

**GUIDANCE NOTES
FOR SUBMISSIONS TO
UK GOVERNMENT'S
PRODUCT
CHARACTERISTICS
DATABASE

(SOLID FUEL BOILERS
ONLY)**

Summary

1. Submission Pack Version Number

The Guidance Notes are routinely updated to reflect changes to the submission process. The submission pack provides means for submission of data. You will find comprehensive guidance notes and instructions.

The Submission Pack is available on the Product Characteristics Database website (www.sedbuk.com or www.boilers.org.uk). You should ensure that the version you are using correlates with that available at the website prior to making a submission. GASTEC at CRE Ltd may not accept submissions made using old versions of the Submission Pack.

As an aid to those submitting data for validation the following tables identify the latest version number and indicate the changes made.

Submission Pack Revision Table

Version Number	Issue Date	Amendment details
SFB 1.0	March 2006	First Issue
SFB 2.0	October 2007	Issued to include Fuel Feed Options
SFB 3.0	October 2010	Amendments resulting from SAP 2009

(Note: Current version number details are shown in bold for clarity)

2. General Points about the Product Characteristics Database

1. This part of the database is intended for domestic Solid Fuel boilers only, and there is a cut-off at 70kW [Nominal Output]. No modulating or "on/off" boilers will be accepted where the Nominal Output is greater than 70kW. Range-rated Solid Fuel boilers may have an upper limit in excess of 70kW provided that the lower limit is below 70kW.
2. The database is kept up to date on a monthly cycle with deadlines for data submission as shown in the following table:-

Programme for boiler efficiency data submission	
Completed data entries required by:-	For database update on:-
15 calendar days before last working day of each month	Last working day of each month
Note: Entries may be submitted at any time, but cannot be guaranteed for inclusion after the 15 day deadline	

3. Independent certification of efficiency test results is required as explained in SAP 2005 and section 1.1 of these submission notes.
4. All entries in the database are subject to technical audit.
5. Product names in the database must be unique, and it is not possible to have two entries with the same conjunction of brand name, model name and qualifier and fuel type. The way in which product names are validated has changed; photographs are now required to help in this process (please see section 1.2 for more details).
6. You are required to submit an actual example of a dataplate for each boiler submitted.
7. If any product on the database becomes obsolete (i.e. goes out of production) you must inform us. The data will continue to be held for SAP assessors' and Home Inspectors' use.

Because precise identification of your products is a vital part of the SAP procedure (and in future the Home Information Packs), we urge you to pay particular attention to the naming of your product. If a SAP assessor/home inspector is unable to identify your boiler beyond doubt, he will simply assign a



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default value, which will generally be lower than can be achieved through testing. This may not present your product in its best light.

We appreciate that in the domestic Solid Fuel boiler industry it is commonplace to sell virtually identical products under a range of different trademarks/brand names or other identifiers sometimes specified by bulk purchasers; usually known as 'Badged Products'. We draw your attention to the section in the guidance notes calling for a separate entry for each of these products. In order to enable you to validate such information without repeating the entire data entry process, you will find a simple form [Appendix 2], which helps us to cross reference to the original model.

We have attempted to make the process of gathering and validating your boiler efficiency data as easy as possible in order to make the database as accurate and useful as possible. Our quality control procedures have been designed to question any data which do not conform to the government's high standards, but we will work hard to ensure that minor misunderstandings and difficulties are resolved as quickly as possible to the satisfaction of all interested parties.

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SEASONAL EFFICIENCY of DOMESTIC BOILERS in the UK [PCDB]

1. Introduction

The primary purpose of the Product Characteristics Database is to support the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings by providing reliable data on the efficiency and other relevant characteristics of central heating appliances [measured on a Gross basis]. The database has been expanded to hold data for a range of heating products. These guidance notes specifically deal with the submission of Solid Fuel boiler data to the database.

The database has become widely known and used as a reference source of boiler efficiency information [e.g. UK Building Regulations - Part L].

For entries in the database it is GaC's role to verify that either:

1. Efficiency test data submitted [contained in certified copies of Independent Type Tests – ITT] have been produced by an appropriately qualified Notified Laboratory (an accredited test house subject to European standards for quality control and operations) as required under the Construction Products Directive.
2. Or a declaration of the appliance performance has been made by HETAS Ltd in accordance with the declaration provided in Appendix 4 of this manual.

Whilst we are happy to be the company selected to check the compliance of this information and compile it into a useable Internet format, the ultimate resolution of queries is the responsibility of BRE as the Government's operating agent.

The data submitted in respect of Solid Fuel boilers will be published on a computer-readable file for SAP Assessors / Home Inspectors use. The published data will be updated at monthly intervals. Please note that it is understood that there are no plans to publish Solid Fuel boiler data on the web-site (www.boilers.org.uk or www.sedbuk.com) at this time.

