

Replacing Filter Sand

Generally, filter sand should last five to ten years. Over the years, filter sand loses its capacity to filter due to erosion of the granules and impaction/matting of the sand from oils, calcium, clay balls, and dirt.

If you can relate to any of the statements below, chances are it's time to replace your sand:

I have to backwash my sand filter more frequently due to faster pressure rises.

Example: If your filter used to require backwashing every eight days, and now the pressure indicates you should do it every five days, you need to replace your sand.

My pressure gauge indicates that I need to backwash, but very little dirt appears to be flushed out when I do it.

If your viewing glass isn't showing as much dirt when you backwash, then you need to replace your sand.

Ew, a stream of dirt flows from my inlets after I backwash and rinse!

Dirt flowing from your inlets isn't a pretty sight, and it's not healthy for your family or your pool. You need to replace your sand.

I recently used a biguinide product in my pool and was told I would afterward have to replace my sand.

You were told right! If you've used a product such as BAQUACIL in your pool, you need to replace your sand.

Replacing the Sand

You can have a professional Memphis Pool Technician perform this task, or you can tackle the job yourself. Either way, we have illustrated the steps that are taken during the process of sand replacement.

1. First, obtain sand of the proper grade for your filter. Most sand filters use filter sand, which is typically 0.45 to 0.55 millimeters in diameter. On most filters, a bed of pea gravel is recommended at the base of the filter. Consult manufacturer literature or Memphis Pool for the proper amount to add for your filter.

SUGGESTION: Ask about using ZEOSAND instead of sand. ZEOSAND

a. increases your filter's capacity, and
b. filters out even smaller particles than sand.
The result is greater water clarity and sparkle combined with the advantage of less frequent backwashing.

2. Open the filter by following these steps below:
 - a. Turn off the pump. Disconnect the multiport valve plumbing by backing off the threaded union collars. Some valves are threaded into the body of the tank, others are bolted on. Remove the valve.
 - b. Some sand filters have a large diffuser basket just inside the tank. Remove this and clean it out. You can now access the sand.
3. Remove the old sand by scooping it out.
4. Cover vertically exposed plumbing or pipes with some type of protective cap.
5. Fill the bottom third of the tank with water to cushion the impact of the sand on the laterals.
6. Slowly pour the gravel into the filter. Then, pour the sand. Remember to be careful of the laterals. Fill the sand to about two-thirds of the tank. Although different models require varying amounts of sand, a good rule of thumb is to leave 10-12 inches of freeboard - that is, the space between the top of the sand bed and the bottom of the diffuser assembly. Adequate freeboard will prevent sand loss during backwashing. Conversely, if the sand bed is too shallow, the filter will work but will load with dirt quickly and require frequent backwashing.

NOTE: Service and installation manuals offer various tips to help you change the filter. Some, for instance, recommend holding the vertical sandpipe to make sure it isn't dislodged as the sand is being added.

7. Reassemble the filter parts, remove the protective caps, and replace the top valve or dome on the top of the filter tank. Some assemblies are threaded into the top of the tank, while others are held in place by a clamp assembly. All assemblies use o-rings to create a good seal, with manufacturers typically recommending use of an appropriate o-ring lubricant to ensure a good seal.

8. Start system. Rinse first, then backwash to remove dust and impurities from the new sand. Then, set to "filter" and operate as normal. If using ZEOSAND, start the system on "backwash," then rinse after four minutes. Repeat two more times before turning to the "filter" position. You're ready to roll!