

Validated UV Systems

These UV systems have been validated using one of the following: EPA UV Disinfection Guidance Manual (USEPA 2006) or NSF/ANSI 55 Class A. **Note: this list is intended only to provide information about reactors validated by acceptable protocols; for any UV reactor selected for use in an onsite reuse system, the project must verify that the reactor is able to meet the requirements laid out in the San Francisco Department of Public Health's Rules and Regulations Regarding the Operation of Alternate Water Source Systems, such as being able to automatically divert water that does not meet treatment or water quality standards.**

For all systems below, refer to information from manufacturer about additional water quality conditions necessary for achieving the stated dose.

Company	Brand Name/Trade Name/Model	Validation Standard	Validated Dose	Min UV Sensor Reading	Max Flow Rate (GPM)	Min UV Transmittance (UVT)	Potential Pathogen Credit (Virus / Protozoa / Bacteria)
Eagle Water Treatment Systems	EWT6-40CA	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	18	Check with manufacturer	2 / 3 / 2
Greenway Water Technologies	GAUV-12H GAUV-20H GAUV-32H	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	9 17 27	97%	2 / 3 / 2
Luminor Environmental	LBH6-051A LBH6-101A LBH6-151A LBH6-251A LBH6-401A	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	2.2 4.0 5.4 7.9 13	70% ²	2 / 3 / 2
Neotech Aqua	D438 ⁴	EPA/NSF ETV Protocol	40 mJ/cm ²	0.8 mW/cm ²	40	55%	2 / 3 / 2
Puretec	RI-17KA	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	13	Check with manufacturer	2 / 3 / 2
UV Pure Technologies	Hallett 15xs	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	14.6	75%	2 / 3 / 2
UV Pure Technologies	Hallett 30	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	27.4	75%	2 / 3 / 2

This list is being provided solely for the convenience of the public and any interested parties. By providing this sample list of current technologies and companies, the San Francisco Public Utilities Commission does not endorse, warrant, or make representations or endorsements as to the accuracy, quality or completeness of the listed information, or the competency or effectiveness of listed technologies and companies. The City and County of San Francisco will not be responsible for any loss, damage, cost or expense the user might incur as a result of the use of, or reliance upon, the information and companies listed.

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Viqua	PRO10	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	10	70%	2 / 3 / 2
Viqua	PRO20	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	20	70%	2 / 3 / 2
Viqua	PRO30	NSF ANSI 55 Class A	40 mJ/cm ²	Manufacturer set ¹	30	70%	2 / 3 / 2
Viqua	PRO50 ⁴	EPA UVDGM (2006)	40 mJ/cm ²	11.7 mA	51	75%	2 / 3 / 2
Viqua	PRO24-100 ⁴	EPA UVDGM (2006)	100 mJ/cm ²	11.7 mA 13.1 mA 14.7 mA 14.8 mA	9.9 14.9 20.9 24	75% 82% 90% 95% ³	4 / 6 / 4
Viqua	PRO24-186 ⁴	EPA UVDGM (2006)	186 mJ/cm ²	11.7 mA 13.1 mA 14.7 mA 14.8 mA	9.9 14.9 20.9 24	75% 82% 90% 95% ³	6 / 6 / 6

¹ NSF/ANSI 55 Class A validated reactors must be equipped with a UV sensor. The minimum UV sensor reading corresponding to a dose of 40 mJ/cm² is set by the manufacturer and cannot be modified. Control of the treatment system must include a UV reactor that has the capability to alarm and trigger a diversion or shutdown the flow if the UV sensor drops below the UV intensity corresponding to a dose of 40 mJ/cm²

² Manufacturer recommends operation at or above 75% UVT for the optimal operation of a unit and to stay within warranty parameters.

³ Minimum UVT values are approximate. The UV sensor reading will account for changes in UVT and respond accordingly.

⁴ These systems have been accepted previously by the CA Division of Drinking Water.

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