

Enhancing Safety at Trility's Water Treatment Plant

A custom-engineered FRP access floor delivering safer, corrosion-free operations at Loganholme's water treatment facility.

THE PROJECT

Project Category:**Access Platform Design & Installation****Scope of Work:****Design, supply, and installation of a raised FRP flooring system.****Solution:****Pedestal-supported FRP grating providing safe, corrosion-free access.****Project Challenges:****Complex pipe layout, tight timeframe, and remote site logistics.**

THE SOLUTION:

Trility engaged FRP Engineering to design and install a raised access floor within a newly bunded section of their Loganholme water treatment plant. The area featured multiple pipes and valves at ground level, creating significant trip and safety hazards for operators needing to step over live lines.

FRP Engineering proposed a pedestal-supported FRP grating system — a lightweight, corrosion-resistant, and non-conductive solution ideal for harsh water treatment environments. The design provided a safe, accessible platform that maintained clear access to operational equipment while reducing the risk of trips and falls.

BEFORE FRP:



Safety Concerns | Limited Access

AFTER FRP:



Improved Access and Safety



Easy Installation and Cleanability

THE FRP APPROACH:

Due to the maze of pipework and tight delivery timeframe, FRP Engineering tailored its approach to maximise efficiency and minimise site disruption.

Instead of using a traditional support framework, the team employed FRP pedestals to support the grating, allowing for precise adjustment around existing infrastructure. While a full pre-measure and off-site fabrication phase wasn't possible, FRP's skilled technicians fabricated sections on-site with exceptional precision and speed.

All materials, spares, and tools were pre-packed and shipped ahead of time from FRP's Canning Vale workshop, ensuring seamless installation once the team arrived on-site. The works were completed under strict safety and quality protocols, in full coordination with Trility's operations team — allowing the plant to remain in full operation throughout.

"FRP Engineering's team worked quickly and efficiently to deliver a high-quality outcome. The new raised floor has made a real difference to safety and ease of operation." — Trility Site Supervisor, Loganholme Water Treatment Plant

THE FRP RESULT

Safer, Clearer Operator Access

The raised FRP flooring removed trip hazards and created a clear, consistent walkway, allowing operators to move confidently and safely through the area.

Built for Corrosive Water Treatment Environments

FRP grating provides a long-lasting, low-maintenance solution that resists corrosion, chemicals, and moisture—ideal for water treatment facilities.

Improved Accessibility for Maintenance Teams

Operators have reported significantly easier access, with workflows no longer hindered by obstructive pipework.

Reduced Maintenance Burden & Increased Service Life

The new FRP platform reduces ongoing coating and repair cycles associated with steel, offering a durable, cost-efficient alternative over the asset life.

Completed in Just Three Days

The upgrade was delivered safely and efficiently, with surface preparation, pedestal installation, and FRP grating completed in under three days—minimising disruption to plant operations.



FRP PRODUCTS USED:

- FRP Pedestals – for modular, corrosion-resistant floor support
- Moulded FRP Grating – providing slip-resistant, lightweight access flooring
- FRP Engineering Design & Installation Expertise – ensuring safe, efficient delivery in a live plant environment

CONTACT US

For more information on our range, email us on enquiries@frpengengineering.net or call us at (08) 9455 4343 to discover our range of safety work access platforms today!