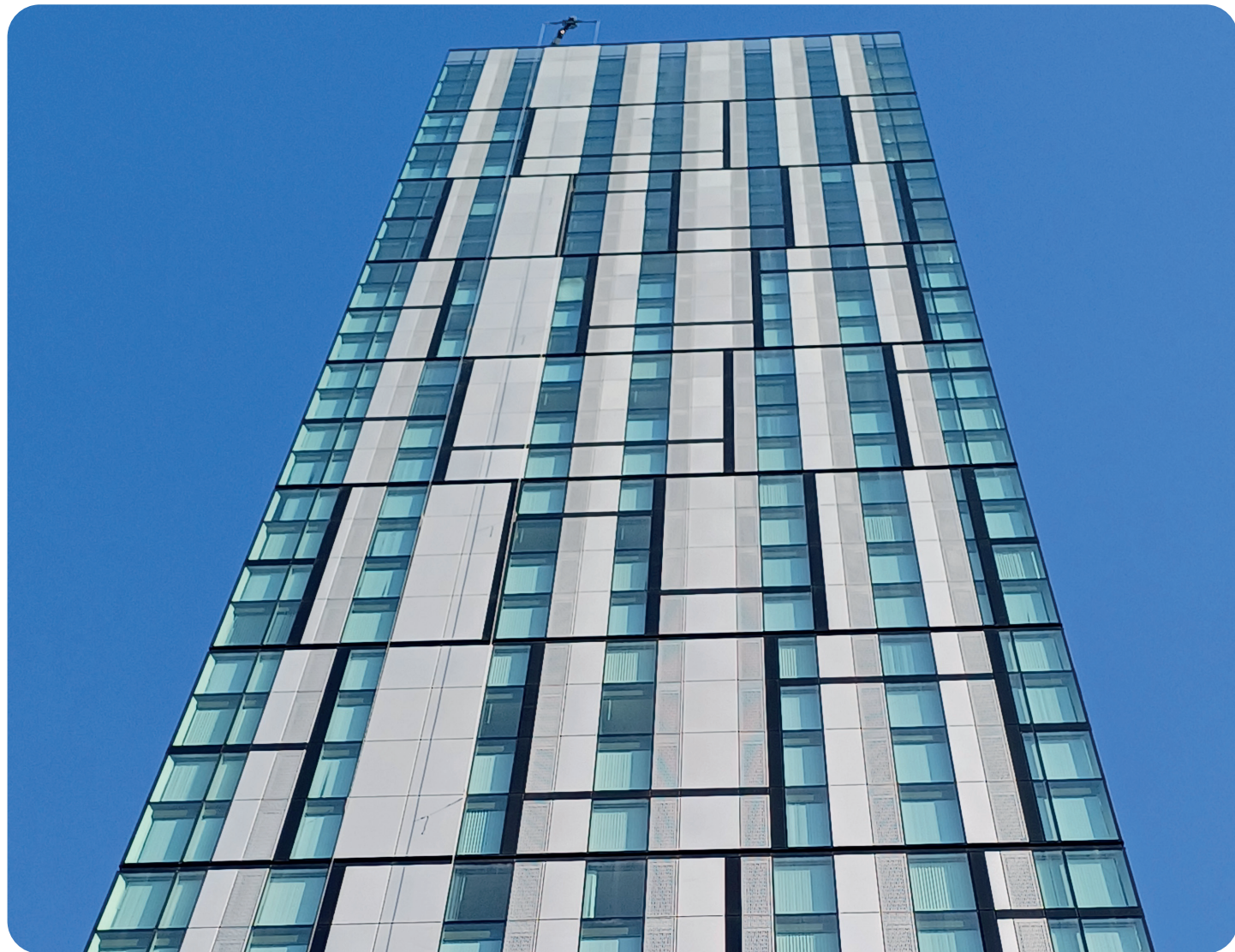


Handling the pressure of a prestigious Manchester development.



Bankside is one of a number of projects being developed by Renaker and MWA Ecosystems, which are dramatically transforming the Manchester skyline. Bankside is a 43 storey residential building with some commercial space on the ground floor. Located within the Colliers Yard neighbourhood, the development comprises 444 luxury apartments, a mixture of 1-, 2- and 3-bedroom apartments and penthouses, all with an exceptional level of residential amenity. Bankside is the first of three towers to be released for sale within Colliers Yard.

Comprehensive drainage and water supply solution (Terrain Soil & Waste, Terrain FUZE and MecFlow Fusion) installed in 43 storey residential tower with ground floor commercial space.

CASE STUDY

Project

Drainage and water supply systems.

Client

MWA Ecosystems on behalf of Renaker.

Application

Drainage (soil and waste) and water supply systems.

Products

Terrain FUZE (HDPE drainage), Terrain PVC drainage, MecFlow Fusion water supply system.

High pressure in a tight space calls for innovative thinking and products.

Mechanical plumbing specialists, MWA, set a tough brief for the water supply system at Bankside. A solution was required which could handle the high pressures needed to supply the whole of the Bankside tower from a single basement pumproom. All while working within a tight site footprint and budget.

Polypipe Building Services has worked with MWA on a number of Manchester projects including the four towers of Deansgate Square, and the two towers at Crown Street. These projects have seen Polypipe and MWA develop a strong relationship and a highly effective approach to high-rise projects.

Gavin Robinson, National Business Development Manager at Polypipe Building Services, said: "We supplied the drainage system throughout the tower, with Terrain FUZE (HDPE) used on the lower levels and Terrain Soil & Waste (PVC) installed all the way up the rest of the property.

"MecFlow Fusion was chosen for the water supply system because of the high pressures that the product can cope with, and was used for the tower's risers, run outs and manifolds serving the apartments."

Fusion uses a fibre reinforced multi-layer PP-RCT pipe material and has been designed for plantroom, riser, header and runout applications; and has been tested to achieve a fire classification rating of B-s1, d0.

Tall buildings will often need a second pump station halfway up, to effectively supply water to the whole tower. Not only did the project have a tight footprint, but within a valuable piece of real estate like Bankside, there was a premium on space. A secondary pump station was therefore highly undesirable.

Without a second pump, the risers had to handle a lot of pressure to move water above 30 floors.

Gavin Robinson explained further:

"MecFlow Fusion can deal with high pressures all the way up the tower. There was no need for a booster pump station. Typically, with this sort of development, the space in the risers can be tight. MecFlow Fusion is lighter and more adaptable than other systems. Our technical Team was able to make optimal use of the space available. We manufactured bespoke MecFlow manifolds, which provided the exact number of ports needed to control the flow of water to each apartment."

MecFlow Fusion was used across the installation as pipe sizes range from 315mm to 20mm. The system was put together from loose components at a fabrication station in the tower's basement. A range of jointing methods were used including electrofusion and socket welding to produce secure, long-lasting joints with minimal fuss. Training and support were provided by Polypipe Building Services' MecFlow specialists.



Andy Moss, Director at MWA Ecosystems, comments:

"We have a good relationship with Polypipe. The size of the business and the brand that they've developed over years of getting water in and out of tall buildings, give a lot of confidence. The products' performance and the level of customisation provided means we handle any challenge. They also train the guys on the innovative stuff which quite frankly is invaluable when you're breaking new ground. It's a huge advantage that we can source all this from one business".