

High-Rate Sand Filters

Sand is the oldest and most popular method of filtration. Sand filters have two things in common:

1. When in the filtration mode, water always flows from top to bottom.
2. All have some sort of lateral or underdrain with slots to hold back sand while allowing clean, filtered water to pass through and return to the pool. High-rate sand filters use a special filter sand, normally .45 to .55 mm (also known as pool grade #20 silica sand), because it has sharp edges that separate particles, allowing filtration to take place. They operate on the basis of "depth" filtration where dirt is driven through the sand bed and trapped in the spaces between the sand particles. Initially, a clean sand bed removes larger particles, and then, as the bed starts to load up with dirt, the filter removes finer particles. The sand can be cleaned by backwashing, which involves reversing water flow through the filter to the "waste" line.

Features of a Sand Filter

1. **Flange Clamp Design** allows 360° rotation of valve to simplify plumbing.
2. **Integral Top Diffuser** ensures even distribution of water over the top of the sand media bed. Full-size internal piping gives a smooth, free-flowing performance.
3. **Corrosion-Proof Filter Tank** molded of tough, durable colorfast polymeric material for dependable, all-weather performance with only minimal care.
4. **Multi-Lateral Underdrain Assembly** with precision engineered, self-cleaning 360° slotted laterals gives totally balanced flow of sand.
5. **Integral Molded Drain Plug** for easy draining of tank, without the loss of sand.
6. **Totally Corrosion-Proof Base** is rugged and attractively styled to provide strong, stable support.

