

# Dutypoint case study: Digital Reality Data Centre



**Location:**  
Amsterdam, The Netherlands



## PROJECT SUMMARY

Dutypoint were contracted to supply a water system to a new state-of-the-art data centre in Amsterdam, The Netherlands.

The purpose of the installation was to provide sufficient water supply to the vital server cooling HVAC system used to protect the servers from over-heating in the summer months.

## PROJECT CHALLENGE

A unique consideration of this project came from the client requiring the ability to shut of the cooling system during colder months to protect against freezing.

This meant we had to ensure that, any water storage tanks installed, could be totally emptied via an automated custom drain off system remotely managed by the client.

The project also required an extremely high inlet flow rate in order to meet the demands of the internal HVAC system. However, due to the turbulence caused by the extreme flow rate entering the water tanks, traditional level control systems wouldn't be suitable.

Further-more, the area available to install the required water storage units, was very limited – Adding yet more complexity to the already very unique project.

## PROJECT NAME

Digital Reality Data Centre

## INDUSTRY SECTOR

Data Centre

## PROJECT TYPE

Construction

## PROJECT VALUE

£50,000

## MAIN CONTRACTOR

Mercury BV

## PROGRAMME

3 months

## COMPLETION

2017

## PRODUCT SUPPLIED

2x QuadraTANK

ElevaTANK

WRAS Approved Flexible Bellows





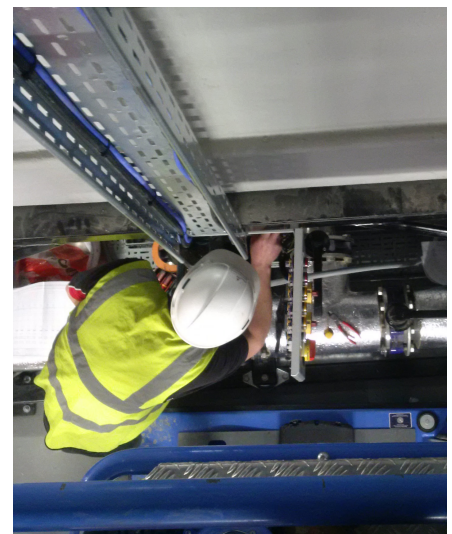
*Rooftop QuadraTANK installation at Digital Reality,  
Amsterdam, The Netherlands*



*ElevaTANK used as a mains inlet  
break-tank on the ground floor*



*QuadraTANK  
space-saving solution*



*Installing the custom automated  
shut-off valves*

## PROJECT SOLUTION

After a full site survey, we advised that a rooftop QuadraTANK would be the most appropriate space-saving solution to house the water storage and booster set. Also, in order to overcome the water turbulence caused by the high flow rate, the standard solenoid valve needed to be replaced with a special fast-close, battery powered, backup actuator valve.

Additionally, in order to comply with local water regulations and also meet the flow rate needed, we installed a specially designed, 3.2m tall, separate ElevaTANK break-tank at ground-level to store water from the mains inlet. This stored water was then pumped into the rooftop QuadraTANKs and feed into the HVAC system.

Using this combined system, we were able to meet local water regulations, supply the rooftop tanks with the constant water supply needed to cope with the demands of the industrial HVAC cooling system used at Digital Reality and ensure the cooling system could be safely switched off in the winter months without the risk of freezing..