

HEATWEB

CASE STUDY · HEAT NETWORKS & COMMERCIAL

Putney Plaza

Modular plant for 1.5 MW of hot water

AT A GLANCE

SITE
Putney Plaza, four tower blocks

SERVICES
Domestic hot water, underfloor heating, radiators, commercial zone

HEAT SOURCES
Gas boilers, CHP, extract air heat pump

SYSTEM
HIFLOW modular heat exchange units on iHIU controls

PROGRAMME
SBRI open-source controls field trial

HEATWEB SERVICES
Modular plant, controls, remote monitoring

Four tower blocks at Putney Plaza get their hot water, underfloor heating, radiators and a commercial zone from a bank of HIFLOW modular heat exchange units. They blend heat from gas boilers, CHP and an extract air heat pump, and have delivered every service since turn-on.

The challenge

The scheme needed plant-room provision of domestic hot water, underfloor heating, radiator circuits and a commercial zone for four tower blocks.

Heat came from two grades of source: gas boilers and CHP as the high-grade supply, and an extract air heat pump as the low-grade one. The plant had to combine them, match the load and keep every service running.

What we did

- Supplied HIFLOW modular units: six for 1.5 MW of domestic hot water, two for radiators, three for underfloor heating and two for the commercial zone.
- Added 8,000 litres of custom-made buffer storage.
- Blended the high-grade and low-grade feeds so that all the plant runs at its best efficiency.
- Ran the whole system on our iHIU control system, monitored remotely.

What we found

- The modules work together to match the load and give a high level of redundancy.
- Remote control let us adjust setpoints and add screed-drying cycles when installers asked for them.
- Historic performance can be shown down to 10-second intervals.



Putney Plaza plant monitoring dashboard.

1.5 MW
domestic hot water from six modules

8,000
litres of custom-made buffer storage

100%
delivery of every service since turn-on

The outcome

- 100% delivery of every service since turn-on, thanks to the modular approach.
- All the plant runs at its best efficiency by blending boiler, CHP and heat pump heat.
- As an SBRI open-source controls field trial, control of the boilers, CHP, heat pumps and circulating pumps around the buffer stores and common boiler header was upgraded.

About Heatweb. Heatweb Solutions is a UK provider of engineering support for heat networks and commercial HVAC: monitoring, fault diagnostics, technical compliance, optimisation, commissioning and maintenance.

Talk to an engineer

The full case study: www.heatweb.co.uk/blog/case-study/putney-plaza/

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