

Benefits of the Radiant Underfloor System & Service

1 Peace of mind.

Radiant use pipe with the highest UK specification (95⁰C @ 10 bar) for plastic heating pipe. This pipe has very low expansion rates so it will not adversely affect or crack your screed. Should the worst happen and water at far too high a temperature reaches the floor, this will not damage your system.

2 High quality and reliable circuit distribution.

Radiant manifolds are solid one piece brass (they have no joints that could leak) and are all fitted with automatic air vents, temperature and flow gauges and individual circuit control valves. Pump and water temperature controls from world leading industry standard suppliers making replacement parts easy to obtain.

3 Energy efficient control.

Intelligent room temperature control from clever thermostats that have direct control of the boilers operation. Even when the time clock is 'on' unless there is a demand for heat from any one of the room thermostats, the boiler does not need to operate. As soon as there is a demand for heat this activates the operation of the boiler. This precise control reduces your running costs by ensuring that the boiler only operates when it needs to.

4 A comfortable living environment.

If the internal temperature of the building is allowed to cool down too much there will be an unacceptable delay at the next heating period. Radiant intelligent room thermostats have an automatically set 'minimum temperature' level. This minimum level ensures that the building will not take a long time to warm up at the next 'on' period, a common problem with some systems.

5 Straightforward installation.

Every job has an easy to follow colour coded CAD layout and a step by step manual. Anyone from a novice DIY enthusiast to a professional plumber can install an Radiant system without difficulty. Every job has a technical person assigned to it, giving complete support from a simple phone call right up to an 'on-site' visit. This is Radiant's way of ensuring that you are never alone with your project.

6 Compatibility.

The Radiant underfloor system is fully compatible with any condensing boiler and Energy Management System. Radiant have designed this feature so that you do not require 'special' hot water cylinders to 'enhance' the performance of the boiler. In fact you do not require any special or additional equipment to ensure a fully functioning and energy efficient system. Radiant are manufacturers and market leaders in condensing cooker and boiler technologies and we understand the complete design concept. *Beware of cheap imitations!*

Thermotronic Oil Condensing Boiler - Floor Standing only

Designed, developed and hand built in the UK, the Thermotronic boiler represents the pinnacle of engineered efficiency.

Radiant (formally HCC) were the first company in the UK to develop oil fired condensing boiler technology, some twelve years ago. Since then constant improvements to the design and performance of these exceptional heating machines has kept Radiant at the forefront of condensing boiler technology.

Why Floor Standing?

Fundamentally all oil-fired burners are 'on/off' devices –i.e. they cannot turn down the heat in the same way a modern gas boiler can. If the water content of the heat exchanger were low it would reach temperature very quickly resulting in many more on/off cycles for the burner, leading to a cumulative waste of fuel and operating inefficiency. This is overcome in the Thermotronic boiler by using only large water capacity heat exchangers which are much more fuel efficient and therefore more economic to run.

Design and Output Range

The output of the Thermotronic boilers range from 20 kW through to 80kW, (68,000 btu/hr – 273,000 btu/hr). So there is certain to be a boiler that fits your precise requirements. There are two design types within this range; The T2, a two stage heat exchanger for the smaller outputs (20 to 30kW) and the T3, a single stage heat exchanger for the larger outputs (40 to 80kW). All the condensing heat exchangers are made from high grade (316L) stainless steel. In all the time we have been manufacturing these boilers we have never had to replace a condensing heat exchanger. You can be confident they are built for a lifetime and will return your investment many times over.

Efficiency and the Environment

Radiant Thermotronic boilers have an ultra-high efficiency rating: in the order of 92% nominal and 97% peak. Emission of CO gasses is so low (nominally less than 25 parts per million) that it exceeds all current European Standards and is significantly better than conventional boilers making the Thermotronic an environmentally friendly option.

