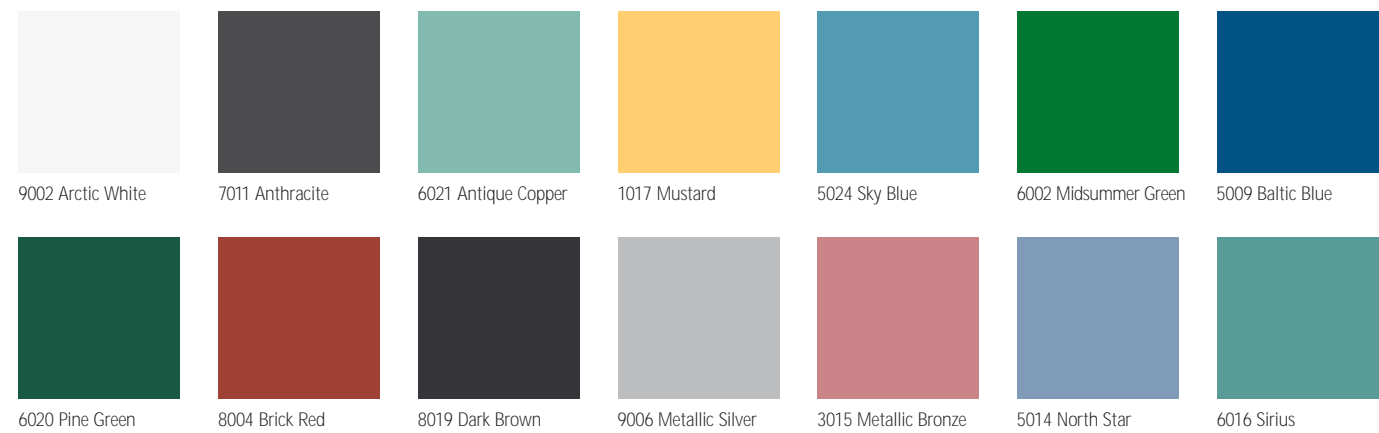


Colour coding

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	CB20	
Nominal heat input		
G20 natural gas	kW	19.5
G31 propane	kW	18.5
Gas flow rate		
G20 natural gas	m³/h	1.85
G31 propane	m³/h	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	
Dimensions	mm	1710L x 1295W x 200D
Flue diameter	100mm single wall or 125mm twin wall	
Ducted air diameter	mm	100
Total installed weight	Kg	91
Minimum mounting height	m	4.5
Recommended mounting height range*	m	4.5-10.0

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

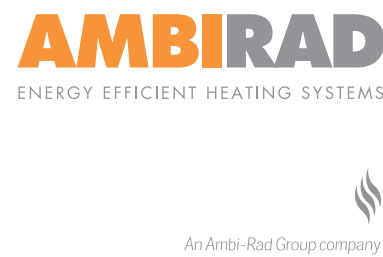
Clearance from combustibles

Model	CB20	
Above reflector	mm	570
Beneath tubes	mm	1600
To the sides	mm	1050
To the ends	mm	640



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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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AMBIRAD

ENERGY EFFICIENT HEATING SYSTEMS



COBRA

PACKAGED RADIANT TUBE HEATER

New for 2003

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.

However, all the best principles of efficiency are maintained. The Cobra meets the efficiency criteria to qualify for Enhanced Capital Allowances not only at the current levels but even those stipulated for 2004.

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.

The unit is initially available in one size of 20kW. 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.
- Balanced flue option available²– no air vents need to be fitted.
- 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.
- Minimizes the impact of the Climate Change Levy.
- Eligible for Enhanced Capital Allowances – at 2004 stated thresholds.¹

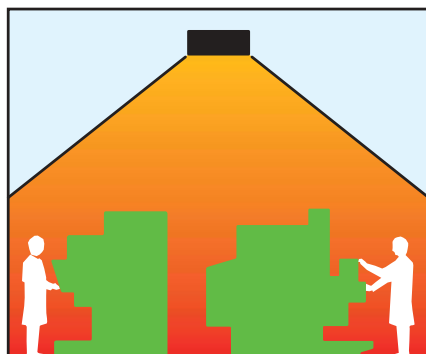
Lower installed costs

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.

In the next phase of development Cobra will be available with a balanced flue option which eliminates the need (under Part L) to provide combustion air grilles within the building. Further reducing disruption and building related costs on site.

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.

