



**Waterco Far East  
Water Treatment**

Selangor, Malaysia



*Masjid Lapangan Terbang Subang*

# Enhancing Ablution Pool Filtration at Masjid Lapangan Terbang Subang

## Context and Motivation

Maintaining the cleanliness and hygiene of ablution pools in mosques is crucial for ensuring a pure environment for worshippers performing Wudu (ablution). However, traditional cleaning methods often result in significant water wastage and labour-intensive maintenance routines. Recognizing these challenges, Waterco approached Jabatan Agama Islam Selangor (JAIS) to sponsor the installation of the WuduPure system in a mosque in need.

Accordingly, JAIS nominated Masjid Lapangan Terbang Subang, where the mosque committee had raised concerns about debris accumulation and excessive water use during cleaning. The responsibility of installing the WuduPure system at Masjid Lapangan Terbang Subang fell on the capable hands of AS Engineering Sdn Bhd.



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Waterco Limited (ASX:WAT) pioneers reliable solutions for healthy, safe water environments, which are used in residential, commercial and industrial applications in over 40 countries. Established in 1981, it has become a global brand recognised for designing and manufacturing filtration and sanitisation equipment for aquaculture, and water treatment sectors.

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## The WuduPure System - Dissecting Each Component

The filtration system comprises the following components:

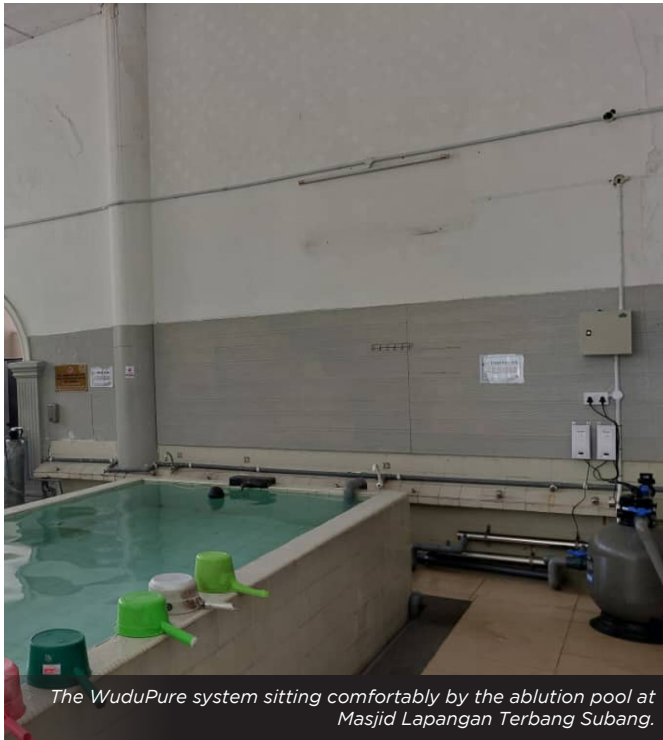
1. **Hydrostorm ECO-V 100:** An energy-efficient pump designed to deliver optimal water flow with minimal energy consumption, thanks to its advanced impeller and diffuser design. Built for durability, it features a single-piece strainer pot and volute made from state-of-the-art engineering plastics, ensuring long-lasting performance and reduced maintenance. In addition, at its low-speed setting, the Hydrostorm ECO-V operates with a significantly reduced noise level.
2. **Solclear 150 UV Steriliser:** A UV sterilization unit that effectively eliminates harmful bacteria and microorganisms from the water through environmentally friendly ultraviolet technology, without needing any addition of chemical compounds.
3. **Glass Pearl Filter Media:** A high-performance filter medium made from 100% pure glass, providing exceptional water clarity and filtration efficiency. Glass Pearls are also capable of filtering particles as small as 3 microns. Its smooth surface greatly reduces backwashing water usage by up to 20%, saving both precious time and water.
4. **Inline Strainer:** A pre-filtration device that captures larger debris, reducing the load on the main filtration system.
5. **Micron Fibreglass Filter:** A robust media filter designed for high-capacity filtration, ensuring clean and clear water in the ablution pool. Its construction using advanced filament winding technology provides exceptional durability and resistance to corrosion, UV light and fire, making it an ideal solution for high-use environments.



