1 What is backsiphonage?

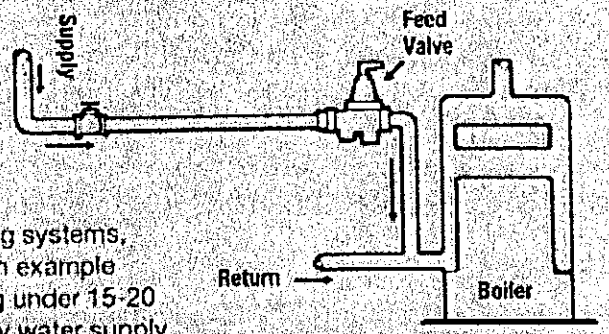
Backsiphonage is the reversal of normal flow in a system caused by a negative pressure (vacuum or partial vacuum) in the supply piping.

2 What factors can cause backsiphonage?

Backsiphonage can be created when there is stoppage of the water supply due to nearby firefighting, repairs or breaks in city main, etc. The effect is similar to the sipping of a soda by inhaling through a straw, which induces a flow in the opposite direction.

3 What is backpressure backflow?

Backpressure backflow is the reversal of normal flow in a system due to an increase in the downstream pressure above that of the supply pressure.

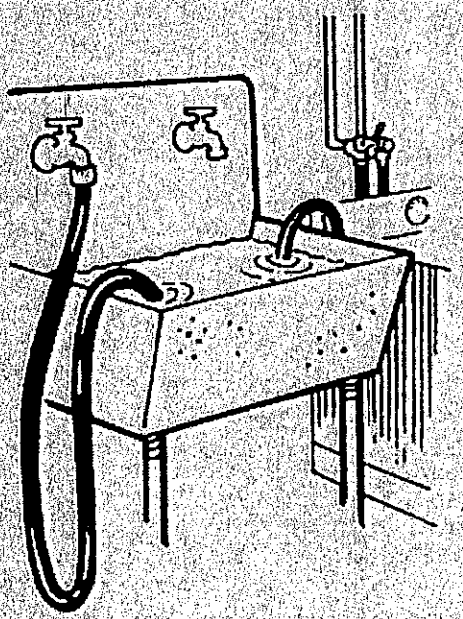


4 What factors can cause a backpressure backflow condition?

Backpressure backflow is created whenever the downstream pressure exceeds the supply pressure which is possible in installations such as heating systems, elevated tanks, and pressure-producing systems. An example would be a hot water space-heating boiler operating under 15-20 lbs. pressure coincidental with a reduction of the city water supply below such pressure (or higher in most commercial boilers). As water tends to flow in the direction of least resistance, a backpressure backflow condition would be created and the contaminated boiler water would flow into the potable water supply.

5 What is a cross-connection?

A cross-connection is a direct arrangement of a piping line which allows the potable water supply to be connected to a line which contains a contaminant. An example is the common garden hose attached to a sill cock with the end of the hose lying in a cesspool. Other examples are a garden hose attached to a service sink with the end of the hose submerged in a tub full of detergent, supply lines connected to bottom-fed tanks, supply lines connected to boilers.



6 What is the most common form of a cross-connection?

Ironically, the ordinary garden hose is the most common offender as it can be easily connected to the potable water supply and used for a variety of potentially dangerous applications.