

## MiniCascade Filter

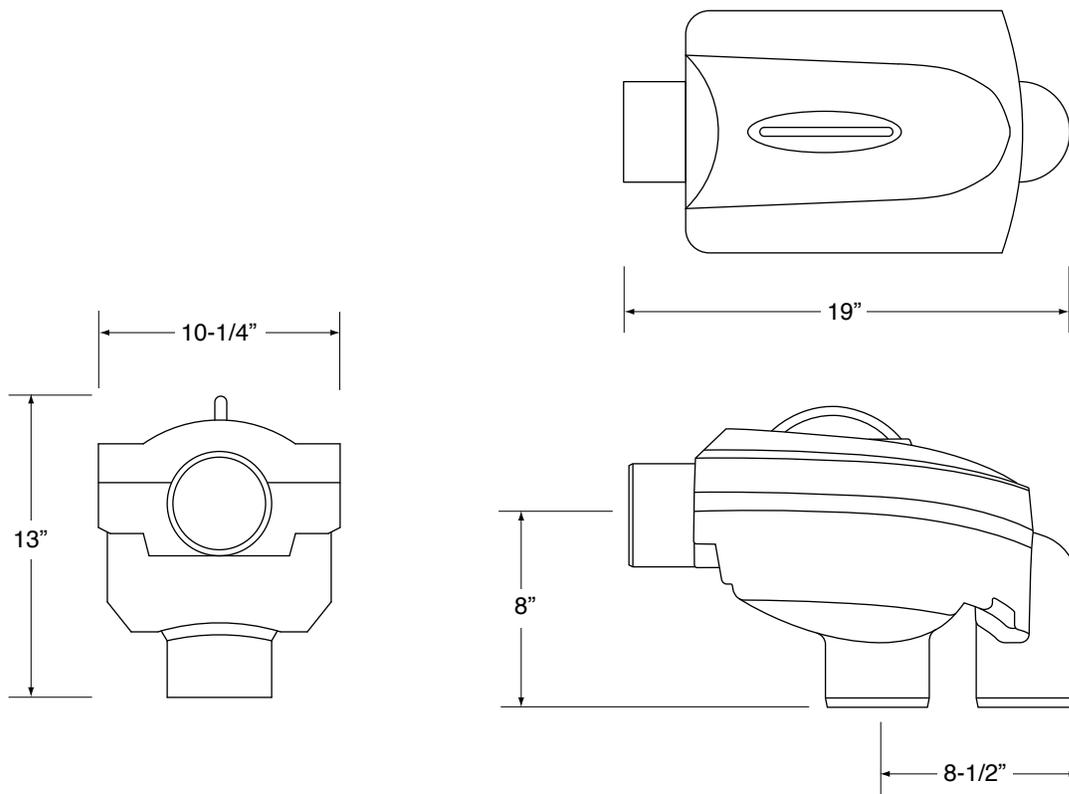
*MiniCascade Filters* are compact, high-rate mechanical filters designed to extract organic debris and particulates from either rooftop or surface rainwater. They can be installed within underground tank accessways having at least 30" inside diameter, or mounted on the wall of a building to serve a surface tank. Rainwater enters through the side port, cascades over and through a curved horizontal, multi-layer filter element, and exits through the bottom center port. Debris that cannot pass through the filter element is washed through the second bottom port opposite the inlet.

The *MiniCascade-100* can filter 95%+ of the rainwater from roofs up to 5,000 square feet, or 2500 square feet for seasonally dry climates intense rainfall. They are mostly self-cleaning and require only occasional manual cleaning. An optional internal sprayhead is available to further reduce maintenance in regions with high levels of dust or plant pollen.

