

TYPE F - ROOM HEATERS WITH BOILERS

Introduction

A wider range of appliance types are available following the introduction of wood pellet appliances to the UK market place. As well as the performance information given, the icons let you know at a glance whether the appliance is freestanding or inset, the type of fuel the appliance is designed to burn and whether it is classed as intermittent or continuous burning, its primary air control system, hearth suitability, and if applicable its DEFRA exemption and/or its HETAS MCS Approved Product status.

Application The following notes are intended to assist the technically minded in using figures given in this section.

These appliances give their heat output in two forms:

1. Radiation and Convection for direct room heating.
2. Hot water from the boiler which is available for domestic use and/or radiators.

The rated outputs shown against each room heater are based on the performance with a standard test fuel and doors closed under test conditions which provide for a four-hourly refuelling interval for smokeless fuels and a 1½ hourly refuelling interval for wood logs, except in the case of hopper feed appliances which have a six-hourly refuelling interval. Exceptions are noted in the *Appliance Feature Icon* areas.

During preliminary selection of an appliance, a room heating allowance of not less than the following should be taken:

- Calculate the heat demand for the room where the appliance will be installed using the calculation method at the start of Part E. Then calculate the hot water demand.
- The choice of a SF appliance with a boiler may not be a straight forward option here. The hot water demand for a property and the output available from a selected appliance model may give limited options, especially where the boiler is expected to provide all the hot water demand.
- Manufacturer's will provide a proportional heat output to the room and an output for water, for example 1.9kW to the room and 11.4kW to water. This proportional ratio, and not the output, may remain constant, so for example if the number of radiators will only accept 75% of the nominal hot water output, then conversely only 75% of the dry heat to the room will be released. The following calculation should be made and the appropriate appliance chosen.
- To also help elevate some of the issues of this ratio, it is recommended to have a radiator in the same room as the appliance to help balance the output.

The principle calculation to check the proportional ratio is:

$$\text{Actual heat to room} = \frac{\text{Total connected heat}}{\text{Boiler maximum output}} \times \text{Appliance room maximum output}$$

For boiler water heating the following commonly used figures are the lowest which should be taken in making a preliminary selection of an appliance:

- Domestic Hot Water - 1.2kW.
- Approximate area of radiator and pipe-work transmission - 0.5kW/m².

It may be assumed as an approximation that over a range of burning rates the proportions of direct room heating and water heating follow the same ratio as the rated output figures shown against each appliance. The appliance will burn less fuel and require less frequent re-fuelling if:

- a. It is installed in a smaller room (or a room having a lower heat loss) than the largest it can serve, in which case the boiler output will be correspondingly less; or
- b. It is installed / operated with a domestic hot water and/or central heating load less than the rated output of the boiler.

Account should be taken of the conditions outlined in a when determining the domestic hot water and/or central heating load that can be served by the boiler. In the case of b. it will be necessary to determine whether any supplementary heating surface will be needed in the room in which the room heater is installed.

Installation of a radiator in the same room as the appliance gives the user greater control over the total heat input to the room and thus provides for economy in running costs. This is particularly the case when:

- a. The "direct room heating" output of the room heater is close to the calculated heat requirement of a room, or:
- b. There is a pro-rata reduction of the direct room heating output as described in paragraph (b) above.

If the appliance is installed in a room with a heat requirement in excess of the direct room heating output, an appropriate amount of radiator surface must be installed in the same room. Some room heaters are fitted with boiler flue dampers which vary the proportion of space heating output to water heating output. In these cases outputs are given under alternative working conditions.

The appliance selected should be one capable of meeting the particular space heating and hot water requirements together under one of the conditions set down, ie with the boiler damper either closed or open, if satisfactory service under conditions of -1°C outside temperature is to be obtained. In the case of boilers which have narrow waterways the remark 'Suitable for indirect hot water systems only' is added (see Introductory Notes).

There are three types of combustion control used on appliances in this Part:

- a. Manual control where the user turns the control up or down according to need which gives a changing output over a period of several hours due to changes in the firebed.
- b. Body temperature control where the burning rate is thermostatically controlled by a thermostat having the heat sensitive phial in close proximity to the body of the room heater. This type of control tends to produce a steady output by responding to the room heater body temperature and so compensates for changes in the firebed. However the control only responds very slightly to changes in room temperature and not at all to changes in hot water for radiators and domestic hot water.
- c. Water temperature control where the burning rate is controlled by a thermostat having the heat sensitive phial in, or on, the boiler. This type of control tends to produce a fluctuating roomheating and boiler output dependent on the water temperature and therefore, on the demand for hot water for radiators and domestic use which affects the water temperature. The thermostat does not respond to changes in room temperature but aims to maintain reasonably constant preselected water temperature. It is particularly useful on appliances which have a low direct room heating output and a relatively high hot water output from the boiler.

