HEATWEB



CASE STUDY · HEAT NETWORKS & COMMERCIAL

Gordon House, Tower Hamlets

A tower block HIU refurbishment without a single snag

AT A GLANCE

BUILDING
19-storey tower block, 97 flats, Tower Hamlets

HEAT SUPPLY
Central boiler plant, multiple boilers, twin primary pumps

BEFORE
Combination hot water cylinders in every flat

AFTER
SLIM HIUs, pre-set radiator valves, thermal bypasses at lateral ends

OUR ROLE
HIU supply, factory commissioning and design support (as Thermal Integration)

COMPLETED
2017

97 flats over 19 floors on a central boiler plant moved from combination cylinders to factory-commissioned SLIM HIUs. Nothing in the flats needed setting up, there was not one snag or call-out, and the return risers ran cool to the touch.

The challenge

Combination cylinders gave low pressure hot water, overheated cupboards and corridors, and returned water only a degree or two below the flow temperature.

New storage would not fit the cupboards and would have needed new discharge pipes throughout the block.

What we did

- SLIM HIUs in place of storage: a small footprint, mains pressure hot water and a lower cost.
- Thermal bypasses at the ends of the laterals and pre-set dynamic radiator valves, so no flat needed a bypass or differential pressure control.
- HIUs factory commissioned to the consultant's settings and tamper-proof on site.



A combination cylinder before, and a SLIM HIU in the same cupboard after.

What we found

- Pipework outside the flats went in first, so the boiler house was commissioned before any work inside the flats.
- Not a single component in the flats needed setting up, and not one snag or call-out arose on the contract.
- Return risers were cool to the touch, and heat meters showed improved condensing efficiency at the boilers.



Gordon House, 19 storeys and 97 flats in Tower Hamlets.

97
flats moved from cylinders to HIUs

0
snags or call-outs on the contract

0
components to set up in each flat

The outcome

- Residents gained mains pressure hot water, regained cupboard space and no longer live with overheated cupboards and corridors.
- The SLIM comes from the same family as the DATA, the best HIU recorded under the BESA UK HIU test standard.
- A model for refurbishing communal heating in tower blocks: HIUs designed with the network, self-balancing valves and factory commissioning.

> "It is rare to go through an entire contract without a single call out to assist, and the fact that there have been no snags at all can only be put down to an exemplary installation. We are very proud to have our name associated with such an efficient building."
>
> **Richard Hanson-Graville, then technical manager at Thermal Integration**

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/gordon-house-tower-hamlets/

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