

Test Report

Purpose:

Determine the drain efficiency of PermaFlow compared to conventional P-Trap with clean-out plug

Some P-traps are manufactured with a cleanout feature. This feature is particularly helpful on P-traps that are glued in place and not easily removed. However, the cleanout feature itself can contribute to blockages. See the photographs below to help explain.



Typical clean out type P-trap



Inside view of P-trap. The clean out feature itself creates an area for debris to collect and thus start a blockage. It is not a smooth flow surface. As debris collects, bacteria can start to grow and cover the inside of the P-trap

Typically, you would not remove the plug from the clean out until you start to have very slow drainage. At this point, the P-trap is almost completely blocked with a very thick material the consistency of jelly. It typically will not simply drain out. You will have to go into the drain hole with a tool to try to remove the debris. See photographs below.



As you can see using a screw driver or similar tool similar tool will not allow you to clean all surfaces



Using a tool such as a flexible wire will allow you to clean additional areas. The problem is that you can not see inside the P-trap to clean it adequately. Also, there will still be a film (bacteria, mold, and/or fungi) material on the sides of the P-trap that will cause problems in the future.

The purpose of PermaFLOW™ is to provide the owner with a tool that allows them to manage their drainage system. If used properly and on a regular basis, there should never be a large build up of material in the trap area. PermaFLOW™ is designed with a special flow angle to help increase turbulence and reduce the occurrence of debris buildup. The transparent feature of PermaFLOW™, allows you see when a film starts to develop on the inside of the trap area. Then you can simply turn the paddle to remove it. This will prevent any large pieces of debris from going down stream.

If the PermaFLOW™ is not maintained on a regular basis, and a larger buildup does occur, then the paddle can be turned to dislodge the debris. If the flow rate is high enough to remove the debris from the trap area, then it should be high enough to move it down stream. As added insurance, you can fill your sink with water and then open your drain. This larger volume of water will effectively remove any larger pieces of debris. In fact this practice will also help clean your pipes between the sink and the septic tank.

Regarding, materials going to the septic tank: Most of the materials that are put into a drain are organic in nature so the bacteria that exist in the septic tank should break them down.

Should you need to remove PermaFLOW™ at some point, it is relatively simple. It has a nut on the inlet and outlet that can be removed by hand. The PermaFLOW™ can then be easily removed for cleaning.