F1

Roomheater with Boiler
Mineral

The type of thermostat for each appliance is indicated by a note in the *Appliance Feature Icon* area.

Approved Fuels

Fuels regarded as suitable for the appliances in this section are listed in the Manufactured Smokeless Fuels area and Natural Smokeless Fuels area of Part 3 - Wood, Biomass & Solid Mineral Fuels of this Guide and wood logs as specified in BS EN 13240 or when tested to BS 14785 in conformity with that standard. Refer to the *Appliance Feature Icon* area for these variations.


















It should be noted that bituminous coal and wood in any of its forms including pellets is not permitted by law to be burned on appliances in Smoke Control Areas, except where the appliance has been exempted under Part II (4) of the Clean Air Act, 1993. Exempted appliances are designated with the Defra exempt icon (left) in this list.

Type F1 - Room Heaters with Boiler - Mineral Fuel




Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Charnwood Charnwood, Bishops Way, Newport, Isle of Wight, PO30 5WS				01983 537 777 www.charnwood.com		
LA 45iB	F10501		Smokeless	2.1 / 11.2	76.4 / 77.9	
LA 30iB	F10502		Smokeless	2.2 / 6.3	74.4 / 75.9	
LA 50iB	F10503		Smokeless	1.9 / 12.1	75.1 / 76.6	
Stovax Ltd Falcon Road, Sowton Ind. Estate, Exeter, Devon, EX2 7LF				01392 474 000 info@stovax.com www.stovax.com		
Stockton 8 HO Boiler Stove ST8HBMF2	F11072		Smokeless	6.0 / 8.0	70.4 / 72.4	
Stockton 11 HO Boiler Stove ST11HBMF2	F11073		Smokeless	6.4 / 11.0	70.0 / 72.0	
Stockton 14 HO Boiler Stove ST14HBMF2	F11074		Smokeless	7.0 / 14.0	71.9 / 73.8	

F2

Roomheater with Boiler
Wood Logs



























Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Stovax Ltd Falcon Road, Sowton Ind. Estate, Exeter, Devon, EX2 7LF				01392 474 000 info@stovax.com www.stovax.com		
View 8 HO Boiler Stove VW-8HBMF1	F11075		Smokeless	6.0 / 8.0	70.4 / 72.4	
Waterford Stanley Ltd Unit 401-403, IDA Industrial Estate, Cork Road, Waterford, Ireland				00353 51 302 333 www.waterfordstanley.com		
Stanley Reginald Boiler Stove	F10729		Smokeless	5.0 / 10.6	74.3 / 76.1	
Yeoman Stoves (by Stovax Ltd) Falcon Road, Sowton Ind. Estate, Exeter, Devon, EX2 7LF				01392 474 000 yeoman@stovax.com www.yeomanstoves.co.uk		
Devon 50 HO Boiler Stove YM-DEV-50HBMF2	F11076		Smokeless	6.0 / 8.0	70.4 / 72.4	
County 60 HO Boiler Stove YM-COU-60HBMF2	F11077		Smokeless	6.4 / 11.0	70.0 / 72.0	
County 80 HO Boiler Stove YM-COU-80HBMF2	F11078		Smokeless	7.0 / 14.0	71.9 / 73.8	
CL 8 HO Boiler Stove YM-CL8HBMF1U	F11079		Smokeless	6.0 / 8.0	70.4 / 72.4	

Type F2 - Room Heaters with Boiler - Wood Logs

































Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Broseley Fires Ltd Unit B, First Floor, Knights Court, Archers Way, Battlefield Enterprise Park, Shrewsbury, Shropshire, SY1 3AB				01743 461 444 sales@broseleyfires.com www.broseleyfires.com		
Evolution 26	F20787		Wood	10.1 / 15.8	70.9 / 77.9	
Charnwood Charnwood, Bishops Way, Newport, Isle of Wight, PO30 5WS				01983 537 777 www.charnwood.com		
Country 16B Woodburner	F20500		Wood	7.3 / 8.6	67.6 / 75.0	
Island IIIB	F20504		Wood	9.0 / 9.0	67.3 / 73.3	

