
STANDATA bulletin 20-PCB-008

Plumbing

Interceptors

Date Issued: April 2023

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Purpose

This bulletin details the requirements for installing grease, oil, sand/grit interceptors, and the protection of the drainage system.

Discussion

Designers, installers, and safety codes officers are reminded that where a fixture or equipment discharges sewage or waste that may damage or impair the sanitary drainage system or the functioning of a public or private sewage disposal system, provisions must be made for treatment of the sewage or waste before it is discharged to the sanitary drainage system.

Fats, Oils, Grease (FOG)

Code Reference

NPC 2.4.4.3 Interceptors

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.(1).

Unless stated otherwise, all Code references in this STANDATA are to the National Plumbing Code of Canada 2020

Issued by the Provincial Plumbing Administrator

[Original signed]

Sidney Manning

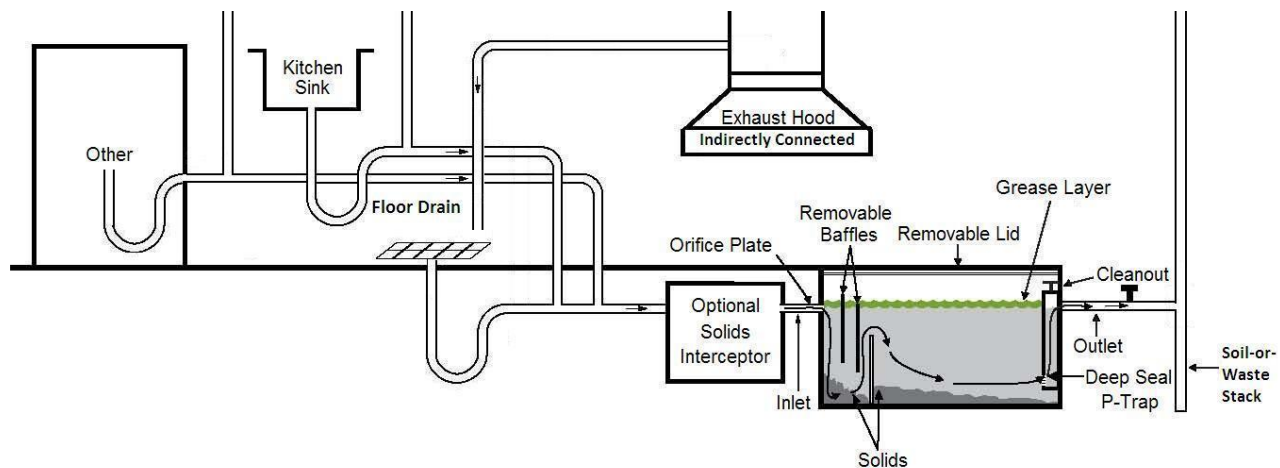
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The intent of this requirement is to reduce the amount of FOG that will be discharged to the sewer system, which may cool and solidify within the drainage system, and lead to blockage of the drainage system. Grease interceptor sizing and methods of installation can be found in the manufacturer's installation instructions. Good engineering practices such as information found in ASPE 2018 Data Book -Volume 4, Chapter 8, Grease Interceptors or CSA B481 Series-12 Grease interceptors may also be considered.

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

Oil or Gasoline

Code Reference

Treatment of Sewage and Waste 2.4.4

2.4.4.3. Interceptors

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 NFC.)

- 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
 - 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 NPS smaller than the largest connected drainage pipe but not less than NPS 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 NPS 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.

Code Reference

Characteristics of Materials, Systems and Equipment 1.2.2.1

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."

Acrylonitrile-butadiene-styrene (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 suitable for use include PVC pipes, copper tubing, and cast iron soil pipes.

A-2.5.5.2. Venting of Oil Interceptors.

