

Managing Stormwater at a University in Jeddah

Polypipe Middle East uses Polystorm for their first project in the Kingdom of Saudi Arabia.



CASE STUDY

Project

King Abdulaziz University
Jeddah, KSA

Client

King Abdulaziz University

Application

Infiltration Tanks

Products Used

Polystorm - PSM1

King Abdulaziz University (KAU) is recognized as a prestigious, world-class university due to its international outreach and collaboration in research, innovation, and accreditations. With more than 82,000 students, KAU is ranked as the top university in the Arab world and as of 2017, it has featured in the top 150 global universities. The opportunity to collaborate with such an influential client was the perfect introduction to working in the Kingdom of Saudi Arabia for Polypipe Middle East.

Polypipe Middle East worked in cooperation with the consultant, Flour Arabia Limited, and contractor, Masarrat Al Wosta Establishment to provide a solution to the issue of stormwater drainage on university grounds. Jeddah has experienced some strong storm events, which are not only dangerous, but can also cause inconveniences and property damages. To avoid flooding and find a solution to its consequences, the university rightfully acknowledged the need for prevention and protection.

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Initial plans included the use of ponds as a method of reducing the impact of stormwater. However, with the guidance of our team's extensive technical support, the client decided against the traditional approach and instead adopted our innovative solution - Polystorm. Polystorm was used for soakaway application.

It was installed beneath campus grounds, thus enabling surface water to infiltrate back into the earth close to where it falls. As the first Polystorm installation in Saudi Arabia, this successful implementation opens Polypipe Middle East up to future opportunities within the country.

Polystorm (PSM1) was selected as the best solution for the project demands due to its modular design, allowing for more flexibility in shape. This flexibility enables a larger drainage surface area and thus faster surface water clearance time, with minimal maintenance and installation costs. The product is ideal for versatile use and can be installed for both shallow and deep excavation systems in both trafficked and non-trafficked areas. Other merits of the Polystorm system include its lightweight yet robust structure, which makes it quick and easy to install, while still offering excellent health and safety installation benefits.

Using a value engineering approach, Polypipe Middle East was able to reduce the tank size in line with the information provided by the client. Engaging this approach at an early stage helped to avoid costs down the line.

By using Polystorm, the client was able to reduce installation time, integrating 400 m³ of product per day, as well as lower costs compared to traditional concrete systems. Polypipe Middle East were able to deliver a premium quality solution, introducing a new and innovative water management solution into the Kingdom of Saudi Arabia.