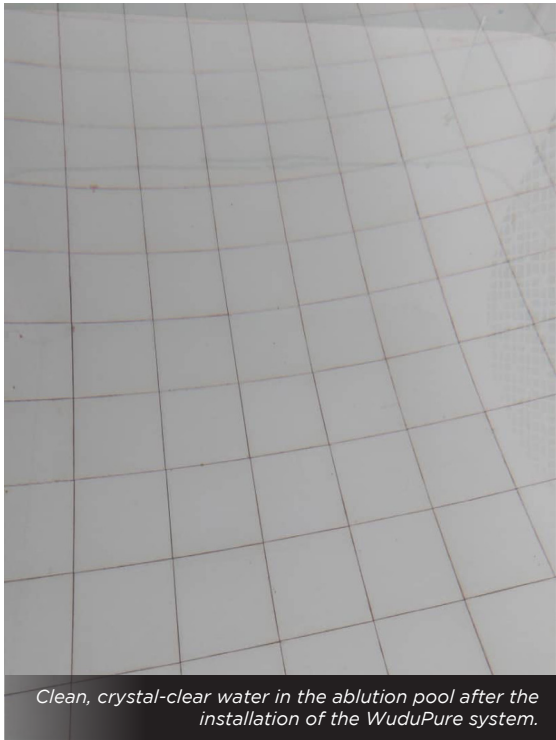
## The WuduPure Edge: Features and Benefits

The WuduPure system offers several noteworthy advantages, addressing the specific needs of Masjid Lapangan Terbang Subang:

- **Efficient Filtration:** The Hydrostorm ECO-V 100 pump, coupled with the Micron filter, ensures that the ablution pool water is continuously filtered and circulated. This combination maintains optimal water clarity and quality by removing debris and contaminants effectively.
- **UV Sterilization:** The Solclear UV steriliser uses environmental-friendly ultraviolet technology for the disinfection of water, without requiring any addition of chemical compounds. Therefore, Solclear can sterilise water safely and efficiently, eliminating any infection-causing microorganisms.
- **Superior Filter Medium:** The Glass Pearl filter medium provides exceptional filtration performance, trapping fine particles and enhancing water clarity. Its spherical shape also reduces backwashing frequency, considerably saving water and maintenance efforts.
- **Debris Management:** The Inline Strainer captures larger debris before it enters the main filtration system, thereby reducing the filtration load. Not only does this protect the main filter in the long run, but it also ensures smoother, more efficient operation.



The WuduPure system sitting comfortably by the ablution pool at Masjid Lapangan Terbang Subang.



Clean, crystal-clear water in the ablution pool after the installation of the WuduPure system.

### Project Success and Client Satisfaction

Following the installation of the WuduPure system by AS Engineering, the committee at Masjid Lapangan Terbang Subang has reported significant improvements in the maintenance and cleanliness of the ablution pool. They highlight that the advanced filtration system greatly reduces the amount of water required for cleaning, aligning with the mosque's goal of minimizing water wastage. The combination of mechanical filtration and UV sterilization ensures that the water remains clean and free from contaminants, providing a safe environment for worshippers. Additionally, the efficient operation of the WuduPure system reduces the frequency and effort needed for pool maintenance, allowing mosque staff to focus on other important tasks.

Overall, the committee expresses their satisfaction with the outcome, noting that the WuduPure system effectively addresses their concerns about water usage and pool cleanliness. They commend Waterco for providing a solution that not only meets but exceeds their expectations, ensuring a clean and hygienic ablution facility for all fellow worshippers.

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