

ULTRAVIOLET WATER TREATMENT

Technical Information & Installation Diagrams

MICROORGANISMS DESTRUCTION CHART

Use the below chart to determine the required UV dose (in mJ/cm²) required to destroy specific microorganisms in water.

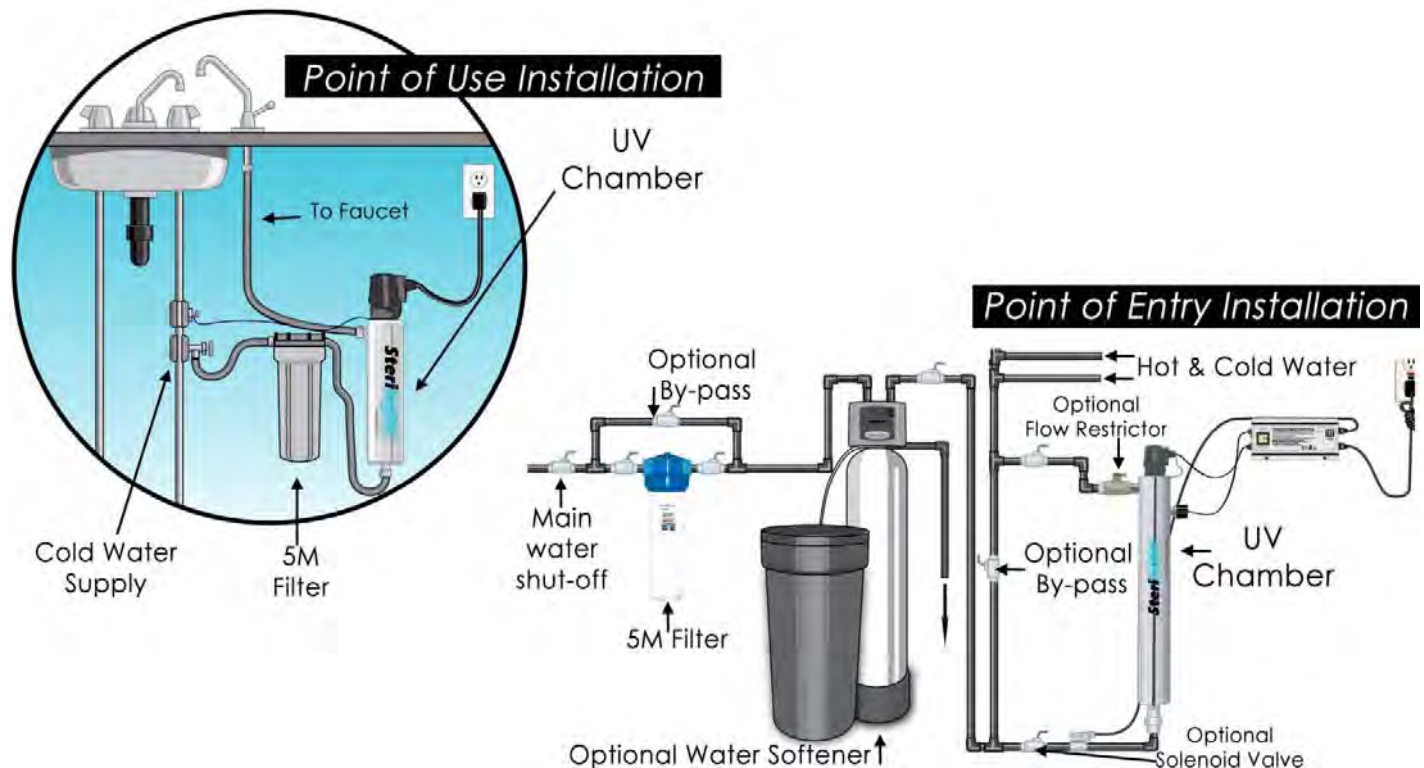
Name	Dose
Bacteria	
Agrobacterium tumefaciens	8.5
Bacillus anthracis	8.7
Bacillus megatherium (vegetative)	2.5
Bacillus megatherium (spores)	2.5
Bacillus subtilis (vegetative)	11
Bacillus subtilis (spores)	58
Clostridium tetani	22
Corynebacterium diphtheria	6.5
Dysentery bacilli (diarrhea)	4.2
Escherichia coli (diarrhea)	6.6
Legionella bozemanii	3.5
Legionella dumoffii	5.5
Legionella gormanii	4.9
Legionella micdadei	3.1
Legionella longbeachae	2.9
Legionella pneumophila (legionnaires disease)	3.8
Leptospira interrogans (infectious jaundice)	6
Mycobacterium tuberculosis	10
Neisseria catarrhalis	8.5
Proteus vulgaris	6.6
Pseudomonas aeruginosa (laboratory)	3.9
Pseudomonas aeruginosa (environmental)	10.5
Rhodospirillum rubrum	6.2
Salmonella (food poisoning)	10
Salmonella enteritidis	7.6

Name	Dose
Bacteria	
Salmonella paratyphi (enteric fever)	6.1
Salmonella typhimurium	15.2
Salmonella typhosa (typhoid fever)	7
Saracen lutea	26.4
Serratia marcescens	6.2
Shigella dysenteriae (dysentary)	4.2
Shigella flexneri (dysentary)	3.4
Shigella sonnei	7
Staphylococcus epidermidis	5.8
Staphylococcus aureus	7
Streptococcus faecalis	10
Streptococcus heaolyeous	5.5
Streptococcus lactis	8.8
Viridans streptococci	3.8
Vibro comma (cholera)	6.5
Mold Spores	
Aspergillus flavus (yellowish green)	99
Aspergillus glaucus (bluish green)	88
Aspergillus nigar (yellowish green)	330
Mucor ramosissimus (white-grey)	35.2
Penicillium digitatum (olive)	88
Penicillium expansum (olive)	22
Penicillium roqueforti (green)	26.4
Rhizopus nigricans (cheese mold)	220

Name	Dose
Algae	
Chlorella vulgaris	22
Protozoa	
Nematode eggs	92
Paramecium	200
Giardia lamblia (3-log)	6-10
Cryptosporidium (3-log)	<10
Viruses	
Influenza	6.6
Poliovirus (poliomyelitis)	7
Rotavirus	24
Tobacco mosaic virus	440
Bacteriophage (E. Coli)	6.6
Hepatitis	8
Yeast	
Baker's yeast	8.8
Brewer's yeast	6.6
Common yeast cake	13.2
Saccharomyces ellipsoideus	13.2
Saccharomyces sp	17.6

*UV dose shown in mJ/cm²

TYPICAL INSTALLATIONS



EM[®], APPLIED MEMBRANES INC.[®], APPLIED[®] ARE TRADEMARKS OF APPLIED MEMBRANES, INC. © 2016