

CASE STUDY

# INGENIOUS WARMTH FOR BIG WORKING SPACE

Detailing Centre | Great Britain

#### THE SITUATION.

Gtechniq wanted to develop a purpose-built detailing centre to showcase their range of protective vehicle coatings for paintwork, wheels, trim and glass. The new centre needed a heating system that not only provided a good level of thermal comfort for the detailers working on the vehicles but also was beneficial for the detailing process.

### THE CHALLENGE.

Gtechniq's goal was to develop a world class detailing centre which provided the pinnacle of vehicle preparation and delivered breath-taking results. To achieve this goal the heating solution needed to be non-intrusive, aid the application of their protective coatings, reduce the circulation of dust particles which would stick to the coatings and, finally, cut heat loss when the large roller-doors were opened to move the vehicles in or out of the centre.

### THE SOLUTION.

The ETHERMA Thermocassette infrared heating panels provided an ideal solution. These flush-mounted ceiling panels were seamlessly integrated within the suspended ceiling grid maintaining the clean, minimalistic look required by Gtechniq.

Unlike convection heating, the infrared heating panels directly warm objects (floor, walls, people, vehicles, etc.) not the air. Warming the cars allows an easier application of the protective coatings, whilst the coatings themselves dry quicker. Infrared heats the room evenly, reducing the temperature gradient between the floor and ceiling (0.5 °C - 1 °C) which minimises convection currents and the circulation of dust particles which could stick to the coatings and spoil the high quality finish.

By warming the thermal mass of the detailing centre, the energy consumed (and paid for!) is stored in the building itself and therefore not lost when the large roller-doors are opened - as is the case with convection heating. Additionally, staff enjoy the uniform heating offered by infrared rather than hot and cold spots which are associated with convection heating.



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#### THE SOLUTION IN DETAIL.

The infrared heating system comprises of 24 ETHERMA Thermocassette TC-300W infrared panels evenly distributed across the  $150\,\mathrm{m}^2$  suspended ceiling. The panels are controlled by a hard-wired eTOUCH mini programmable thermostat which can switch up to  $16\,\mathrm{Amps}$  or  $3.8\,\mathrm{kW}$  of heating. With a heating load of  $7.2\,\mathrm{kW}$  it was necessary for the thermostat to switch the infrared heating panels through an electronic relay system.

The in-ceiling infrared panels are ideally suited for full heating or zone heating in ceilings up to 3.5 m high and give an even heat distribution, maximise the amount of floor space available and reduce the risk of damage from accidental impact.



## ETHERMA THERMOCASSETTE - PRODUCT BENEFITS

- + Very high proportion of radiation
- + Large infrared emitting surface
- + Lightweight design for easy ceiling mounting
- Pleasant room climate thanks to comfortable infrared radiant heat
- + Magnetic field & maintenance free
- + In-ceiling mounting



ETHERMA thermocassette

## ETOUCH MINI - PRODUCT BENEFITS

- + Self-explanatory and especially user-friendly
- + Exceptional design, black or white touchpad
- + Energy saving by ECO+ standard setting
- + 2.5 cm TFT colour display with touchpad
- Incl. two frames: high-gloss white and high-gloss graphite black





eTOUCH mini thermostat

## 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.