F2

Room heater with Boiler
Multi-Fuel






















Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Heat Design 60 Hawthorn Road, Western Industrial Estate, Naas Road, Dublin 12, Republic of Ireland,				00353 1 4089192 Karl.Breen@heatdesign.ie www.heatdesign.ie		
San Remo SR8B	F21017	    	Wood	3.0 / 5.4	71.3 / 77.7	
San Remo SR12B	F21018	    	Wood	4.8 / 8.2	70.0 / 76.2	
San Remo SR20B	F21019	    	Wood	9.1 / 11.8	67.4 / 73.3	
Pyroclassic Fires Ltd 453 Newton Road, Lowton, Warrington, WA3 1NZ				03333 231 271 info@pyroclassic.co.uk www.pyroclassic.co.uk		
Pyroclassic IV	F20830	    	Wood	4.2 / 1.6	75.4 / 81.9	
<i>Capable of operating at low output for an extended period of up to 12 hours. Refuel period is 1.6 h to give the rated output shown.</i>						
























Type F3 - Room Heaters with Boilers - Multi-Fuel

Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
BFM Europe Ltd Gordon Banks Drive, Trentham Lakes North, Stoke-on-Trent, Staffordshire, ST4 4TJ				01782 339 000 info@bfm-europe.com www.flavelfires.co.uk		
Flavel Central Heating Stove	F31326	    	Wood	5.8 / 8.9	66.1 / 72.7	
			Smokeless	5.1 / 9.7	78.8 / 80.4	
Portway Stoves Gordon Banks Drive, Trentham Lakes North, Stoke-on-Trent, Staffordshire, ST4 4TJ				01782 339 000 info@bfm-europe.com www.portwaystoves.com		
Portway 2: Central Heating Stove	F31325	    	Wood	5.8 / 8.9	66.1 / 72.7	
			Smokeless	5.1 / 9.7	78.8 / 80.4	
Charnwood Charnwood, Bishops Way, Newport, Isle of Wight, PO30 5WS				01983 537 777 www.charnwood.com		
Country 16B Multi-fuel	F30499	    	Wood	7.3 / 8.6	67.6 / 75.0	
			Smokeless	6.4 / 13.2	72.9 / 74.6	
Cove 2B	F30581	    	Wood	4.6 / 6.4	68.1 / 74.6	
			Smokeless	7.1 / 9.3	74.8 / 76.5	
SLX 45	F30856	   	Wood	6.0 / 6.3	69.1 / 75.5	
			Smokeless	4.6 / 9.7	69.0 / 70.6	
<i>Outer castings available for freestanding installation.</i>						

F3

Roomheater with Boiler
Multi-Fuel

Appliance Name	HETAS ID	Icons	Fuel Type	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Dunsley Heat Ltd Bridge Mills, Huddersfield Road, Holmfirth, Nr Huddersfield, West Yorkshire, HD9 3TW				01484 682 635 sales@dunsleyheat.co.uk www.dunsleyheat.co.uk		
Highlander 8 Central Heating Boiler	F30697		Wood	3.9 / 5.8	67.0 / 73.6	
			Smokeless	3.8 / 7.7	69.6 / 71.0	
Highlander 16 Central Heating Boiler	F30783		Wood	7.1 / 8.5	67.0 / 73.6	
			Smokeless	4.5 / 12.4	72.3 / 73.8	
Highlander 10 Central Heating Boiler	F30788		Wood	5.2 / 8.2	67.6 / 74.3	
			Smokeless	3.9 / 10.5	72.3 / 73.8	
Firebird Heating Solutions Ltd Údarás Industrial Estate, Baile Mhic Ire, Co.Cork, Ireland, P12 HK51				+353 (0) 2645253 info@firebird.ie www.firebird.ie		
16" Inset Back Boiler Stove	F30902		Wood	2.5 / 7.3	68.7 / 75.0	
			Smokeless	3.6 / 8.3	75.3 / 79.9	
<i>Also available with an enamel finish.</i>						
18" Inset Back Boiler Stove	F30903		Wood	3.6 / 6.9	70.5 / 77.0	
			Smokeless	3.6 / 12.1	79.4 / 81.0	
<i>Also available with an enamel finish.</i>						
Hi-Flame Fireplace (UK) Ltd Unit 5A, Holmes Chapel Business Park, Manor Lane, Holmes Chapel, Cheshire, CW4 8AF				01477 544 585 info@hi-flame.com www.hi-flame.co.uk		
Alpha Inset Boiler (AL357i-B)	F31170		Wood	4.8 / 7.5	74.3 / 80.2	
Precision Inset Boiler (HF357i-B)	F31171					
Olymberyl Gabriel Inset Boiler (OL357i-B)	F31172					
Graphite Inset Boiler (GR357i-B)	F31173					
Hunter Stoves Ltd Emperor Way, Exeter, Devon, EX1 3QS				01392 444 770 info@hunterstoves.co.uk www.hunterstoves.co.uk		
Herald 14 CE vll Multifuel Central Heating Stove	F30736		Wood	4.8 / 9.1	67.0 / 73.6	
			Smokeless	4.8 / 9.5	69.4 / 70.8	
Mendip Stoves Ltd dist. by Eurostove Ltd Unit H1, Mendip Industrial Estate, Mendip Road, Somerset, BS26 2UG				01934 750 500 info@mendipstoves.co.uk www.mendipstoves.co.uk		
Mendip 8 Boiler	F30891		Wood	3.4 / 5.3	67.2 / 73.8	
			Smokeless	3.1 / 5.2	67.0 / 68.4	








































































