

# Watts Microflex

Bringing 21st Century Heating to a Period Home

## Case Study





## SCOPE

Installation of district heating  
in a domestic property

- **WHO**  
Amber Heating
- **WHAT**  
Domestic heating supplied  
by ground source heat pump
- **HOW**  
Microflex Duo
- **WHERE**  
Brewham UK
- **WHEN**  
August 2020

Microflex Duo is a dual core pre-insulated pipe suitable for transporting heating water from central plant buildings or between out buildings and the main premises. The dual core pre-insulated pipe is also suitable for potable water, wastewater and other fluids.



## Bringing renewable energy to a traditional home

Microflex pre-insulated pipe is flexible and durable. It helps to keep water at the same temperature as it travels from the heating source to the building and saves energy in the process which is why it was identified as the ideal solution to the challenges of this project.

During the project, the existing oil boiler is being replaced with a new ground source heat pump, pre-insulated pipe work and heat interface units. Microflex Duo is being used to provide primary heating and sanitary hot water.

The pipe was supplied by Watts Premier Partner Mibec, their MD Mitch Cadd explains why Microflex was the first choice for this project: "Mibec and Watts worked together to assist the client with the correct sizing of the pipes offering technical support to ensure the correct flow rates required by each Heat Interface Unit could be met.

As this was a low temperature application it was also required that heat losses across the pipe work needed to be kept to a minimum where Microflex pipe keeps a constant insulation value across the lifetime of the product."



## Microflex Duo Benefits

Microflex's thermal elastic, CFC free foam insulation is made from cross-linked PE-X with a closed microcellular structure. It has a minimal water absorption capacity of < 1% in accordance with ISO 2896.

Using the high quality Microflex couplings, fittings and fix points ensure that the system is anchored and optimised to absorb the possible effects of thermal expansion/shrinkage of the PE-Xa transport pipes. An insulating PE centrepiece guarantees an effective separation of flow and return pipes.

There is a corrosion resistant transport pipe in cross-linked PE-Xa in accordance with EN ISO 15875 with oxygen diffusion barrier in accordance with DIN 4726. The corrugated outside in HDPE to provide high grade protection to the piping system.

Max operating pressure: 6 bar

Max fluid temperature: + 95°C

PE-Xa pipes: SDR 11

Standard full coil length: 100 m





## Watts

At Watts we have one of the widest product ranges in the industry and our products improve comfort, safety and the quality of life for people around the world.

Our range encompasses several well-known brands that form a key part of our product offer. Our experienced team can supply everything you need for your project whether it's plumbing or flow control solutions, water quality and conditioning or HVAC you'll find a Watts product that meets your needs with full support available across the entire product range.

For more information about Microflex Duo or any of the Microflex range, please call **+44 1480 407074** or email us on **wattsuk@wattswater.com**

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