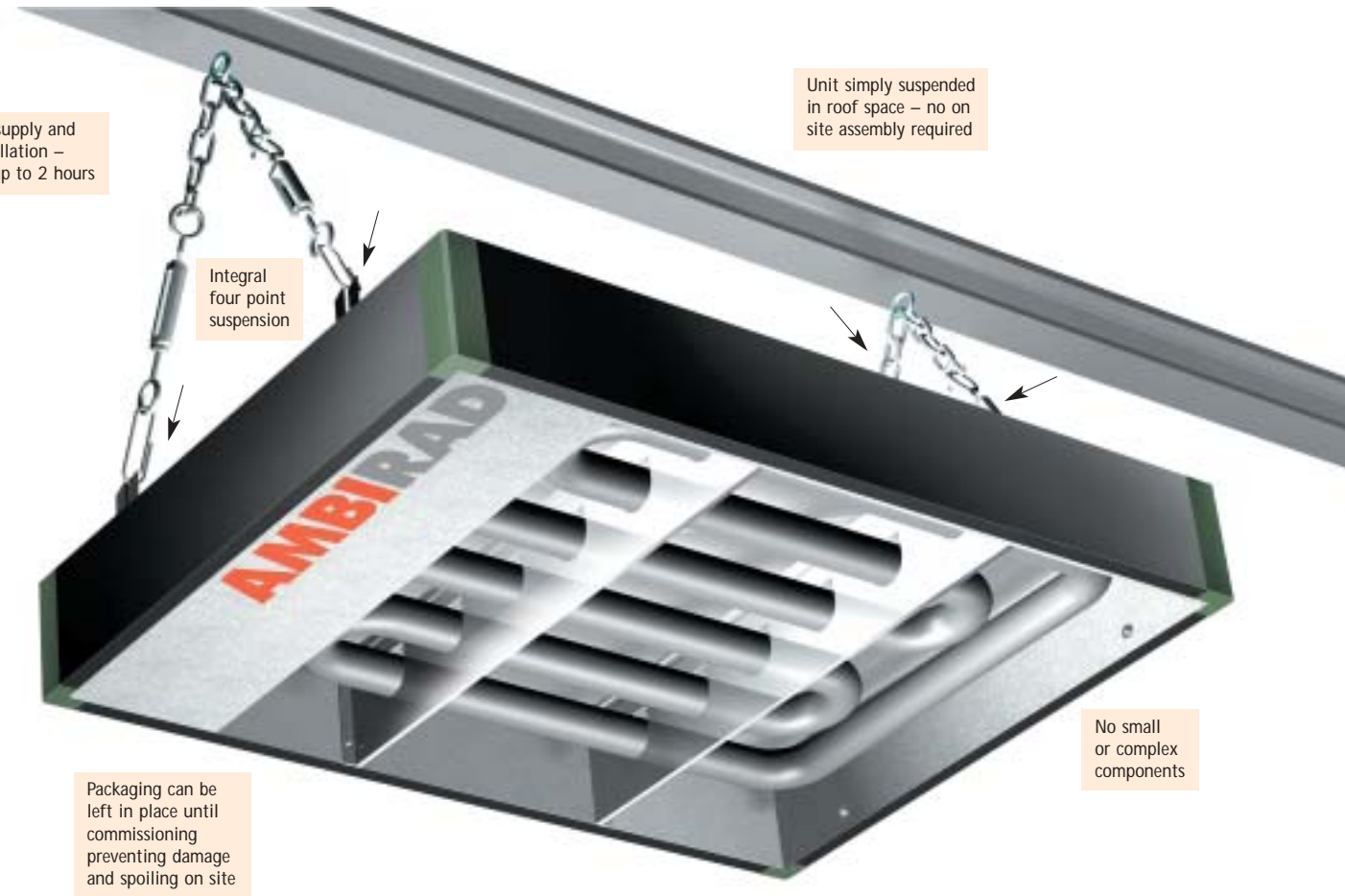


Benefits of radiant heating

- 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.



¹ Subject to final approval by the Carbon Trust.
² Note next phase of development.



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
- Museums

Specification

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

The Cobra is currently available in one standard size unit and is constructed in a twin wall steel construction. Comprising 4 point suspension, the unit 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 48dB(A) at a distance of 3 metres. When the product is fitted with ducted fresh air and is flued this reduces to 42dB(A).

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 high temperature steel for improved longevity and performance.

Protective ball guards are available for applications in sports environments.