

#### CASE STUDY

# WAREHOUSE FROST PROTECTION SYSTEM Colefax & Fowler | London

#### THE EXISTING SITUATION.

Due to the lack of heating, Colefax & Fowler had two challenges to address at their premises in Wandsworth, London. Firstly, in the main warehouse working conditions were particularly uncomfortable during the winter months when the internal temperature could drop into low single figures. Staff were particularly susceptible to the cold when standing at the fabric-cutting benches and light-boxes for prolonged periods or when working in the 'goods-in' area located by the roller shutter doors.

Secondly, a new sprinkler system had been installed in the Fabric Store and the insurance company had stipulated that a frost protection system needed to be installed to prevent potential water damage to stock should the sprinkler system pipes freeze and burst. There was also the consideration that, at some point in the future, the Fabric Store may be used for operational activities and therefore require full heating.

#### THE CHALLANGE.

The workers standing at the 'cutting benches' needed a form of heating which would warm them directly without wasting energy by attempting to heat the surrounding area. On the other hand, staff working in the 'goods in/out' areas needed warmth that would not escape every time the roller-doors were opened. Due to the configuration of the spaces involved, wall mounting the heaters was not an option and floor space had to be kept clear at all times. Different parts of the building had different heating requirements due to physical characteristics. For example, the front of the building and the stairwells have more windows and therefore require more heating than the rear of the building with solid brick walls.

#### THE SOLUTION.

The ETHERMA Thermocassette infrared panels provide a direct form of heating, ideal for either full or zone heating. Designed for installation within a suspended ceiling grid, they provide a discreet heating solution for warehouses, offices, schools, retail premises, etc. The infrared panels provide a soft, pleasant heat for the staff working below them. As the infrared panels heat thermal mass (floor, walls, people and objects) directly, rather than the air, the heat will remain in the area for longer and unlike convection heating, be less susceptible to draughts and leakage. ETHERMA EZ Radiant heaters have an easy and flexible installation and require a minimum of on-going maintenance. The installation height of 3 – 10 metres from heater to floor was ideal for the Fabric Store and ceiling-mounting provided the optimum position allowing the heat to protect the sprinkler system pipes from freezing whilst allowing the walkways between the racking to benefit from the warmth.



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#### THE SOLUTION IN DETAIL

In the main warehouse, each heating area was treated as a separate zone, controlled by wireless, programmable thermostats. Precise control of the heating saves operating costs and avoids wasting valuable energy.

In the 'goods-in' area, a total of 13 ETHERMA Thermocassette TC-300W & TC-600W infrared panels were installed within the suspended ceiling grid. Each panel having a radio receiver which switches the device as dictated by the wireless ET-14A programmable thermostat. This wireless configuration simplifies the installation process and avoids chasing-in cable routes. Where zone heating was required over the cutting benches and light boxes, 5 x TC-600W were installed directly over the areas where the staff stand. The heating in these areas was also controlled by the same wireless system. In the Fabric Store, 4 ETHERMA EZ 2 kW double panel infrared heaters were installed on the ceiling in between the rows of racking. Ceiling mounting the infrared heater offers the most cost effective, unobtrusive and flexible solution. Whilst providing an effective frost protec-

## PRODUCT BENEFITS ETHERMA EZ

- + Hygienic indoor climate
- + Dark emitter
- + Rust-resistant housing
- + Straightforward installation
- + Surface structure optimises radiation

# 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

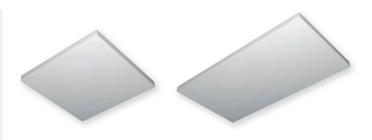
### COMPETANCE AND QUALITY FOR OVER 35 YEARS.



tion system (through the frost-protection setting on the wireless ET-14A programmable thermostat), this heating system has the ability to also provide ambient heating if required in the future.







ETHERMA thermocassette

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.

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