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Sovent Cleaning Best Practices

Sovent cleaning refers to the specialized process of cleaning these unique systems in a non-intrusive manner by utilizing existing access points. Single-stack Sovent systems play a crucial role in facilitating proper and environmentally friendly drainage for various settings such as laboratories, commercial, residential, hotels, and industrial facilities.

These adaptable systems offer construction and design flexibility, however, require maintenance and cleaning using alternative pipe cleaning methods. Any obstructions or restrictions preventing the 25% waste 75% air per the system requirements may affect operation.

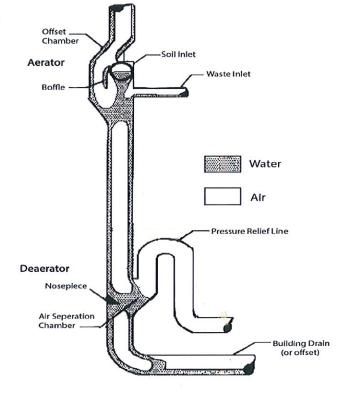
Lifecycles between cleaning periods are dependent on proper drain maintenance and/or potential deferred maintenance of the system. With proper drain maintenance, the average lifecycle between cleaning periods can be up to 12-30 years.

Understand the Sovent System: Sovent system is an engineered single stack drainage system that offers a different concept of waste and venting by slowing the velocity of the liquids and solids through a series of aerator fittings and double offsets. Before entering the building drain a deaerator fitting is placed at the base of the stack to minimize solid build up and slow the drainage before entering the building drain. This fitting is designed to have a pressure relief line which is to extend back (10) ten pipe diameters and tied into the building drain.

How It Performs: A Sovent single stack soil and waste system uses aerator fittings on each floor were soil and waste enter the stack and deaerator fittings at the base of the stack. By incorporating these fittings into a single multi-story stack the volume of drainage is greatly increased over the standard two stack waste & vent system.

The aerator fitting is designed with an offset chamber to slow the soil and waste matter at each floor, never allowing it to reach its terminal velocity thus eliminating back pressure.

The deaerator fitting at the base of the stack is designed to eliminate any buildup of solids and slow the contents before the change in direction. At the base of the stack the pressure relief line eliminates any pressure build up which might occur. This fitting is designed to assure a smooth



drainage flow from the vertical stack into the horizontal drain. The loop in the pressure relief line accommodates a "hydraulic jump" that occurs at the base of the stack.



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Inspection and Assessment: Conduct a thorough camera inspection of the plumbing system. CCTV inspection involves using a waterproof high-resolution video camera to record live images of the interior of a pipe. We use it to identify the location, scope, and type of obstruction or problem in drains, pipes, sewer laterals, and more. Completing a lateral cleaning using a sewer extraction method or a bacteria/enzyme maintenance treatment plan is recommended. Bacteria and enzyme treatments can vary per fixture count and can only be budgeted based on the manufacturer's recommendations.

Recommended Cleaning Methods: Provided below are recommendations for a full building clean of a Sovent system including the two main cleaning methods: Cyclonic media-based or wet jetting method. Preferred methods require hydro excavation trucks connected to the bottom of the stack to remove all debris.

Wet Jetting method:

The wet jetting method uses high-pressure water for cleaning and/or removing debris from pipes. A hydro excavation truck and or vacuum connected to the base of the stack is recommended for proper containment.

Advantages:

- · Original method of cleaning Sovent systems.
- Can restore the pipe to a clean and clear condition.

Disadvantages:

- Expense on average, wet jetting costs approximately 30% more than cyclonic or media based.
- Potential for water intrusion and/or flooding throughout the building.

Cyclonic Media-based cleaning method:

Cyclonic media-based cleaning includes rock salt, ice chips, or sand. A hydro excavation truck and or vacuum connected to the base of the stack is recommended.

Advantages:

- Lower cost in comparison to water-based jetting.
- Reduced risk for water intrusion and/or flooding during cleaning.
- Can restore the pipe to clean and clear condition; comparative to sand blasting reducing scale and tuberculation.

Disadvantages:

• Media needs to be properly flushed out of the system after cleaning.

Mechanical cleaning method:

The mechanical cleaning method uses carbide chains. Only recommended for risers and heavily plugged areas. Not recommended for cleaning baffle or slot vent. Mechanical cleaning leading to the baffle on the aerator, through the deaerator and the PRL is recommended.

Bacteria treatment:

So-Flo Plus is a bacteria enzyme treatment that was created by So-Flo Liquid Solutions. This product was developed to specifically maintain Sovent plumbing systems, and the only one approved by a leading Sovent manufacturer. The unique fittings in Sovent systems can make for some "hard to reach" spots in the system. The beneficial bacteria in So-Flo Plus thrives in this environment, quickly reaching and breaking down organic build up.



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Treatment programs are recommended annually on plumbing systems using So-Flo Plus and more information can be found by contacting lnfo@so-floliquidsolutions.com.

We appreciate the opportunity to work with you and are confident in our ability to deliver exceptional results. Should you have any questions or require further information, please do not hesitate to contact our office.

Sincerely,

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