

References

South Kilburn residential site



Uponor involvement

- ✓ Resolved leaking district heating network with the use of Ecoflex Thermo; 300 metres of Uponor's Ecoflex Thermo pipes were used to create the temporary connection and then a further 283 metres of piping was installed in the underground trenches where the previous pipes lay.
- ✓ The insulation and design of Ecoflex Thermo minimised heat and energy losses, making it highly efficient system which reduced energy wastage and minimised heating costs.
- ✓ Minimised disruption to the site's residents while swapping out the old pipes for the new. The results was that no residence was cut off from the heating network for any longer than 12 hours.

Uponor upgrades district Heating network at South Kilburn residential site

Connect the buildings to the district heating system that supplied the two site's 300 apartments with hot water. The multi-residential properties Swift House and George House in South Kilburn, London, were in need of new pipes to connect the buildings to the district heating system that supplied the two site's 300 apartments with hot water. This upgrade was required as the existing pipes were leaking, making the heating system both inefficient and ineffective. As well as supplying the new pipes that would fix the leaking, Uponor also played a pivotal role in devising an installation process which would significantly minimise disruption to the residents.

Project Facts:

Location	Completion
South Kilburn, London, United Kingdom	2021
Building Type	Product systems
Multifamily homes	Local Heat Distribution, Multilayer Pipe Systems
Project Type	
Renovation	

Partners

Main Contractor:

Bouygues UK

Developer:

L&Q Group

Uponor upgrades district heating network at South Kilburn residential site

300 metres of Uponor's Ecoflex Thermo pipes were used to create the temporary connection and then a further 283 metres of piping was installed in the underground trenches where the previous pipes lay. These new pipes connected the [district heating network](#) to the ground floor communal areas, service areas and to the building's main risers. Uponor's multi-layer composite pipes (MLC) were used to connect the risers, also supplied by Uponor, to the heat interface units (HIU) that were already installed in the apartments.

A representative from Bouygues UK, said: "We replaced the existing pipes with the Uponor specified products, as these are proven to be much more durable and therefore would be able to maintain a reliable, effective long-term supply of heating and hot water. We were particularly impressed with how robust the pipes were, which would help to avoid future leaks below ground.

It was important to complete this project as safely and quickly as possible to meet the client's requirements. To achieve this, not only would the quick, easy-to-install nature of Uponor's solutions be a benefit, but Uponor worked on a strategy that would drastically reduce the amount of time the heating and hot water would be turned off for residents.

This strategy involved firstly installing a temporary above-ground network of pipes and then connecting them to parts of the above ground network which did not require replacement. Once the temporary pipes were connected to maintain heating and hot water, the redundant underground pipes were then dug out and replaced with the new Uponor pipework."

In addition to the robust, reliable nature of Uponor's pipes, they can also be easily cut-to-length, helping to simplify and speed up the refurbishment project further. The modular connection on Uponor's risers also helped to streamline the work, as this made it easy to connect and change the pipes.

Uponor coordinated the work so that it could be done quickly and efficiently despite the tight working spaces. This efficiency was essential in order to get the new main line from the plant room operational as soon as soon as possible after the old line

had been turned off. The result was that no residence was cut off from the heating network for any longer than 12 hours.

Despite careful planning to ensure that all materials were onsite and ready when required, Uponor's logistical abilities were tested by the fact that phase two of the project took place during the first COVID-19 lockdown. Despite this, thanks to its robust supply chain, the team was able to ensure the reliable delivery of materials throughout the project. The team also conducted strict risk assessments and developed new onsite operating procedures to ensure that the project could continue to be delivered in a COVID-secure manner.

Benefit

The flexibility of Ecoflex Thermo means that it can be used to connect a decentralised plant room or energy centre to a building without joints, as the pipe can be laid over bumps or around obstacles which for alternative systems would require multiple connections. This design advantage makes the system much more reliable as it eliminates weak points where leaks can occur.

The insulation and design of Ecoflex Thermo minimises heat and energy losses, making it a highly efficient system which reduces energy wastage and minimises heating costs.

Uponor's design services and logistical support ensured that the project ran smoothly and provided peace of mind in the long term reliability of the site's heating network.

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“We've worked previously with Uponor and knew that they were up to the task. The Uponor team performed site surveys and looked at the situation well in advance in order to come up with a plan that would solve the site's issues. Throughout the project, Uponor provided ongoing help and support to address the health and safety, and logistical issues associated with carrying out pipework replacement work while ensuring very minimal disruption of services to residents.”

A representative from Bouygues UK