Appliance Name	HETAS ID	Icons	Output Mode	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Parkray Ltd Emperor Way, Exeter, Devon, EX1 3QS				01392 444 770 info@hunterstoves.co.uk www.parkray.co.uk		
Consort 15 CE vll Multifuel Central Heating Stove	F30740		Wood	4.8 / 9.1	67.0 / 73.6	
			Smokeless	4.8 / 9.5	69.4 / 70.8	
Percy Doughty & Co. Imperial Point, Express Trading Estate, Stone Hill Road, Farnworth, Bolton, BL4 9TN				01204 868 550 sales@percydoughty.com www.percydoughty.com		
Firefox 12B Vega 300B	F30871		Wood	6.2 / 7.4	69.6 / 76.0	
	F30872		Smokeless	4.8 / 8.0	73.2 / 75.1	
Stovax Ltd Falcon Road, Sowton Ind. Estate, Exeter, Devon, EX2 7LF				01392 474 000 info@stovax.com www.stovax.com		
Stockton 7 Inset HO Boiler Stove 7125HB	F31083		Wood	4.0 / 7.0	67.8 / 74.4	
			Smokeless	4.0 / 7.0	74.8 / 76.8	
View 7 Inset HO Boiler Stove VW-7NHBMF1	F31084		Wood	4.0 / 7.0	67.8 / 74.4	
			Smokeless	4.0 / 7.0	74.8 / 76.8	
Waterford Stanley Ltd Unit 401-403, IDA Industrial Estate, Cork Road, Waterford, Ireland				00353 51 302 333 www.waterfordstanley.com		
Tara Boiler	F30515		Wood	2.3 / 5.4	72.8 / 79.6	
			Smokeless	1.8 / 5.9	74.5 / 76.0	
Erin Boiler Stove	F30517		Wood	3.6 / 7.5	68.5 / 75.5	
			Smokeless	5.0 / 7.3	73.2 / 75.0	
Stanley Lismore Boiler Stove	F30857		Wood	2.4 / 5.5	67.7 / 74.7	
			Smokeless	5.1 / 12.1	75.3 / 76.8	
Cara + High Output Boiler	F31255		Wood	4.2 / 6.9	70.2 / 77.3	
			Smokeless	2.8 / 12.0	71.8 / 73.6	
Yeoman Stoves (by Stovax Ltd) Falcon Road, Sowton Ind. Estate, Exeter, Devon, EX2 7LF				01392 474 000 yeoman@stovax.com www.yeomanstoves.co.uk		
CL7 Inset HO Boiler Stove YM-CL7NHB	F31085		Wood	4.0 / 7.0	67.8 / 74.4	
			Smokeless	4.0 / 7.0	74.8 / 76.8	


















Pictured: the Vega 300.

