

AMBIRAD

ENERGY EFFICIENT HEATING SYSTEMS



Cobra

Packaged radiant
tube heater



Introduction

Cobra represents a radical new approach to gas fired radiant heating – a packaged heater that requires no on site assembly. It can simply be unpacked and suspended into the roof space – dramatically reducing on site handling and installation time.

The Cobra is specifically designed to meet the needs of installers, building owners and specifiers, providing a fast, easy to install, maintain and operate solution for industrial and commercial buildings.

Designed with the building's aesthetics in mind Cobra is slim line and compact in its construction and comes in two standard colours RAL9002 (Arctic White) and RAL7011 (Anthracite). For added flexibility the heater can be matched to a range of RAL colours for a small additional charge.

Units are available with a range of outputs; 12, 20 and 40kW. Options for ball guards are available when the product is to be used in a sports hall application.

Cobra benefits

- No on site assembly – installation time reduced by **up to 2 hours**.
- Ease of handling – no complex or fiddly components.
- Improved integration with building aesthetics.
- Very quiet operation – ideal for commercial/public environments.
- Easy to operate and maintain.
- High temperature steel radiant tubes for longer life and performance.
- Increased radiant and thermal efficiency – reduces running costs.
- Minimises the impact of the Climate Change Levy.

Lower installed costs

The Cobra provides a **one hour saving** in handling, assembly and installation time compared with a standard Ambi-Rad radiant tube and **up to 2 hours** compared with certain competitive radiant products. It can be simply hung into the roof space immediately still within its packaging. There are no small or complex components to identify, handle and assemble. Packaging can be removed easily prior to commissioning the heater keeping the product finish as pristine as possible and removing the need to return to site to clean the product after the installation is complete.

Radiant heating

Radiant heat warms all solid objects and surfaces in its path through electromagnetic waves. Being mounted overhead, Cobra radiant heaters produce infra-red heat that is directed downwards to low level by a reflector. Heat passes inertly through the air to create a comfortable, all round radiant warmth at lower air temperature, this reduces wasteful heating of empty space and makes substantial energy savings over conventional boiler and air systems.

Benefits of radiant heating

- Reduces running costs. Savings of between 25-60% of fuel costs can be achieved.
- Provides even heat coverage at low level.
- Does not directly heat the air – ideal in areas of high air infiltration.
- Minimises roof heat losses – reduced stratification.
- Systems can be controlled easily to provide varying zoned temperatures and operating times.
- Provides rapid heating up times.

Specification

Cobra incorporates a 20kW gas fired burner suitable for natural gas (G20) and propane (G31).

Note: Propane (G31) will be available on the 40kW version in the near future.

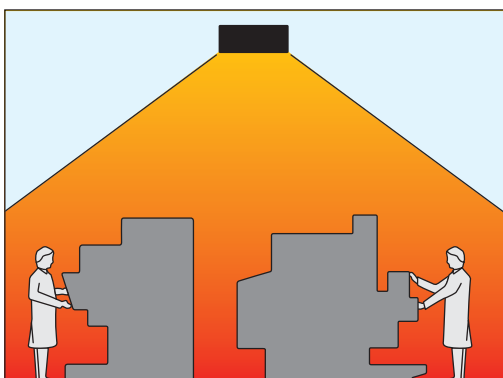
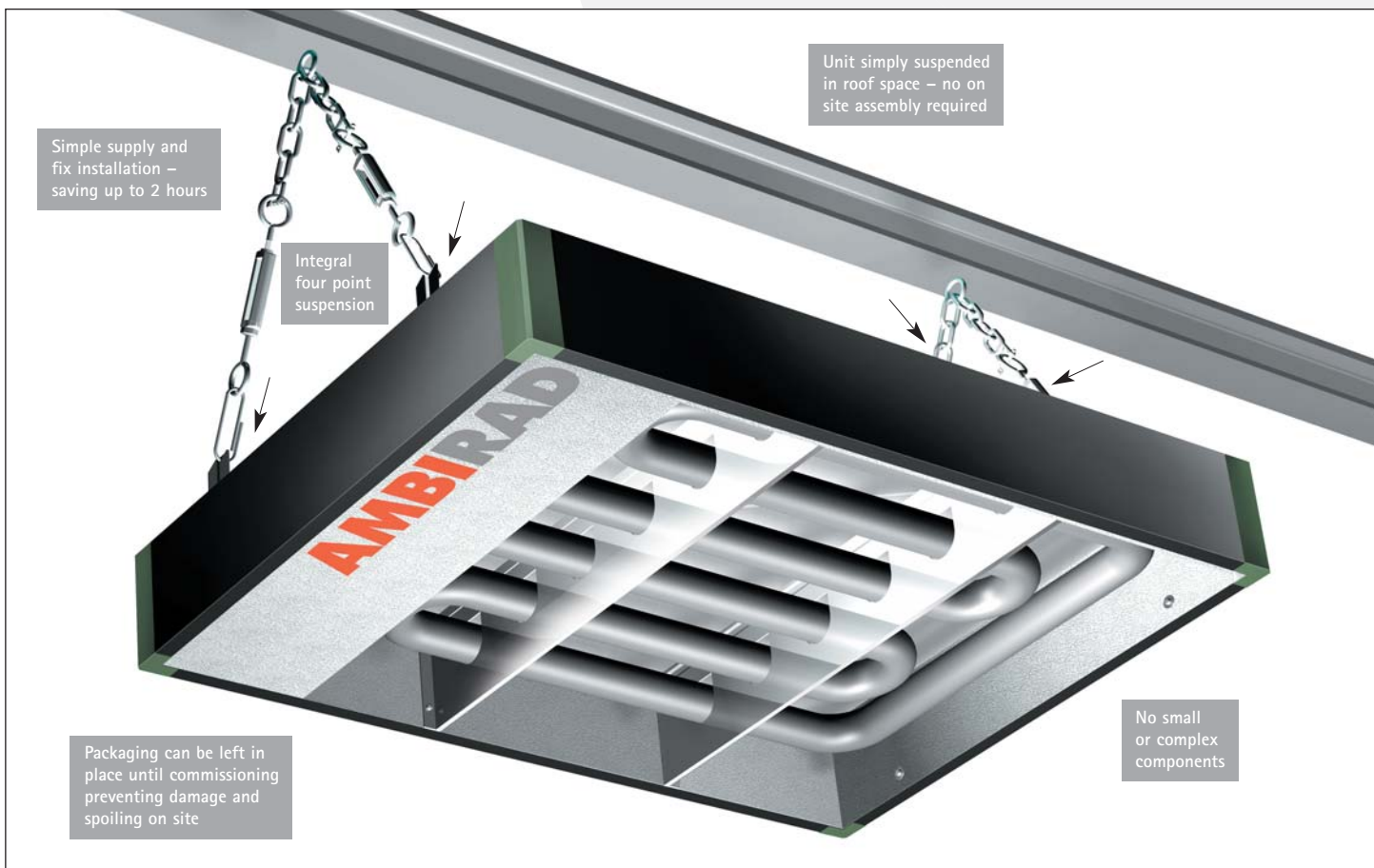
The Cobra is currently available in two sizes and is constructed from twin wall steel panels. Units can be installed unflued, individually flued, or on a central 'herringbone' manifold and can be fitted with ducted fresh air intake onto the burner to provide combustion air from outside the building.

