Noise – Pool and spa pumps, and Pool cleaning systems

Pool and spa pumps

Pool pumps and filters can often cause a noise disturbance to nearby neighbours. When installing a swimming pool or spa, consideration should be given to the location and type of equipment.

Many complaints arise after the pool pump or spa pump has been installed and the only method of reducing the noise is by providing a barrier between the pump and the neighbouring premises. The following advice on preventing unnecessary noise may be helpful:

- When choosing a pool motor for your pool, consideration should be given to purchasing a water-cooled pool motor or a quiet air-cooled model.
- Install the pool motor on rubber matting (25mm is usually ideal).
- Provide a flexible coupling secured by jubilee clips on the inlet side of the motor. This isolates the motor and can prevent any noise transmission along the pipe work.
- Construct an enclosure over the pool motor, ensuring there is adequate ventilation to keep the motor cool (unless you have a water-cooled motor). The enclosure should be constructed of dense materials such as brickwork or 30mm thick jarrah and be lined internally with acoustic lining or batt style roof insulation.
- Finding the right location for the pool pump is an important decision. Don't assume that a pool pump that is described as quiet or compliant with Australian Standards, will not cause a disturbance to neighbouring properties. When installing your pool, seek advice from the installation company.

A range of measures can be used to reduce the noise impact of pool pumps once installed, including:

- Ask your neighbours if they are being disturbed by the pool pump, and if so, are there particular times when the pump disturbs them more. Most people are affected late at night and early in the morning when they are trying to sleep. This is particularly inconvenient for people who have shift work.
- Place the pool pump on a timer. This will ensure that the unit is not mistakenly left running and will limit the time of operation. Most domestic pools need the pump to run for 6-8 hours per day in Summer in order to achieve the desired turnover of water. Remember to check the timer regularly as power blackouts or power surges can affect the operation of the timer.
- Maintain your pool equipment, keep the filter clean and service moving parts. Poorly maintained equipment can cause higher noise levels and reduce the effectiveness of the pump. Contact the manufacturer or installer for further advice.

Pool cleaning systems

Most pool cleaners can, under certain circumstances, cause low frequency noise to be heard at nearby premises.

The noise is generated by the intermittent suction action of the cleaner as it moves slowly around the pool, causing sound waves to be transmitted into the ground. This can sometimes be heard as a low frequency thumping sound within a neighbour's home.

Pool owners often leave the cleaner connected to the pool pump in Summer. During these months the pool pump may operate for up to eight hours a day, so if the cleaner is connected while the pool pump is on, the disturbance caused to the neighbours will increase. As the disturbance enters a home through the floor, the neighbours who are affected are unable to escape the noise by closing their windows. Where noise from pool pumps or equipment are causing a noise disturbance, the neighbours may lodge a noise complaint.

There are a variety of valves designed to reduce the vibration and there are also several pool cleaners which make no noise at all. It may be wise to do some research prior to purchasing a pool cleaner or seek advice from the pool installation company.