

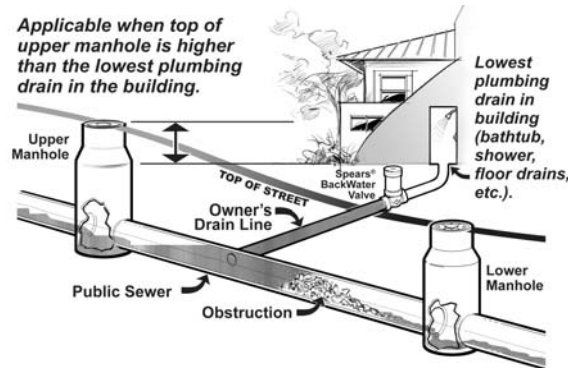


Valves Technical Utility Backwater Valve

Introduction to Backwater Valves

A Backwater Valve is designed to function as a check valve in a drainage pipe to prevent flowing liquid, such as sewage, from reversing its direction. There are other applications for Backwater Valves, such as multi-level pond balancing for Aquascape applications or for storage tank balancing for industrial and agricultural applications. Backwater Valves should not be confused with Backflow Preventers which are used in potable water supply systems.

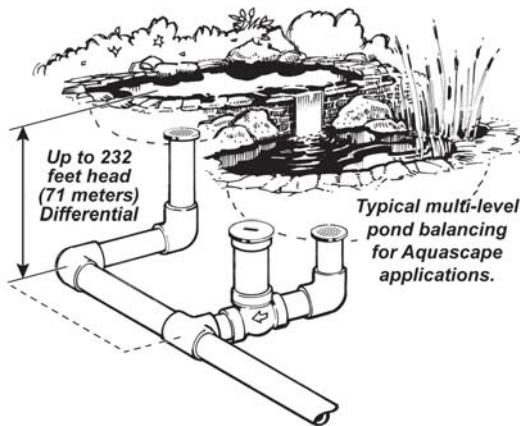
Backwater valves are most important if you are on a public sewer system, especially if you are the lowest home on the line where you could have everyone's sewage above you flow into your home if there is a stoppage in the mainline after your connection. Some jurisdictions require Backwater Valves on new construction:



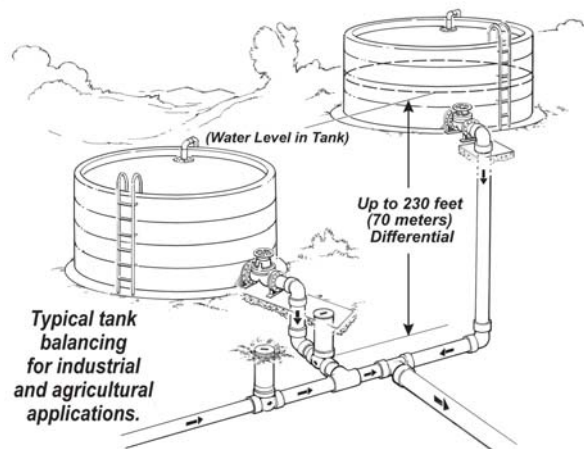
TYPICAL SITUATION WHERE A BACKWATER VALVE IS NECESSARY.

Sewage Application Diagram

Backwater Valves are excellent for maintaining equal water levels in multi-level ponds and storage tanks:



Pond Application Diagram



Storage Tank Application Diagram

Spears® Backwater Valves are offered in an economical Utility Backwater Valve or the full featured Industrial Backwater Valve designs, in a variety of sizes and pressure handling capacities.

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Spears® Utility Backwater Valves feature an easily serviceable and replaceable Flapper Assembly with extendable access using standard piping components. Designed for direct solvent cement connection to ASTM D 2665 DWV drainage pipe or any other IPS size pipe. Spears® IPS x Sewer adapters easily convert valve to ASTM D 3034 SDR 35 Sewer Pipe. Backwater Valves conform to requirements of ASME/ANSI A112.14.1 Utility Backwater Valves are designed to prevent backflow in numerous applications where easy service access for maintenance and cleaning is needed.

