PLUMBING SAFETY
Information Bulletin

STANDATA

January 2017

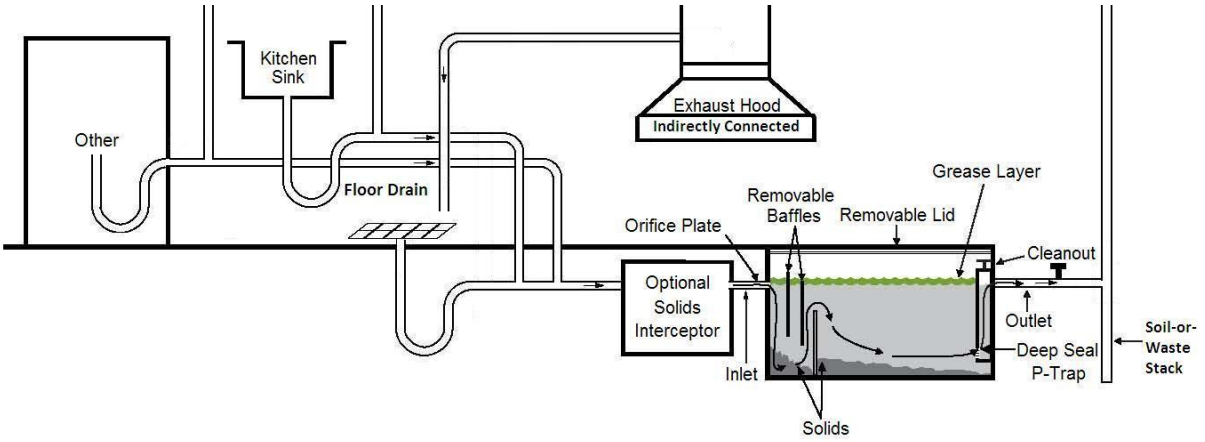
Subject: Interceptors

This bulletin has been developed to inform the plumbing industry of the requirements associated with the installation of grease, oil, sand/grit interceptors and the protection of the drainage system.

Designers, Installers and Safety Codes Officers are reminded that where a fixture or equipment discharges sewage or waste may damage or impair the sanitary drainage system or the functioning of a public or private sewage disposal system, provisions shall be made for treatment of the sewage or waste before it is discharged to the sanitary drainage system. (See Appendix A) – A-2.4.4.4.(1).

Fats, Oils, Grease (FOG)

N.P.C. - 2.4.4.3.(1) Where a fixture discharges sewage that includes fats, oils, or grease and is located in a public kitchen, in a restaurant or in a care or detention occupancy, it shall discharge through a grease interceptor. (See Appendix A) – A-2.4.4.3.(3).



The intent of this requirement is to reduce the amount of FOG that will be discharged to the sewer system, which may cool and solidify within the drainage system, and lead to blockage of the drainage system. Grease interceptor sizing and methods of installation can be found in the manufactures installation instructions. Good engineering practices such as information found in ASPE 2008 Data Book -Volume 4, Chapter 8, Grease Interceptors or CSA B481 Series-12 may also be considered.

Note: CSA 481.3 -12 requires dishwashers to be discharged into a dedicated grease trap.

Issue of this STANDATA is authorized by
the Chief Plumbing Administrator

[Original Signed]
Sidney Manning

Alberta Government

Oil or Gasoline

N.P.C. - 2.4.4.3.(2) Where the discharge from a fixture may contain oil or gasoline, an oil interceptor shall be installed. (See Article 2.5.5.2 for venting requirements for oil interceptors.)

2.5.5.2 Venting of Oil Interceptors
(See Appendix A) (See also Article 4.3.5.2. of Division B of the AFC.)

1) Every oil interceptor shall be provided with 2 *vent pipes* that
   a) connect to the interceptor at opposite ends,
   b) extend independently to outside air, and
   c) terminate not less than 2 m above ground and at elevations differing by at least 300 mm.

2) Adjacent compartments within every oil interceptor shall be connected to each other by a vent opening.

Intent: To limit the probability that pressure differentials within oil interceptors can lead to an accumulation of flammable or explosive gases, which could lead to an explosion or fire, and harm to persons.

3) Where a secondary receiver for oil is installed in conjunction with an oil interceptor, it shall be vented in accordance with the manufacturer's recommendations, and the *vent pipe* shall
   a) in no case be less than 1 ½ inches in *size*,
   b) extend independently to outside air, and
   c) terminate not less than 2 m above ground.

Intent: To limit the probability that a lack of vent pipes or the installation of vent pipes in a location where they are susceptible to blockage will lead to a restricted flow to the sump, which could lead to backups, entry of waste into occupied space, unsanitary conditions, and harm to persons.

4) The *vent pipes* referred to in Sentence (1) are permitted to be one *size* smaller than the largest connected drainage pipe but not less than 1 ¼ inches in *size*, or can be sized in accordance with the manufacturer's recommendations.

5) Every *vent pipe* that serves an oil or grease interceptor and is located outside a *building* shall be not less than 3 inches in *size* in areas where it may be subject to frost closure.

Oil or Gasoline Interceptor Piping Material

An objective of this Code is to limit the probability that, as a result of the design or installation of the *plumbing system*, a person in or adjacent to the *building* or facility will be exposed to an unacceptable risk of injury due to fire. The risks of injury due to fire addressed in this Code are those caused by - OS1.1 - fire or explosion occurring.

