

## Tank Diffusers

When rainwater is simply dumped into a storage tank, the resulting turbulence suspends accumulated sediment at the tank bottom and sinks floating debris at the tank surface. Until the water column has sufficient time to re-stratify, often a day or more, the quality of extracted rainwater is significantly diminished. This turbulence can be substantially reduced by installing a vertical inlet pipe connected to a *diffuser* at the bottom of the tank that reduces the flow velocity and reverses the flow direction upward and away from the sediment layer.

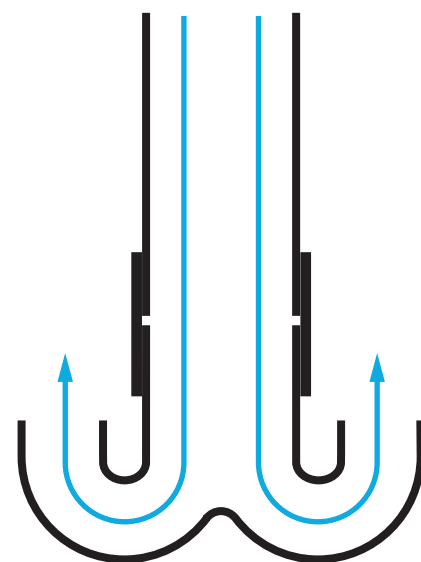
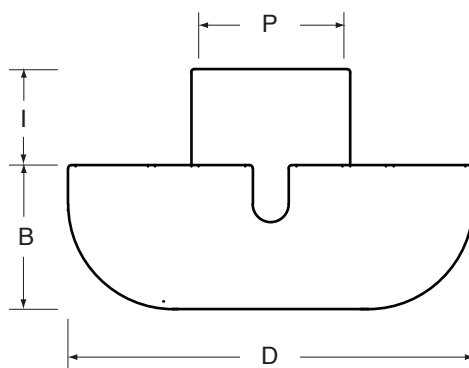
*CT Tank Diffusers* are hydrodynamically optimized to minimize turbulence. Gently curving interior flow channels preserve laminar flow, and four annular outlets disperse water uniformly in all directions. The total cross-section of the outlets is at least three times the cross-section of the inlet, reducing the flow velocity by more than two-thirds. Since all surfaces are curved and each outlet is almost as large as the inlet, the diffusers are inherently self-cleaning.

The diffusers are made with thick-wall, potable-grade polyethylene in three sizes to fit 4", 6", or 8" pipe. Inlets are made to standard pipe dimensions so they can be joined to inlet pipes with flexible couplings or can fit directly into the belled end of gasketed pipes. Flexible mechanical connection eliminates the need to work with adhesives in confined spaces, allows easy adjustment, and prevents damage to underground tanks from compression during backfilling.



### DIMENSIONS

Pipe Size (P)	4"	6"	8"
Base Height (B)	4"	6"	8"
Inlet Height (I)	4"	4"	4"
Diameter (D)	11-1/2"	17"	22"



water flow through diffuser