However, burning the fuel and converting it to useful energy is only half the story. Even greater annual operating efficiencies can be achieved through using intelligent management control systems. All Radiant Thermotronic boilers are available with the option of a Siemens weather compensation and boiler optimisation controller. This precise form of control virtually eliminates the waste of energy associated with a conventionally controlled system.

Installation Advantages

All Thermotronic boilers are extremely quiet when operating and because of this they can be sited almost anywhere. Standard plastic pipes (either 82mm or 110mm soil and vent pipe) is all that is required to flue these boilers and their versatility is such that either a balanced flue, a conventional type flue or a monodraught type flue can be employed at incredibly low costs. Thermotronic boilers can also be connected to any type of hydraulic heating system design making them ideal in replacement situations as well as for new systems.

Guarantees

All Thermotronic boilers are built by hand and individually tested. The heat exchangers are guaranteed for five years against a manufacturing defect and all other component parts of the boiler are guaranteed for 12 months from the date of purchase. (These guarantees do not affect your statutory rights.)

Radiant Heating Solutions Ltd. Hougham, Grantham, Lincs,

Tel: 01400 250572

Fax: 01400 251264

Email sales@heating-solutions.biz

LIST PRICE February 2003

THERMOTRONIC T2 - Floor Standing Oil Fired Condensing Boilers

LEAD TIME: - 4 – 6 Weeks

<u>Model</u>	<u>List Price</u>
20kW Basic	£1,995.00
20kW with EMS**	£2,545.00
30kW Basic	£2,100.00
30kW with EMS	£2,650.00
40kW Basic	£2,360.00
40kW with EMS	£2,910.00
45-60kW Basic	£3,600.00
45-60kW with EMS	£4,200.00

**Energy Management Systems

Please note;

The 40kW T2 boilers will be discontinued shortly and replaced with the new *All Stainless Steel* T3 boilers.

THERMOTRONIC T3 – All Stainless Floor Standing Oil Fired Condensing Boilers

LEAD TIME: - 4 – 6 Weeks

<u>Model</u>	<u>List Price</u>
40kW Basic	£2,930.00
40kW with EMS	£3,405.00
60-80kW Basic	£4,120.00
60-80kW with EMS	£4,595.00

All prices are exclusive of VAT

Price on application for delivery cost.

Condensing Range Cookers

A unique product, hand built in the Midlands that is based on the Sandyford Classic cooker with condensing technology added by Radiant Heating Solutions

STYLISH

Elegant two oven thermostatically controlled cooker with 'slam shut' doors. Can be installed into any type of heating system.

RELIABLE

Quality components from recognised suppliers ensures years of trouble free service.

SERVICABLE

Standard burner and control parts mean that any qualified and approved engineer can service and repair this cooker.

QUIET

Arguably the quietest cooker of its size and type.

EFFICIENT

Producing the lowest emissions of green house gases and the highest efficiencies of its type

The cooker has two burners, one for heating the other for cooking. Both burners are thermostatically controlled. The warm-up time from cold is only twenty minutes to full roast temperatures (200°C). The cooker can be connected to any type of heating system, including underfloor and does not require a 'heat leak' radiator. However the cooker must always be connected to a hot water cylinder. The heating can be controlled by any type of device from a simple time clock right up to an energy management system (EMS). There are two exhaust pipes and two air intake pipes (all 82mm or 3" plastic) and it can be used on a balanced flue. **This cooker does not require an expensive class 1 chimney**, it uses simple plastic pipes for the flues. The cooker features 'slam shut' doors and a large 'dog bone' hot plate. It is available in the usual colours and the order lead-time is around six to eight weeks. These appliances *must* be installed by an approved Engineer of Radiant.

Price guide for cooker with slam shut doors,

Gas-fired 100,000 btu/hr output to heating **£7,140.00**

Oil-fired 100,000 btu/hr output to heating **£6,460.00**

Prices exclude VAT, delivery and commissioning

This product is sold through PBM, a trade relation partner.
Please contact us for further details of this product.

