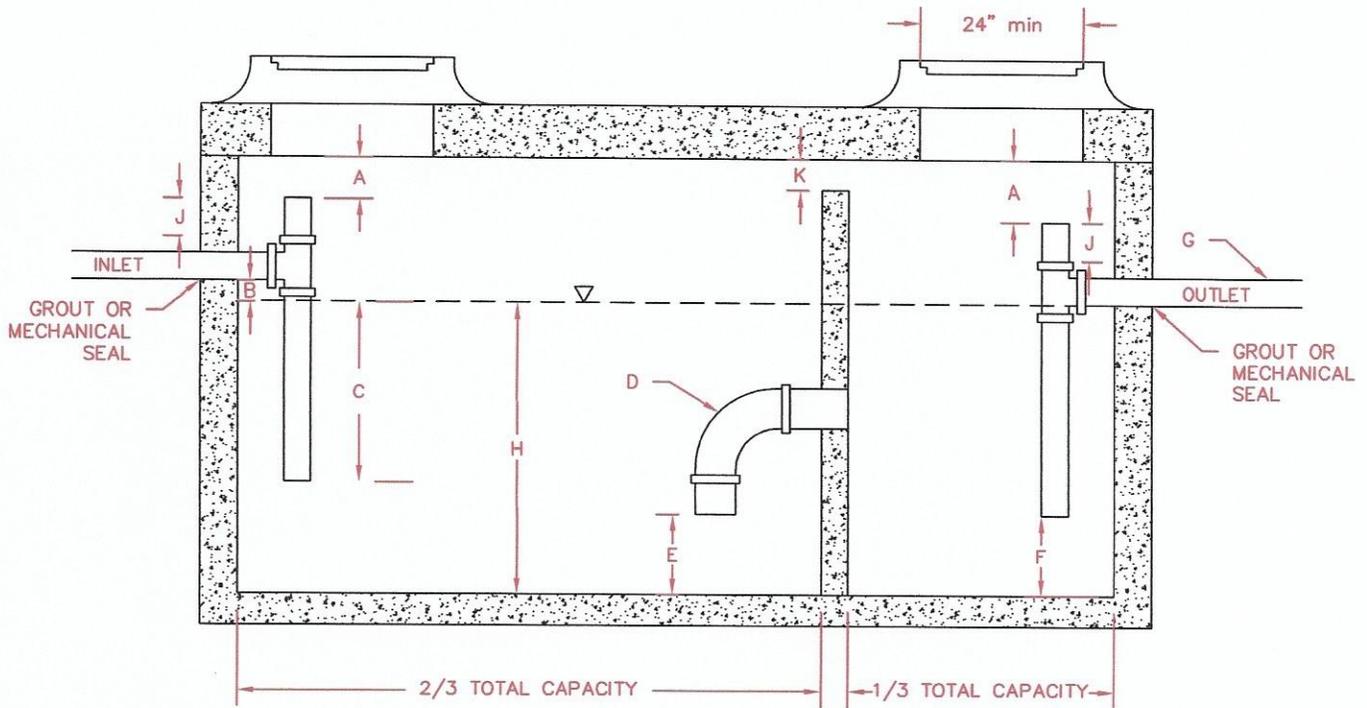
1. Access to grease interceptors shall be provided by a minimum of 1 manhole per interceptor division (baffle chamber) and of 24-inch minimum dimensions terminating 1 inch above finished grade with cast iron frame and cover. An 8" thick concrete pad extending a minimum of 12" beyond the outside dimension of the manhole frame shall be provided. One manhole shall be located above the inlet tee hatch and the other manhole shall be located above the outlet tee hatch. A minimum of 24" of clear opening above each manhole access shall be maintained to facilitate maintenance, cleaning, pumping, and inspections.

2. If determined by the City to be impracticable to install the GGI below grade, the requirements to terminate the manhole 1" above finished grade and the concrete pad around the manhole shall be waived.
3. Access openings shall be mechanically sealed and gas tight to contain odors and bacteria and to exclude vermin and ground water, in a manner that permits regular reuses.
4. The manholes are to be accessible for inspection.

Additional Requirements

1. **Water Tight** – Precast concrete grease interceptors shall be constructed to be watertight. Unless determined by the City to be impracticable, a static water test shall be conducted by the installer and timed to permit verification through visual inspection by City of Dothan's FOG program staff. The water test shall consist of plugging the outlet (and the inlet if necessary) and filling the tank(s) with water to the tank top a minimum of 24 hours before the inspection. The plumbing contractor is responsible for providing the plugs. The tank shall not lose water during this test period. Certification by the plumbing contractor shall be supplied to the City of Dothan's FOG program staff prior to final approval of grease control equipment.
2. **Location** – Grease Interceptors shall be located to be readily accessible for cleaning, maintenance, and inspections. They should be located close to the fixture(s) discharging the greasy waste stream. If possible, Grease Interceptors should not be installed in "drive-thru" lanes or a parking area. Grease Interceptor access manholes shall never be paved over.
3. **Responsibility** – Maintaining the grease interceptor(s), including complete pump of contents at the required frequency and insuring proper components are installed, is the responsibility of the user/owner.
4. **Load-Bearing Capacity** – Each interceptor shall be structurally designed to withstand any anticipated load to be placed on the interceptor (i.e., vehicular traffic in parking or driving areas). This includes any risers or other extensions for the interceptor manholes to insure that any large commercial vehicle will not cause a collapse of the structure. Interceptors located in such parking or driving areas shall comply with AASHTO HS20-44 traffic rating load limits.
5. **Construction Material** – Grease Interceptors shall be constructed of sound durable materials, not subject to excessive corrosion or decay, and shall be water and gas tight. Note: Concrete materials and other grease interceptor materials shall meet the American National Standards Institute, Inc. (ANSI) and International Association of Plumbing and Mechanical Officials (IAPMO) standards.
6. **Cleanout Rings and Covers** – All cleanouts located outdoors shall have a solid cover (not grated). Outdoor cleanouts, including sanitary cleanouts installed in areas subject to vehicular traffic shall have a brass ring and solid cover installed.
7. **Marking and Identification** - Prefabricated gravity grease interceptors shall be permanently and legibly marked with the following:
 - Manufacturer's name or trademark, or both
 - Model number
 - Capacity
 - Month and year of manufacture
 - Load limits and maximum recommended depth of earth cover in feet; and
 - Inlet and outlet

GREASE INTERCEPTOR DETAIL



- A.) MINIMUM 6" BUT NO LESS THAN PIPE DIAMETER.
- B.) INLET PIPE INVERT TO BE A MINIMUM OF 2 1/2" ABOVE LIQUID SURFACE.
- C.) INLET PIPE TO TERMINATE 2/3 DEPTH OF WATER LEVEL.
- D.) 90 DEGREE SWEEP, MINIMUM SIZE 6".
- E.) 12" FROM FLOOR TO END OF SWEEP.
- F.) 12" FROM FLOOR TO END OF OUTLET PIPE.
- G.) OUTLET PIPE NO SMALLER THAN INLET PIPE, MINIMUM 4".
- H.) MINIMUM DEPTH OF LIQUID CAPACITY 42"
- J.) MINIMUM 6" HIGH NIPPLE
- K.) MAXIMUM DISTANCE FROM CEILING 6".