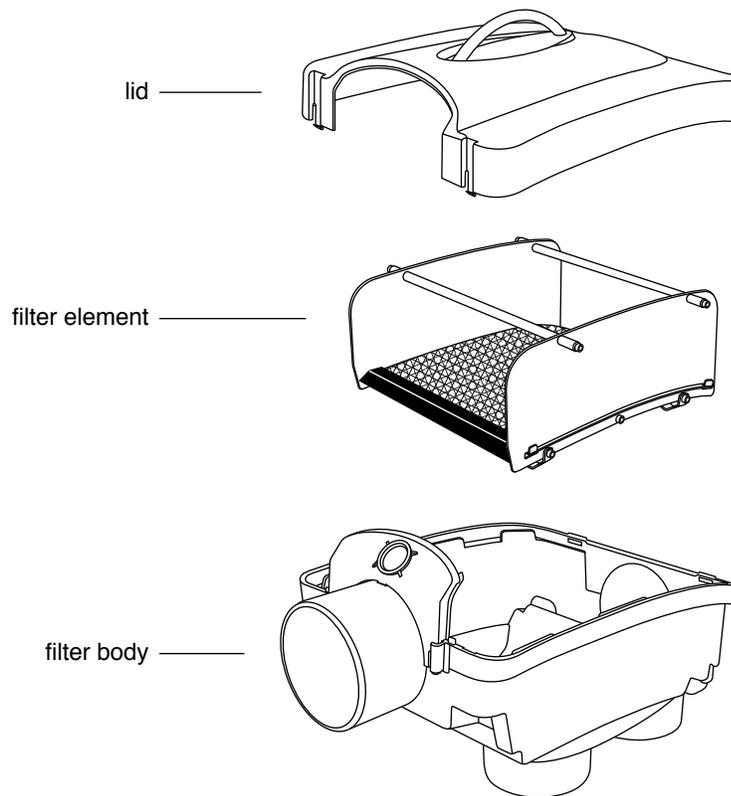


### PHYSICAL CHARACTERISTICS

Model	Inlet	Outlet	Overflow	Length	Width	Height	Max Area
MiniCascade-100	4"	4"	4"	19"	10"	13"	5000 ft <sup>2</sup>