Cobra is very quiet in operation being rated at 40 and 48dB(A) for the 20 and 40kW models respectively. These noise levels can be further reduced by up to 6dB(A) by flueing the product and fitting ducted fresh air.

Cobra is despatched in shrink-wrapped packaging which can be left on when installed to protect the heater from soiling during other non-related building work. The packaging then can simply be removed when the unit is commissioned.

Cobra tube specification is of stainless and aluminised high temperature steel for improved longevity and performance.

Protective ball guards and decorative grilles are available for applications in sports environments.



Applications

Cobra is ideal for areas where enhanced aesthetics are required but can be used effectively for space or spot heating in any of the following applications

- Factories
- Engineering workshops
- Warehouses
- Retail outlets
- Vehicle distribution centres
- Vehicle workshops
- Glasshouses
- Sports arenas/halls
- Museums

Colour coding

Cobra is constructed from pre-coated steel with RAL9002 (Arctic White) and RAL7011 (Anthracite) being available as standard colours. The range of RAL colours shown below are available for a small additional charge. Please contact our sales department to check availability.



Specification and technical data

Model		CB12	CB20	CB40
Nominal heat input				
G20 natural gas	kW	11.4	19.5	38
G31 propane	kW	11.4	18.5	-
Gas flow rate				
G20 natural gas	m ³ /h	1.1	1.85	3.6
G31 propane	m ³ /h	0.43	0.69	-
Gas supply		Connection R ¹ / ₂ 1/2in BSP external thread		
Gas pressure	Nat. gas G20	max. 25.0 mbar (min. 17.5 mbar)		
	Propane G31	max. 57.5 mbar (min. 25.0 mbar)		
Electrical supply		230 volts 1 phase 50Hz		
Current rating		0.55 amp max. (inductive)		
External fuse rating	amps	3		
Ignition		Electronic programme start-up with spark ignition		
Noise level dB(A) @ 3m 'free field'		48		40
Dimensions	mm	1710L x 1265W x 200D		2298L x 1865W x 256D
Flue diameter		125mm single wall or 125mm twin wall		
Ducted air diameter	mm	102	102	102
Total installed weight	Kg	91	91	152
Minimum mounting height	m	4.3	5.2	5.7
Recommended mounting height range*	m	4.3-9.0	5.2-10.0	5.7-10.5

* Note for mounting above or below these heights please contact technical department.

Clearance from combustibles

Model		CB12	CB20	CB40
Above reflector	mm	570	570	680
Beneath tubes	mm	1370	1600	2300
To the sides	mm	670	1050	1300
To the ends	mm	640	640	940



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Due to continuous product innovation, Ambi-Rad reserves the right to change product specification without due notice.

Ambi-Rad has reproduced paint colours as faithfully as print will allow.

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