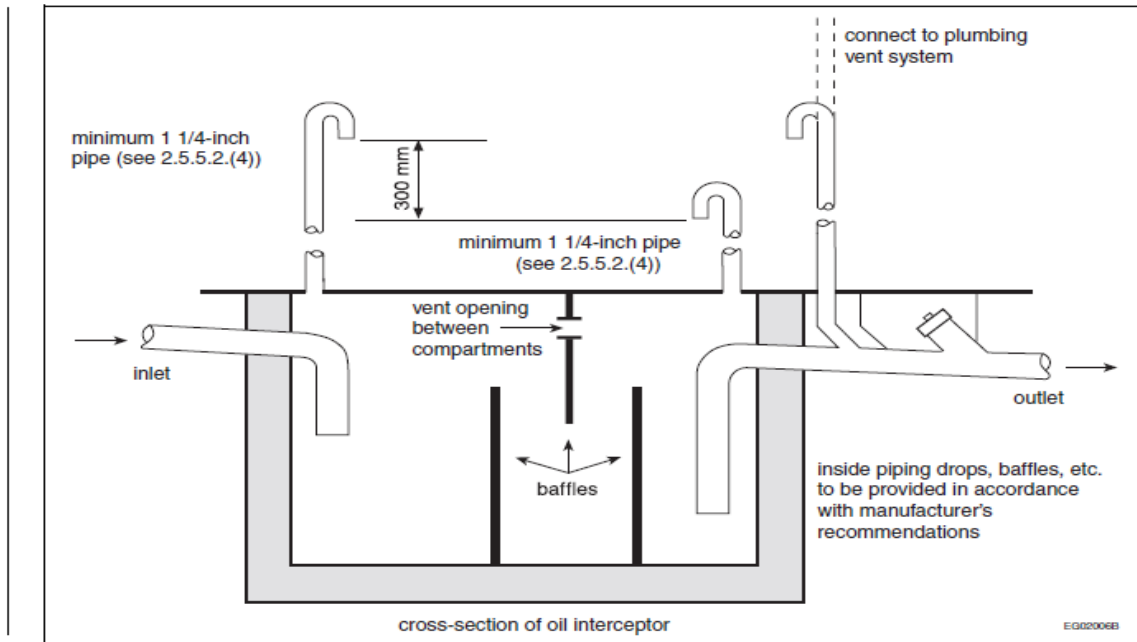


Figure A-2.5.5.2. Venting of Oil Interceptors

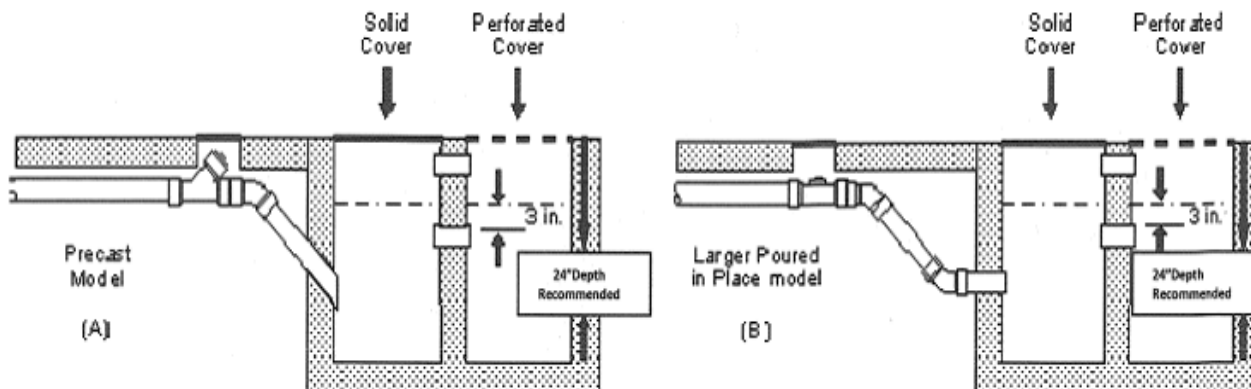
Code Reference

NPC 2.4.4.3 Interceptors

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 location of the cleanout must be 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, 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 the exception of the required cleanout. The cleanout and any other piping must not be located within the compartments to provide accessibility for cleaning and maintenance.