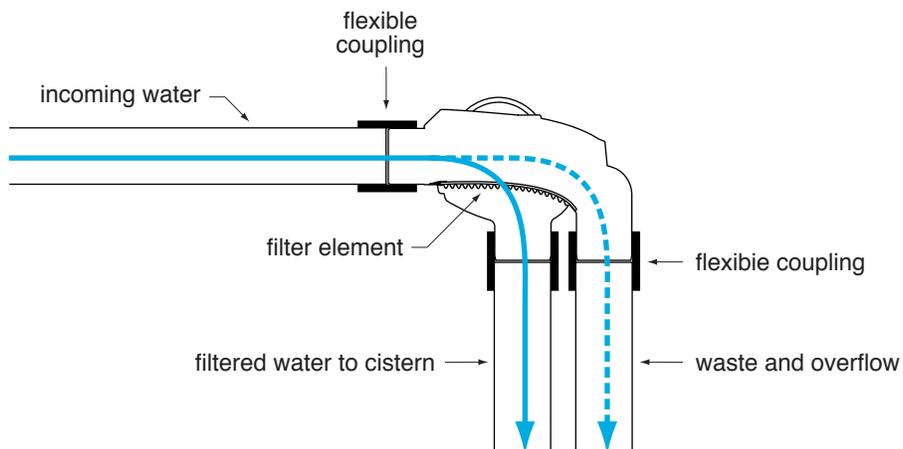


## COMPONENTS



## OPERATION

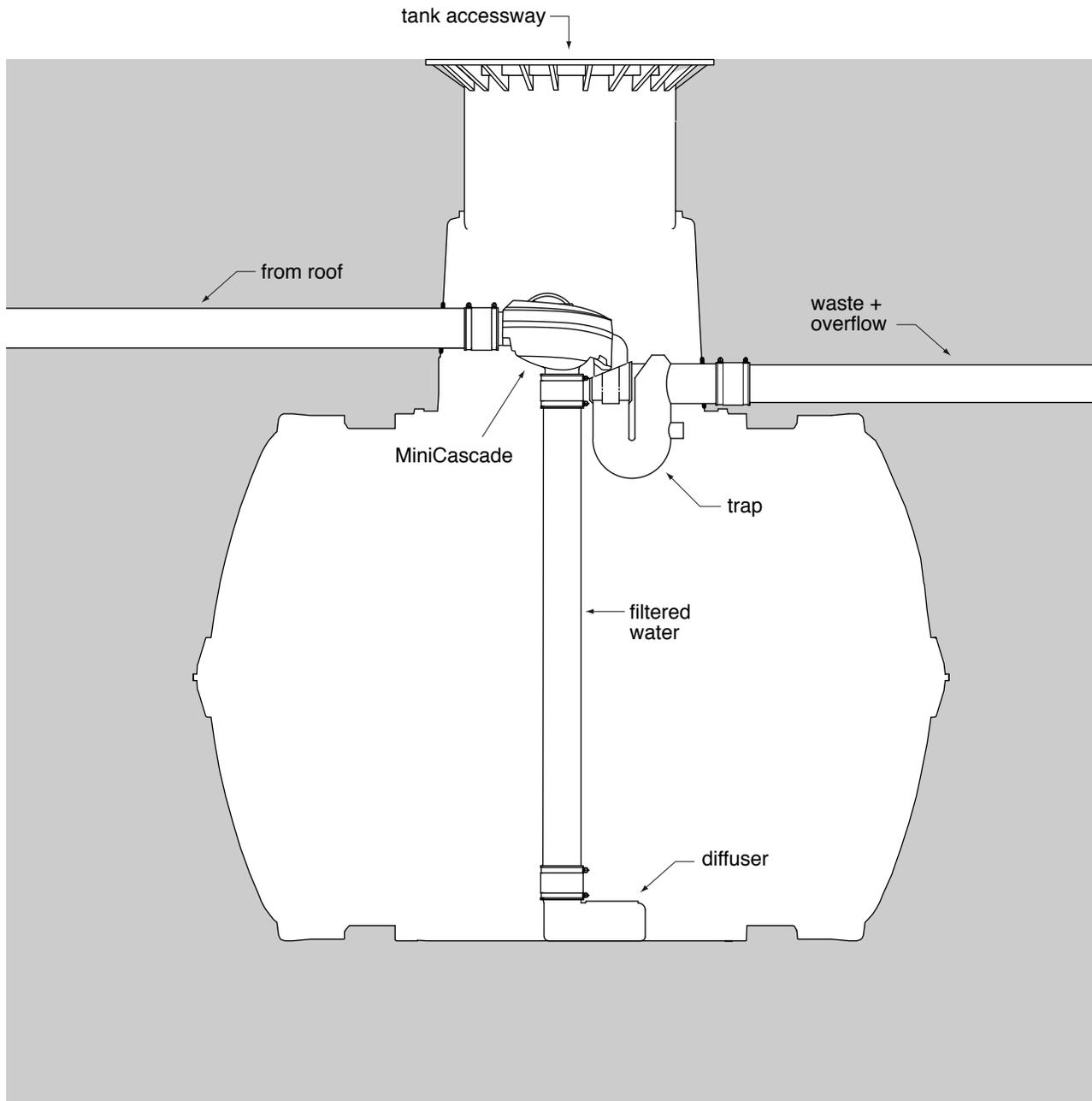
Rainwater enters through the side port, cascades over and through a curved horizontal, multi-layer filter element, and exits through the bottom center port. Debris that cannot pass through the filter element is washed through the second bottom port opposite the inlet. If the filter is clogged or the cistern cannot handle the hydraulic flow, unfiltered water overflows through the second bottom port.



## UNDERGROUND INSTALLATION

MiniCascade filters can be installed within the accessway of an underground tank provided the inside diameter of the accessway is a minimum of 30" to allow sufficient space to uncouple and remove the filter for access into the tank. In the illustration, rainwater enters through the side port, filtered water flows out through center of the filter to a diffuser at the bottom of the tank, and debris flows through the a trap and out of the tank. When a trap is used as shown, the outlet pipe invert is 6-1/2' lower than the inlet pipe invert.

Since the filter element is attached to the underside of the lid, it can be removed for inspection and cleaning simply by reaching into the accessway and lifting the lid handle. An optional sprayhead uses filtered rainwater delivered by the rainwater system pump to rinse the filter surface in place, and since the sprayhead is located at the filter inlet, most of the rinse water is re-captured.



## SURFACE INSTALLATION

MiniCascade filters can be wall mounted with a sturdy metal bracket. Since they are made of black plastic that is UV stable and opaque, they can be directly exposed to sunlight without additional protection. In the illustration, rainwater enters through the side port, filtered water flows out through center of the filter to a diffuser at the bottom of the tank, and debris flows through the a trap and out of the tank. Flexible elbows are used to make all connections.

Since the filter element is attached to the underside of the lid, it can be removed for inspection and cleaning simply by lifting the lid handle. An optional sprayhead uses filtered rainwater delivered by the rainwater system pump to rinse the filter surface in place, and since the sprayhead is located at the filter inlet, most of the rinse water is re-captured. The sprayhead is ideal for tall tanks to reduce the need for climbing ladders.

