

Plumbing Your UV Sterilizer, how to

Drs. Foster & Smith Educational Staff

Time spent up front getting acquainted with the plumbing needs of UV sterilizers streamlines installation and maintenance.

Stable water parameters, proper diet, and regular water changes are the keys for disease prevention and a healthy, successful aquarium. However, the addition of sophisticated equipment such as an [ultraviolet sterilizer](#) to a [quarantine tank](#) can further minimize the spread of free-floating bacteria and parasites. Ease of installation or plumbing can play a large role in selecting an appropriate UV sterilizer.



UV sterilizers can be plumbed in two ways, either "hard plumbed" or "soft plumbed." Hard plumbing is a permanent installation involving adhesives and PVC piping, while soft plumbing is semi-permanent involving flexible tubing and clamps. Knowing the plumbing style of the fittings on a UV sterilizer helps you select a compatible pump, as well as other plumbing supplies. Fittings for UV sterilizers come in three styles:

- **Barbed/Insert fittings** - Commonly soft plumbed and the easiest to plumb since the appropriate-sized flexible vinyl [tubing](#) is simply fitted onto it and secured with [clamps](#). Most hang-on sterilizers will have barbed fittings.
- **NPT (National Pipe Threading) fittings** - Sterilizers that incorporate NPT fittings are either MPT (male pipe thread) or FPT (female pipe thread). Depending on your current system, NPT fittings can be hard or soft plumbed. However, the use of "[NPT x Insert Adapters](#)" can make plumbing easier since they convert NPT fittings to barbed or insert fittings.
- **Slip fittings** - Usually hard plumbed but a combination of both plumbing methods can be applied using reducing bushings. A "Slip x FPT Reducing Bushing" converts a slip fitting to a NPT fitting which is then converted to a barbed or insert fitting for easy installation.

Spending some time up front getting acquainted with the plumbing needs of UV sterilizers can streamline installation and maintenance. Because UV bulbs need to be replaced at least once a year, a properly plumbed system will mean easier maintenance. By having all the necessary [plumbing supplies](#) on hand, installation will be quick, so you can start to see the benefits of your UV sterilizer sooner.