Features

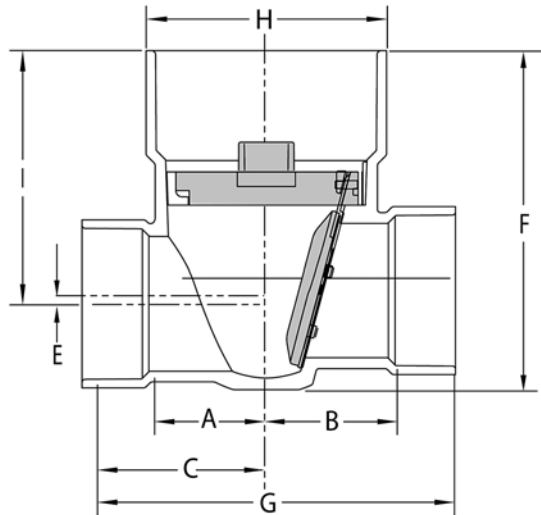
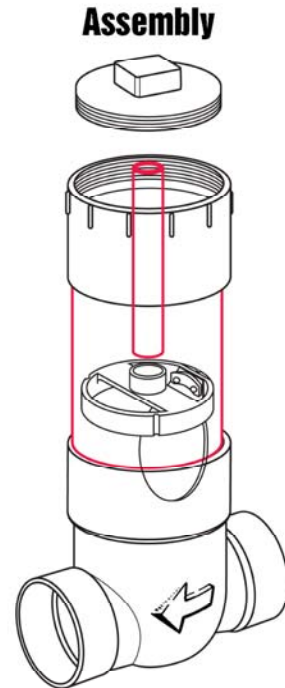
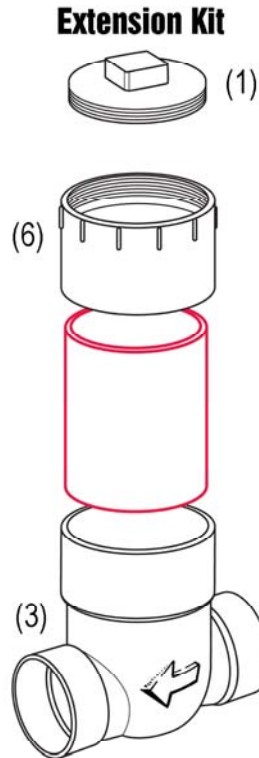
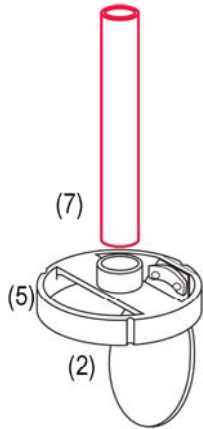
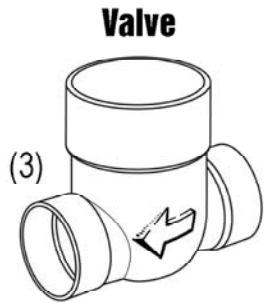
- Replaceable internal flapper assembly
- Extension Kit Adapter components allow easy construction of a valve extension with user supplied pipe cut to desired length
- Direct Valve Connection to ASTM D 2665 PVC DWV or other IPS size pipe. Spears® IPS DWV x Sewer & Drain Adapter Bushings are available for connection to ASTM D 3034 & ASTM D 2729 Sewer pipe
- Standard Valve Adapters Pressure Rated to 50 psi (115 feet of head) @ 73°F (23°C) - Optional 100 psi Adapter (232 feet of head) available
- Conforms to ASME/ANSI A112.14.1 for Backwater Valves



Valves Technical Utility Backwater Valve

Spears® Utility Backwater Valve has been engineered for easier installation with included Extension Kit Adapter components for use with User-Supplied Schedule 40 Class 125 Extension Riser pipe cut to desired length. Utility Backwater Valve package comes with 50 psi (115 feet of head) rated Extension Adapters. Optional Adapter Kits available in 100 psi (232 feet of head) rating. Can also use User-supplied equivalent adapter components..

1. Access Plug
2. Flapper
3. Valve Body
4. User Supplied 6" Riser Extension Pipe (SCH 40 or Class 125 - do not use SCH 80 pipe)
5. Collar
6. DWV Cleanout Adapter
7. User Supplied 1" or 1-1/4" Internal Extension Pipe (for lifting Flapper Assembly to service)



VALVE DIMENSIONS

Size	A	B	C	E	F	G	H	I
3"	3-5/8	3-13/16	5-3/16	7/16	7-5/8	10-5/8	7-1/4	9-5/8
4"	3-3/4	3-3/16	5-1/2	3/8	7-9/16	11-1/4	7-1/4	10-1/8
6"	4-15/16	4-15/16	8	1/2	9-15/16	15-15/16	9-3/8	13-9/16