Installers are reminded that drainage and vent piping to oil interceptors must be suitable for the intended environment. Division A, Sentence 1.2.2.1.(1) states: “All materials, systems and equipment installed to meet the requirements of this code shall be free from defects and possess the necessary characteristics to perform their intended functions when installed.”

ABS drain, waste and vent pipe and fittings should not be used to conduct sewage to an oil interceptor or to vent an oil interceptor. The intent of this requirement is to limit the probability that ABS would be damaged by the interaction with oil products that accumulate in the oil interceptor.

Materials that are suitable for use include PVC pipe, copper tubing, and cast iron soil pipe.

A-2.5.5.2. Venting of Oil Interceptors.

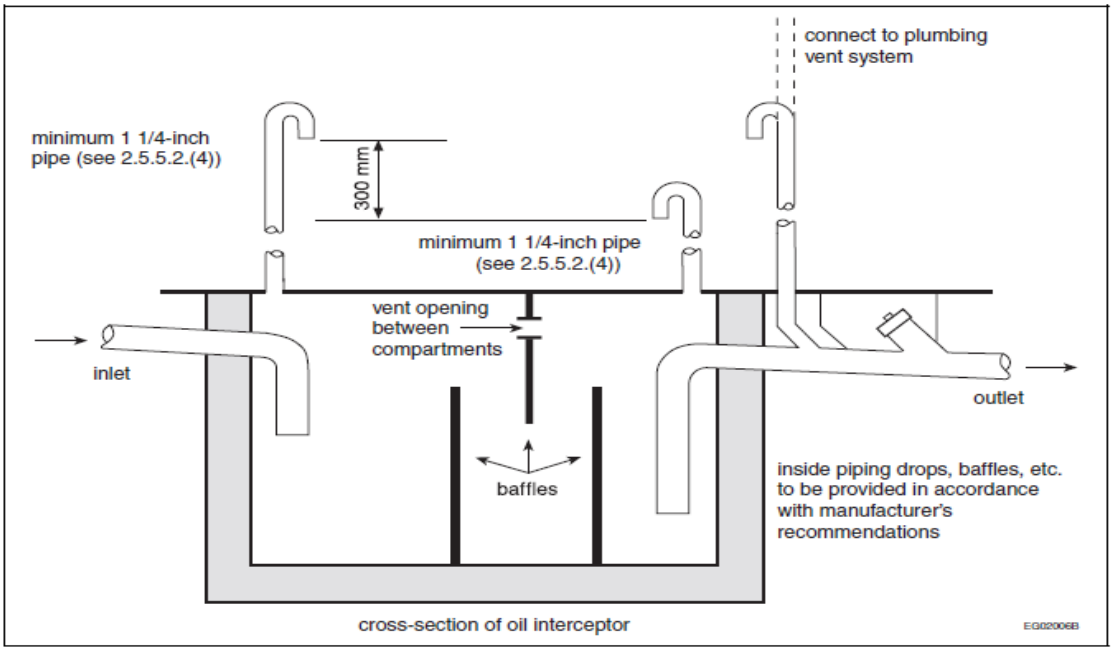


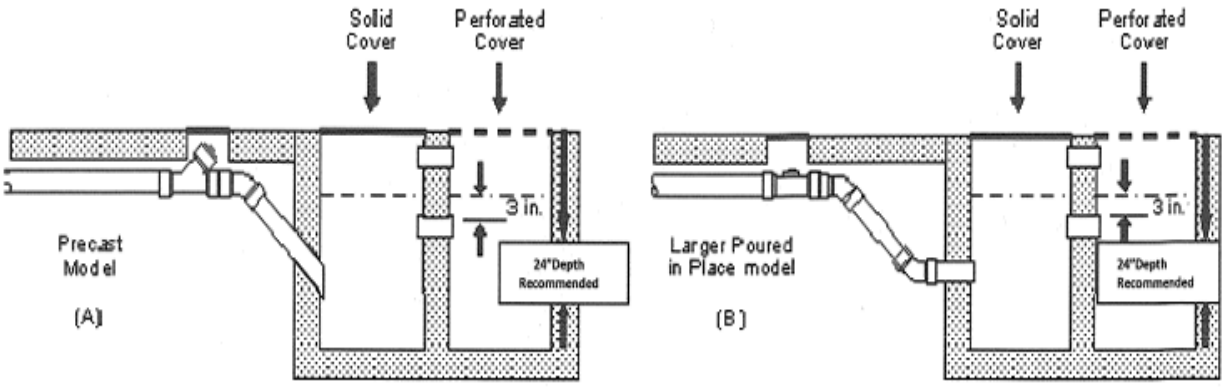
Figure A-2.5.5.2.
Venting of Oil Interceptors

Sand and Grit Interceptors

N.P.C. 2.4.4.3.(3) Where a fixture discharges sand, grit or similar materials, an interceptor designed for the purpose of trapping such discharges shall be installed.

The garage floor interceptor design and methods of installation as illustrated below are suitable on the basis of past performance.

Note: The cleanout shall be so located that it is accessible for use and protected from vehicular damage by using a ductile iron cover (minimum load rating 7,499 lbs) or equivalent material.



The minimum compartment inside dimensions is 600 mm (24 in.) by 600 mm (24 in.) for a garage floor interceptor serving a service station, paint shop, workshop, and etc. The size of a garage floor interceptor for a car wash or similar operation must be increased to suit the application.

A garage floor interceptor must be piped and vented in the same manner as a "floor drain" with exception of the required cleanout. The cleanout and any other piping shall not be located within the compartments in order to provide accessibility for cleaning and maintenance.