

Red Rads or Indirect Oil-Fired Heaters:

Which is more cost effective?

Keeping a live site heated is necessary to preserve work already undertaken and to provide a comfortable working environment for all personnel. Unfortunately, sites are often complex, large and can contain open spaces – a logistical nightmare to heat! Traditional electrical heaters, such as Red Rads, are extremely effective but are also prohibitively expensive to run. And you'd often need tens of these traditional heaters to heat a site, leading to extortionate fuel bills.

Indirect oil-fired heaters are much more efficient and, when used in combination with ducting, can easily cover large areas, keeping workers comfortable without breaking the bank.

A real-life illustration

A site manager needs to maintain an ambient temperature of 20°C within the building being worked on for four weeks. It is a two-storey building covering 25m x 30m, has ceiling heights of 2.5m, and the outside temperature is trending at 5°. Each floor contains multiple rooms. Based on the volume of the building, 160kW of heat will need to be provided.



Traditional 'Red Rads' vs. an Indirect Oil-Fired solution



Option 1: Multiple Red Rads

The site manager strategically locates **50** red rads (Each providing 3kW of heat) in various rooms around the building. Each heater requires a 32A 110V supply, requiring up to 25 10kVA 415V site transformers.

Approximate cost:

50x red rads at £25-30ea/wk
25x 10kVA site transformers at £40ea/wk

Total weekly cost

£2500/wk

Option 2: An Indirect Oil-Fired Heater

The site manager places a **single** CLIMEX 150kW Indirect Oil-Fired heater outside the building, forcing warm dry heat into the building at both levels simultaneously using flexible ducting. Operating from a single 110v 32a supply, this positive pressure of warm dry heat will spread throughout the building over a couple of days. Once optimum heat has been achieved, ambient temperature can be maintained with thermostats. The heater would work on average for 10hrs day consuming fuel at 15L/hr.

Approximate cost:

1x CLIMEX 150kw Indirect Oil-Fired heater £650/wk (approx.)
C/W splitter and 30m of ducting, 2000L tank and thermostat.
Fuel @ 70p/L (70hrs/wk using 15L/hr) = £735/wk

Total weekly cost

£1385/wk

Result: a £1000 per week saving is possible on heating costs!

By opting for an indirect oil-fired solution, a cost saving of £1115 per week could be achieved in the above scenario. Indirect oil-fired heating also negates the need to hire electricians to create multiple temporary power points, and there are no hidden costs associated with oil-fired heating.

Indirect oil-fired heating creates air movement, which circulates hot air around a space, rather than just focussing it on a particular spot. This reduces the risk of plaster cracking, and the positive air movement also removes the need to hire dehumidifiers to remove moisture from the atmosphere.

So, you can see that in many ways, indirect oil-fired heaters provide the perfect heating solution. If you've the choice between Red Rads and an indirect oil-fired solution, there's really no reason to choose the former.

* Prices correct November 2019