Type F4 - Room Heaters with Boilers - Wood Pellet

F4

Roomheater with Boiler
Pellet

Appliance Name	HETAS ID	Icons	Output Mode	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Aico Spa Via Kupfer, 31 25036, Palazzolo sul'Oglio (BS), Italy,				+39 030 7402939 info@ravelligroup.it eng.ravelligroup.it		
Ravelli HRV 100 Touch	F41879	   	Rated Output Part Load	2.0 / 10.1 0.6 / 3.8	83.9 / 91.2 83.8 / 91.1	
Ravelli HRV 140 Touch	F41880	   	Rated Output Part Load	2.6 / 14.6 0.6 / 3.8	82.8 / 90.0 83.8 / 91.1	
Ravelli HRV 160 Touch	F41881	   	Rated Output Part Load	2.4 / 16.3 0.8 / 4.7	83.9 / 91.1 87.3 / 94.9	
Ravelli HRV 200 Touch	F41882	   	Rated Output Part Load	2.8 / 20.6 0.9 / 6.1	84.7 / 92.1 85.1 / 92.5	
Cola Stoves UK Lichfield Road, Branston Industrial Estate, Burton upon Trent, Staffs, DE14 3HD				0843 479 0009 sales@colastoves.co.uk www.colastoves.co.uk		
Energyca 30	F41408	     	Rated Output Part Load	4.0 / 24.0 1.1 / 5.8	85.7 / 93.1 87.1 / 94.7	
Pictured: the Energyca 30. Hoppers hold approx. 48 kg of pellets.						
Energyca	F41410	     	Rated Output Part Load	3.4 / 20.1 1.1 / 5.8	86.1 / 93.6 87.1 / 94.7	
Hopper holds approx. 48 kg of pellets.						
Termo Charme Plus	F41411	     	Rated Output Part Load	3.1 / 18.1 0.68 / 4.82	85.5 / 92.9 87.7 / 95.3	
Termo Blitz Plus	F41413					
Termo Perla Plus	F41414					
Termo Focus	F41412	     	Rated Output Part Load	2.4 / 15.1 1.1 / 4.3	86.4 / 94.0 89.6 / 97.4	
Hopper holds approx. 20 kg of pellets.						
Termo Perla Lux	F41415	     	Rated Output Part Load	1.7 / 10.8 1.1 / 4.3	87.6 / 95.2 89.6 / 97.4	
Hopper holds approx. 22 kg of pellets.						
Termoplus 18	F41416	     	Rated Output Part Load	1.7 / 17.3 0.7 / 4.8	85.7 / 93.1 87.7 / 95.3	
Aquaplus 18	F41417					
Pictured: the Termoplus 18. Hoppers hold approx 30 kg of pellets.						
Termoplus 23	F41418	     	Rated Output Part Load	1.9 / 21.1 0.9 / 6.0	85.9 / 93.4 87.2 / 94.8	
Aquaplus 23	F41419					
Pictured: the Termoplus 23. Hoppers hold approx 40 kg of pellets.						

Appliance Name	HETAS ID	Icons	Output Mode	Rated Output kW Room/Water	Efficiency % Gross/Net	Product Image
Nordica Extraflame Via Summano 104, 36030, Montecchio Precalino (VI), Italy,				+39 0445 804000 info@lanordica.com www.lanordica-extraflame.com		
Comfort Idro	F40524		Rated Output	4.6 / 8.0	83.5 / 90.2	
			Part Load	1.3 / 2.5	86.5 / 93.4	
Solzaima Rua dos Outerlos 111, 3750-362 Belazaima do Chao, Portugal				+351 234 650 650 mail@solzaima.co.uk www.solzaima.co.uk		
Douro 17kW	F41718		Rated Output	3.0 / 14.2	83.8 / 91.1	
			Part Load	0.8 / 4.3	86.3 / 93.8	
Douro 23kW	F41719		Rated Output	3.3 / 18.8	82.0 / 89.2	
			Part Load	0.8 / 4.3	86.3 / 93.8	
SZM C 18kW	F41720		Rated Output	1.1 / 18.1	82.4 / 89.6	
			Part Load	0.55 / 6.45	84.5 / 91.8	
SZM C 24kW	F41721		Rated Output	2.16 / 23.1	82.2 / 89.3	
			Part Load	0.55 / 6.45	84.5 / 91.8	
Windhager UK Tormarton Road, Marshfield, South Gloucestershire, SN14 8SR				01225 892 211 info@windhager.co.uk www.windhager.co.uk		
FireWIN Klassik and Exklusiv 090	F40529		Rated Output	1.3 / 7.8	87.5 / 94.5	
			Part Load	0.7 / 4.0	88.6 / 95.7	
<i>Tested to EN 14785. Hopper holds approx 37kg pellets.</i>						
FireWIN Klassik and Exklusiv 120	F40530		Rated Output	1.4 / 10.6	87.1 / 94.1	
			Part Load	0.7 / 4.0	88.6 / 95.7	
<i>Tested to EN 14785. Hopper holds approx 37kg pellets.</i>						

F4

Roomheater with Boiler Pellet