

### SUBJECT: Floor drains and trap seal replenishment

This bulletin has been jointly developed by Safety Services, and the Plumbing Technical Council to inform the plumbing industry of the requirements associated with floor drain and trap seal replenishment.

**Designers and Installers** are reminded that careful consideration must be given to the method of maintaining the trap seal and the ability of the owner to maintain it. The following must be included in the consideration of trap seal maintenance.

The **National Plumbing Code of Canada 2010 (NPC) Division "B"** require provisions be made for maintaining the trap seal of a floor drain by;

#### 2.4.5.5 Trap Seals

- 1) Provision shall be made for maintaining the trap seal of a floor drain by
  - a) The use of the trap seal primer,
  - b) Using the drain as a receptacle for an indirectly connected drinking fountain, or
  - c) Other equally effective means (See Appendix A).

Maintaining a trap seal can be accomplished by periodic **automatic** replenishment of the water in a trap. Depending upon the floor drain size and location manual replenishment is allowed only in limited residential single family applications. Consider the following;

- **Manual replenishment** is not considered acceptable where floor drain traps are inaccessible for manual replenishment (residential applications only) after the installation of equipment or appliances. An example is an emergency floor drain in a main floor laundry room.
- A **1 ½ inch indirect** waste pipe to a basement floor drain or other suitable location should be used as an alternative for a residential above grade **indirect** emergency floor drain discharge. Refer to Fig. #1.
- **2 inch floor drains** require automatic trap priming.
- The **installer** should instruct the owner in the procedures for manual replenishment (single family residential) and the correct operation and maintenance of an automatic replenishment system where applicable.
- 3 inch or 4 inch floor drain trap seals may be automatically replenished with clear water waste from a 1 ½ inch maximum concealed condensate or clear water drain from sources localized to a single mechanical room . The connection may be made on the floor drain fixture outlet pipe under the floor. Refer to Fig. #2.

The application of “another effective means” lies with the authority having jurisdiction under Section 1.2 **Compliance** using “alternate solutions”.

This interpretation is meant as a guide only, specific site conditions must be considered in each case.

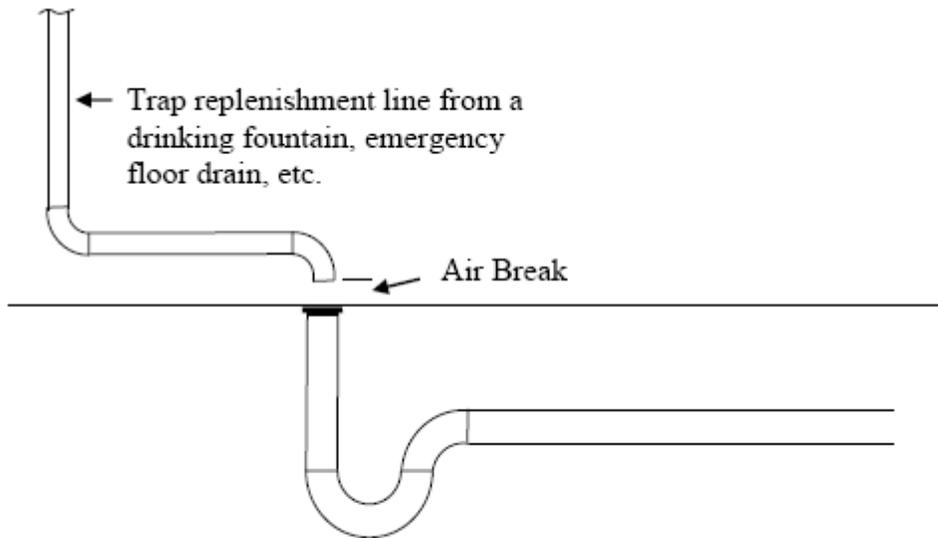


Fig. # 1

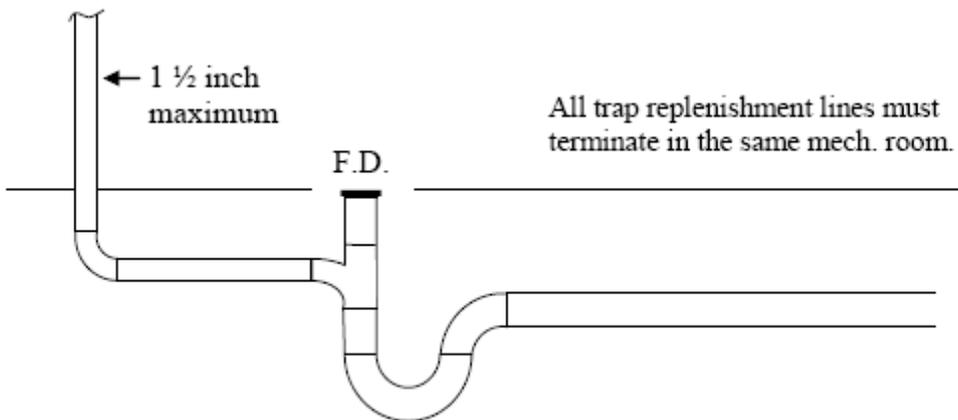


Fig. # 2