

Sector: Residential

Robertson businesses: Robertson Engineering Services, Robertson North East England

Client: Unite Students

Value: £2m (M&E)

Date of involvement: Aug 2017–Aug 2018 (M&E)

Location: East Durham College, Durham



Houghall Court, East Durham College

An efficient sequence to complete on time

Robertson provided construction, refurbishment and M&E for two student accommodation blocks in Durham, one new and one existing, for Unite Students.

The project, being delivered by main contractor Robertson North East, involved two separate buildings. An existing two-storey brick building ('Building A' or 'Weardale') was refurbished, creating 24 studio bedrooms and communal rooms; while a new three-storey H-shaped block ('Building B') was constructed, giving 30 clusters of 4–6 bedrooms with communal kitchens, and 34 studio bedrooms.

Robertson Engineering Services installed each bedroom with prefabricated en-suite shower facilities and electrical panel heating. We fitted a localised fire suppression system to the studios that have a hob and cooker near the corridor door.

We installed and commissioned a single gas-fired, mains feed hot water heater to feed the existing Weardale building.

In the new H-shaped block, we provided a central hot water service plant, which comprises a heat-led CHP system (combined heat and power), to warm a buffer vessel that serves a primary calorifier. The hot water heating is then supplemented by two gas-fired water heaters. We also provided the usual electrical services along with dry risers and natural smoke ventilation systems, associated with each of the two stair cores.

Requirements and challenges

The building sits on a flood plain, so is elevated by about 1.5m. Floor defence door barriers were required, while all ground floor penetrations needed rubber seals.

We had to work closely with the main contractor to ensure efficient sequencing and achieve completion on time. On the new block, it was key to carefully co-ordinate access, so we could install pipework services when the prefabricated shower rooms were being positioned.

Solutions and outcomes

Rather than installing the shower rooms in a horizontal sequence on the new H-shaped block, we installed all pipework, testing and lagging each riser, and then located the shower rooms to three floors of clusters. This was done in a two-week sequence. It allowed second-fix wall boarding to follow on in the same two-week sequence, so that all trades were able to keep to the tight construction programme.

