

CASE STUDY

INGENIOUS WARMTH FOR YOUR KITCHEN

Converted Barn Kitchen Extension | Great Britain

THE EXISTING SITUATION.

When considering the heating for a new 40 m² kitchen extension the owners of the converted barn looked at both wet underfloor and infrared heating. The new walls and roof were to be well insulated with the floor to ceiling windows and large French doors, consisting of double-glazed units.

THE CHALLENGE.

Their interior designers, Completion Ltd, wanted to create a cosy family kitchen with a homely feel. Their aim was to retain the character of the barn and create unrestricted views into the garden. It was therefore necessary to use a large amount of glazing and ensure the attractive stone wall of the old barn remained a key feature. This ruled out the use of traditional wall mounted wet system radiators; but it also meant the heating system had to be discreet and not detract from the overall appearance.

As the property is not used during the week, the client was looking for a responsive heating system which would quickly create a cosy feeling when they arrived home. They were also keen to ensure the kitchen floor was not cold to walk on in bare feet. The client's initial thought was for a wet underfloor heating system. Having successfully used ETHERMA infrared heating panels on two projects, Completion Ltd suggested infrared as the most cost effective and suitable form of heating for the project. The cost of purchasing and installing the infrared system was £2,188 less than a wet underfloor heating system. Moreover the owners can benefit from the various advantages of infrared warmth.

THE SOLUTION.

It was decided that LAVA® FRAME flush-mounted ceiling panels would be ideal as they proved to be cost-effective and easy to install. The infrared heating also provides a cosier feel as the occupants are directly warmed without the need to heat-up the air – just like sitting in the sun. By directly warming the occupants, the 'warm-up' time of an infrared system is much quicker compared to traditional heating systems (e.g. radiators) or wet underfloor heating – making infrared panels a more responsive, controllable and energy efficient option. Absorbing the infrared into the skin is also particularly relaxing and comforting.

Three LAVA® FRAME 750W units were installed in the ceiling at a height of 2.9 m evenly spaced along the length of the kitchen. Flush mounting the infrared panels provided a discreet installation whilst ensuring optimum distribution of infrared throughout the kitchen preventing any cold spots. As a thermal mass, the floor absorbs the infrared and warms to approx. 16°C removing the chill and making it a pleasant surface to walk on with bare feet.

The LAVA® infrared panels have no moving parts and are therefore completely silent with a particularly long operational life (>20 years). They also require no ongoing maintenance or annual servicing. These benefits make a LAVA® infrared heating system one of the most cost effective on the market when whole-life costs are taken into consideration.



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THE SOLUTION IN DETAIL

The infrared heating system comprises of three flush-mounted LAVA® FRAME 750 infrared panels to create a discrete installation. LAVA® FRAME is ideally suited for installation in dry construction and concrete. This means that the LAVA® infrared heater blends even better into the architecture of the room and becomes virtually invisible. Suitable as full area heating or also for creating defined heating zones within a larger space. This system not only saves the heating costs (only £1.26/day for the kitchen), but also ensures a pleasant, healthy indoor climate.

The LAVA® FRAME 750 panels are controlled by hard-wired eTOUCH-eco programmable thermostat. Modern, precise control is the key to saving operating costs and avoiding wasting valuable energy.



LAVA® FRAME - PRODUCT BENEFITS

- + Suitable for wall and ceiling installation
- + Mounting frame with Easy-Click
- + Simple, flush-mounted installation
- + Large infrared radiation surface
- + Magnetic field-free & maintenance free
- + Made in Austria high quality standards

ETOUCH ECO -PRODUCT BENEFITS

- + Easy menu navigation
- + 4 programmes: Home, office, timer and heating
- + Installation mode: Sensor and hysteresis calibration, control line for external timer
- + Self-learning function
- + Energy consumption indicator
- + Switching from summer to winter time is completely automatic
- + Switchable between output control, underfloor, room or combi thermostat
- + Temperature drop detection





COMPETANCE AND QUALITY FOR OVER 35 YEARS.



With ETHERMA you have a competent partner for your heating solutions with more than 35 years of experience. ETHERMA relies on constant innovation, highest product quality and modern design. We support you with a comprehensive service to ensure you use the most suitable product solution for your project. ETHERMA is an Austrian company with international reputation, producing high quality electrical heating systems for our clients, custom-made and manufactured right here.