This cooker is sold exclusively in the UK by Radiant as the 'Sandyford Sherlock'. This is the top of the Sandyford range of appliances. The state of the art condensers used in this ultra high efficiency appliance have been developed by Radiant. Our track record of oil and gas fired condensing boilers stretches as far back as 1989.

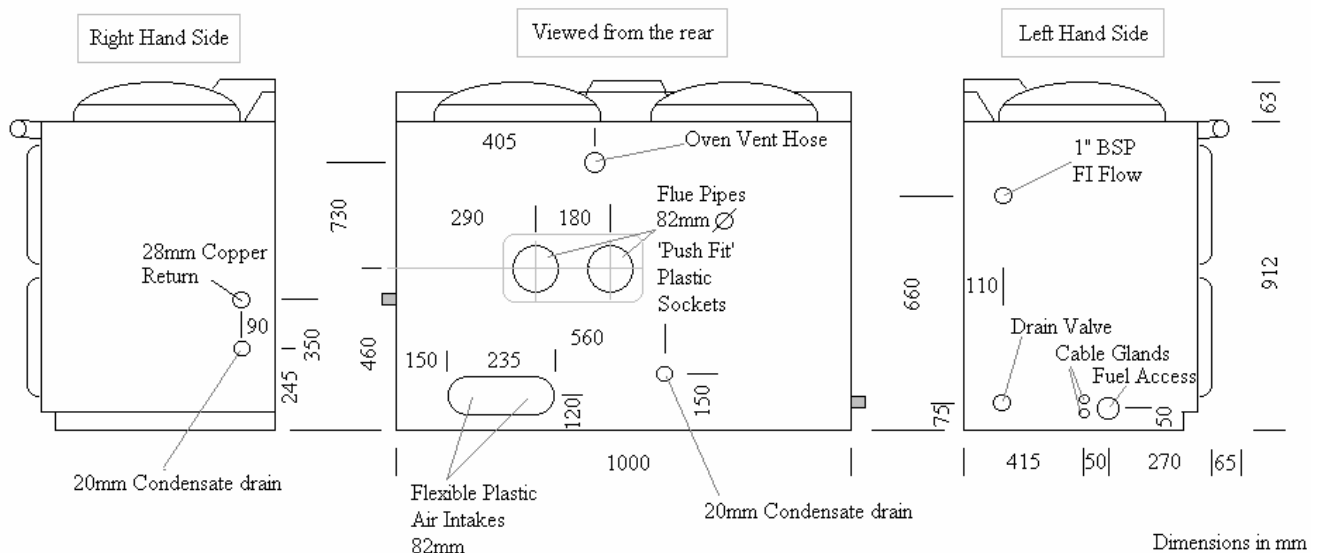
Radiant were the first UK company to manufacture these boilers and now we can put the latest technology into a traditional range cooker.

This exclusive cooker is normally delivered fully assembled, however where access problems are inevitable, the cooker can be delivered part assembled and finished on site.

Pipework & Flue System Layout for the Radiant Sandyford Condensing Cooker

HCC Sandyford - flue & connection details

Please note that the plastic flue pipe sockets off the rear of the cooker protrude by 40mm. These are in fact not fitted until after the delivery so as to aid passage through doorways etc. For flue systems that are to be taken either left, right or vertical, the farthest outlet passes over the nearest outlet. This is achieved by using standard 82mm plastic soil & vent pipe and fittings. Use either push fit or solvent weld fittings and support the weight of the system with brackets. The two air intake pipes can also be extended so that air is taken from outside the building and not the room the cooker is in. When extending the air supply, make sure that rain cannot enter these pipes. There are also two condensate drains that must be run to a suitable drain in 19/20mm plastic overflow pipe. Care must be taken to ensure that these drains cannot freeze.



Main oven 305mm High
 350mm Wide
 505mm Deep

Second oven 250mm High
 350mm Wide
 505mm Deep

Hotplates 342mm x 810mm Max in a 'dog bone' shape