

Oyster Reach, Kent Underfloor Heating Systems



In-screed heating
cable systems



Whitstable, Kent



NGT programmable
thermostat timers

Energy-efficient heating for modern homes.

Heat Mat's technical expertise helped to deliver a luxurious and low-energy heating system for a Passivhaus development in Whitstable, Kent.

Oyster Reach is a group of contemporary apartments with views over Whitstable Bay. The small energy-efficient development is constructed with a 'fabric first' approach to meet 'Passivhaus' standards.

The Goal

Passivhaus design principles focus on low-energy consumption, retention of heat, and minimising heat loss from the building; this reduces the necessity of heating or cooling systems during the year and reliance on a secondary heat source. Masonry Frame Systems, builders of the mixed development, approached Heat Mat to provide a flexible and energy-efficient heating solution for the five apartments.

The Solution

Heat Mat's Danish manufactured In-screed heating cables were specified to complement the innovative and premium approach taken throughout the development. The VDE approved In-screed cables were installed under tiles and secured using our fixing band, before covering with 70mm of screed. NGT programmable thermostats, with energy saving capabilities, control each room.

Due to the extremely well-insulated nature of the property, and additional air management systems the underfloor heating generates a low output of approximately 130W/sqm. The system is designed to allow each room to store heat within the dense screed and top-up when the ambient air drops below the required temperature.

The apartments use electricity produced from renewable sources including Solar PV panels on the roof, supporting the underfloor heating when it is required and resulting in an extremely low running cost for the inhabitants.

"Conventional heating systems have not been installed at Oyster Reach; the underfloor heating is the only form of widely recognised heat generation at the properties," says Norman Hinckes, Director of Masonry Frame Systems, the principal contractor.



The In-screed cables being installed onto fixing strip in an upper apartment.

The Result

Underfloor heating is the ideal choice for the rare occasions when these well-insulated properties will be heated. Predicted energy costs are as little as £175 a year.

Oyster Reach is a collection of aspirational properties constructed and fitted with premium materials including Heat Mat's high quality In-screed heating cable, contributing to the provision of a superior level of energy efficiency for owners. The site meets maximum thermal performance and surpasses the requirements of Level 4 criteria of the Code for Sustainable Homes. Each unit blends stylish design with the construction zeitgeist of renewable building. Heat Mat was delighted to be part of this environmentally conscious and innovative development of luxury low-energy homes.

CASE STUDY
6MM IN-SCREED UNDERFLOOR HEATING SYSTEM
PASSIVHAUS, OYSTER REACH, KENT



Date Installed:
September 2013

Location:
Tankerton, Whitstable, Kent

Client:
Masonry Frame Systems

Installer:
Masonry Frame Systems

System Specifications:

- In-screed heating cable
- Reinforcement fabric
- Fixing band
- 70mm of screed to cover
- NGT programmable thermostat timer

Installation:

We would recommend a team of two people fitting the system if possible, although it can be fitted by a single installer, it is far simpler to fit with two people working at each end of the room. It makes installing onto fixing strip or reinforcement fabric seem like a more manageable task!

About Heat Mat

With more than 1,200,000m² of underfloor heating installed and 20 years' experience of the UK underfloor heating market, you can rely on Heat Mat to understand your needs and supply the products to satisfy your requirements. This is why we are the Professional's Choice, the number one underfloor heating supplier to the professional installation market.

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Heat Mat

Underfloor Heating

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