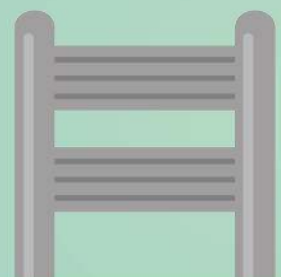




Circulation plays a major role in keeping your pool water clean and safe.

Circulation of the pool water allows you to filter your water, removing debris and microorganisms. It also helps to spread and dissolve any chemicals that you add to the water.

This guide will explain each part of the circulation process.



Skimmer

The skimmer is a unit that is built into the concrete at the side of your pool.

Skimmers suck the water out of the pool and into your filtration system.

They should have a small plastic basket inside to catch any large debris such as leaves, sticks, and bugs before it enters your pump.



Main Drain

This is another place where water is sucked in and pumped through your filtration system.

Main drains are normally located at the bottom of the deep end of the pool.

While the skimmers take care of pulling water from the surface of the pool, main drains are pull water from the bottom.



The Pump

Your pool pump creates suction to draw the water from the pool, then sends it through the filter and back into your pool.

Pumps come in all shapes, sizes and speeds. The speed is the important part, the larger the pool the larger pump it needs. The pump speed is measured in Horsepower and can range from $\frac{3}{4}$ horsepower to 3 horsepower.



The Filter

Once the pump has sucked the water in, it pushes it through your filter. Your pool filter cleans out the fine particles from the water before it goes back into your swimming pool.

There are two main types of filters, Sand Filters and Cartridge Filters. Each has their own benefits and drawbacks.



Return Jets

These jets push the water back into your swimming pool after it's been filtered. The jets also help to circulate the water around the pool to allow the skimmer a to pick up more debris.

The return jets in your pool should be pointed downward at a 30° angle for optimal circulation of pool water and chemicals.

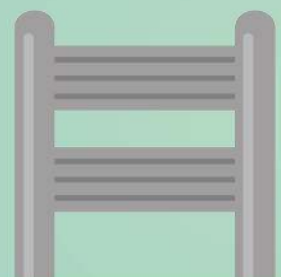
Note: If you have jets located in your steps, these are also return lines.



Extra Equipment

The equipment we have already discussed are the essential parts to maintain a properly functioning swimming pool.

The following equipment is common but not required to keep your pool running.



Pool Heater

It goes without saying, but most pools in Winnipeg need a pool heater.

There are a few types of pool heaters including natural gas, electric and solar. You can choose a heater or a heat pump, each with its own advantages.

Although, it's not a necessary piece of equipment when it comes to circulation and cleaning your pool, it's very nice to be able to keep your pool at comfortable temperature.



UV Sanitization System

The intense germicidal ray of the UV light destroys 99.9% microorganisms. The concentrated electromagnetic ray also eradicates organic matter, which eliminates chloramine formation.

To get to the light, water is pumped through the inlet fitting at the bottom of the unit. After being sanitized, the water is pushed back out through the outlet back into your pool.

This type of system works so well that it's actually been in use for more than ten years to disinfect public drinking water!



A Chemical Feeder

A chemical feeder is a handy piece of equipment that makes adding sanitizer to your pool very easy.

Just fill it full of the correct sanitizer (i.e. chlorine, bromine, etc.) and the feeder will automatically add it to your pool on a set schedule.

This should always be the last piece of equipment in your filtration line.



Dead Areas

Dead areas are spots in your pool that have poor circulation.

Some common spots include:

- ◆ **Behind your ladder (s)**
- ◆ **In and around pool steps**
- ◆ **All cracks, creases, crevasses**
- ◆ **Underneath the skimmer**

Sometimes these dead areas are unavoidable. It will help to have your return jets angled properly to improve circulation. You should monitor and may just have to take care of these areas manually using a pool brush.

