

All kinds of water flow problems.

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Several viewers are complaining about low water pressure in old houses. Old steel pipe tends to collect corrosion and calcium on the walls, enough to slowly choke off the flow of water. A look at the first graphic shows what happens to water flow compared to a clean new 1/2 inch pipe. When it becomes restricted down to about 1/4 of an inch open space, that actually reduces the flow of water by 4 times, so the pressure drops off radically as the pipe slowly clogs up. By comparison if you were to go to a 3/4 inch pipe, as I often recommend for problem showers, compared to a 1/2 inch pipe, you increase the flow by 2.25 times. So pipe size makes a very big difference in water pressure. Another viewer can't get much hot water out of his new hot water tank, but he noticed that the Hot and Cold entries to the tank were reversed. He wondered if that could be the problem. Yes. If you look at the second graphic above, you see that in a proper installation, the cold water is delivered to the bottom of the tank and the hot water drawn off the top. As the tank heats up the water, the hot water rises. The hot water pipe takes the hottest water in the tank first. When you reverse these entries, you dilute the water on the top with cold water, and take the coldest water in the tank off the bottom to the sink. There is a reason for them being labelled with the word Hot and Cold right on the tank itself! A third viewer is worried about water flowing into their crawl space. Actually this is the same problem as water leaking into a basement. The first line of defence is good rain gutters and downspouts that take the water at least 5 feet away from the house. The second line of defence is having the landscape sloping away from the house to keep any flowing water away from the foundation. The next line of defence is a bit of dam proofing on the foundation wall that will force water down and into perimeter drains, as shown in the third photo above, and away from the crawl space or basement. Another viewer wanted to know if he can run a sump pump drain into a septic tank? The answer is a simple NO! Running that much water through the septic tank and into the leaching field would quickly saturate the leaching field. In fact, a strong flow of water, like from a good storm, could even cause the septic tank to stir up and cause scum to flow out of the tank and block the leaching field pipes. Another country dweller has a problem with his water filter constantly plugging up. If you look at the last photo above you can see the type of coating that can form quickly on a ceramic filter; I scrubbed a small area where it shows the clean ceramic underneath. The key to longevity of a filter system is to have several filters, all in the proper order. The first ones remove certain contaminants, and protect the following filters from being blocked. Always have a professional design your filter system, which filters and in which sequence, and that will always be based on an analysis of your water.

Keywords:

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