



# INFRARED ELECTRIC HEATING MAIDSTONE FIRE STATION

**SHADOW**  
Industrial Infrared

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# Case Study: Maidstone Fire Station

## Project Overview & The Challenges:

Maidstone Fire Station Garage faced several unique challenges in heating their space effectively. One of the primary concerns was the frequent opening of large bay doors to accommodate the fire engines. These doors allow cold air to rush in, making it difficult to maintain a consistent indoor temperature using traditional heating methods. The station needed a solution that could provide quick and targeted heat, minimising energy loss when the doors were open.

In addition to maintaining warmth, it was essential to create a comfortable and safe working environment for the garage's personnel. This meant avoiding heaters that could create hotspots or uneven heating, which might cause discomfort or safety concerns. By addressing both the need for efficient heating despite open doors and the importance of worker comfort and safety, we delivered a tailored solution that met the station's specific demands.

## Main Objectives of the Project:

- The fire station garage required an effective heating solution to maintain a comfortable working environment for their personnel.
- A key consideration was the large fire engines, which occupy significant space and sit much higher than standard vehicles. Traditional heating methods pose the risk of damaging sensitive vehicle components with excessive heat or uneven distribution.

To address these concerns, the station sought a heating solution that would efficiently warm the entire space without causing any harm to their fleet. Our infrared heaters offered the perfect solution. The result was a well-heated space that kept the fire station operational and safe, while preserving the integrity of the fire engines.





## IMPLEMENTATION OF INFRARED HEATERS:

The space is a dedicated service area for maintaining and housing their fire engines, playing a critical role in the station's daily operations. This large space is designed to accommodate several fire engines, with high ceilings and expansive doors that allow for quick access during emergencies. The garage is not just a storage area but a working environment where vehicles are serviced and prepared for action, requiring a consistent, safe, and comfortable climate to ensure both the equipment and personnel are well-supported.

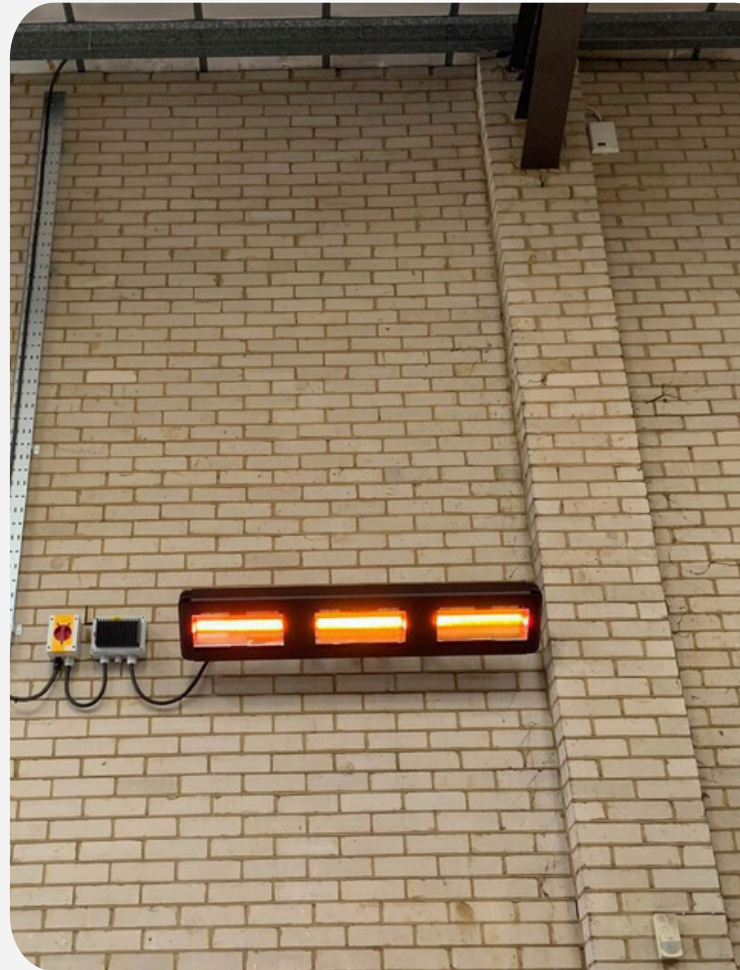
The installation of the industrial heating system at Maidstone Fire Station Garage delivered exceptional results. The infrared heaters provided consistent and even heat distribution throughout the large, open space, ensuring a comfortable working environment for the station's personnel. Importantly, the heaters operated without causing any damage to the fire engines, which were a key concern due to their size and sensitive components. The vehicles remained unaffected by the heat, and the system's efficiency minimised energy loss, even when the large bay doors were frequently opened. The solution successfully met the station's needs for both vehicle safety and operational comfort.



# INSTALLATION OF INFRARED HEATERS:

To meet the specific requirements of the space, we implemented a tailored heating solution using a combination of advanced infrared heaters and control systems. The key components of the installation included:

- Shadow 6kW Industrial Heater (x13): These high-performance heaters were strategically positioned throughout the facility to deliver focused, efficient infrared heat. The Shadow 6kW Industrial Heaters are known for their durability and effectiveness in large, open spaces, making them an ideal choice for maintaining a comfortable environment while minimising energy consumption. Their infrared technology ensures rapid heat delivery, which is particularly useful in environments that require precise temperature control.
- 6kW Remote Variable Heater Controller (Receiver) (x13): Each heater was paired with a 6kW remote variable controller, providing the ability to adjust heating levels according to real-time needs. This allows for flexible control over the intensity of the heat, ensuring optimal comfort and energy efficiency. The remote control functionality also enhances convenience, enabling operators to fine-tune the heating system without needing to manually adjust each heater.
- 3 Zone Master Controller (Transmitter) Wall Mounted (x4): To further enhance the manageability of the heating system, we installed four wall-mounted 3 Zone Master Controllers. These allow for the independent control of multiple zones within the space, giving facility managers the ability to direct heating where it's needed most. By dividing the space into different zones, the controllers help to maximise energy efficiency and comfort, ensuring that heating is applied only to areas that are in use.



We have seen an increased recognition of the compatibility of our infrared heaters within automotive environments. As more automotive facilities, including workshops, showrooms, and production plants, experience the benefits of energy-efficient and focused heating, we've seen a growing trend in the adoption of our systems across different settings.

These environments benefit not only from reduced energy consumption but also from improved worker comfort and operational efficiency, making infrared heating a go-to solution in automotive sectors that require precision temperature control and sustainability.

**CONTACT US TO DISCUSS THE OPTIONS  
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