Manufacturers may continue to submit further data on new products at any time. GaC will deal with these applications within an agreed time target, and will also investigate and correct any errors reported.

When Solid Fuels boilers published on the database go out of production, GaC should be notified so that the entry can be updated. The data will still be held so that SAP assessors / home inspectors can make reference to it as required.

You should be aware that once data relating to a particular Solid Fuel boiler has been published, any modifications to that product which may affect its seasonal efficiency rating must be submitted in the form of a clearly identifiable "new" entry complete with a modified model identity. Product names in the database must be unique, and it is not possible to have two entries with the same conjunction of brand name, model name and qualifier and fuel type. This is to enable a SAP assessor to differentiate between the modified and un-modified products in the marketplace.

1.1 EFFICIENCY DATA

The purpose of this database is to hold energy efficiency performance calculations for Solid Fuel boilers fuelled by any of the fuels specified in the appropriate European Norms. Although the database will contain other descriptive and technical details as well, all entries must include a SAP seasonal efficiency value. Each entry for a SAP seasonal efficiency value has an efficiency category defined as follows:-

(a) Efficiency category 1: Seasonal Efficiency based on HETAS Declaration

HETAS can complete a declaration in respect of the appliance being submitted. This declaration is of a standard format (see Appendix 4) and contains sufficient information to enable a Seasonal Efficiency value to be calculated for the appliance in question. GaC is authorised to accept such a declaration.

(b) **Efficiency category 2: Seasonal Efficiency based on certified data**

Seasonal efficiency has been calculated by the method from the results of standard efficiency tests required to demonstrate compliance with the appropriate BS EN method, together with other information supplied. The results of the standard tests have been certified by a suitably qualified Notified Laboratory (i.e. an independent test house deemed competent under European rules for boiler testing under the CPD) as required for SAP (2005) and have been submitted to GaC with other supporting details. GaC will have checked published entries with efficiency category 2 in accordance with their contract with BRE.

(c) **Efficiency category 3: Estimated**

Efficiency has been taken from SAP (2005), based on Solid Fuel boiler type. Entries with efficiency category 3 are permitted for HETAS-certified obsolete Solid Fuel boilers only, which may not comply with the provisions of the Construction Products Directive.

Note: Information relating to this category can only be supplied by BRE

Validity and accuracy of the data within the database are paramount. Careful scrutiny of the data and the certification submitted by manufacturers, and calculation of Seasonal Efficiency values from it, are essential. To avoid any doubt or misunderstanding as to the accuracy or validity of any of your supporting efficiency data, we have devised a declaration form [Appendix 5]. This should be completed and signed by an authorised signatory from whichever Notified Body carried out the Efficiency Testing required to satisfy the appropriate European Standard / Construction Products Directive.

It should be noted that, in certain cases, we are required to seek additional clarification of submitted results (e.g. where very high boiler efficiency results have been reported by the Notified Body). We would be required to seek further explanation of the methods used to produce this data. In such circumstances we would expect to see confirmation that the test laboratory has carried out sufficient checking of measurements and calculations to ensure consistency of results.

1.2 PRODUCT IDENTIFICATION

It is essential that descriptions obtained from the database allow a SAP assessor or home inspector to identify an installed Solid Fuel boiler reliably. Assessors and inspectors are not heating experts, and will examine only the information on Solid Fuel boilers that is readily visible to the householder. The route to Solid Fuel boiler identification should be viewed as follows: -

1. The product must have a unique description (i.e. distinct from any other product entered, or about to be entered, in the database). The description is made up of Brand Name, Model Name and Qualifier and Fuel type.
2. It must be possible for the SAP assessor or home inspector to identify the specific product from readily visible information.
3. Readily visible information is considered to be markings/labels on the outer case that can be seen. In addition markings/labels that can be read by means of a user-moveable panel. A user-moveable panel is considered to be one that may be hinged (e.g. flap or door) or a panel that can be removed without the use of tools and is intended to be used by the householder.
4. In order to demonstrate that product information is readily visible photographs will need to be supplied clearly demonstrating how the unique product description can be derived as described in 3 above. No submissions will be accepted onto the database where this evidence cannot be supplied.
5. In the case of a Solid Fuel boiler that may be operated with a number of fuels it is not necessary for the fuel type to be clearly visible on the appliance. It is considered possible for the SAP assessor/home inspector to determine the fuel type by other means.

The process by which a product description is verified is given in Appendix 3.

It should be noted that where a unique product description cannot be demonstrated (normally by means of photographs) an entry to the database will be denied.

2 Help and Advice on Supplying Solid Fuel Boiler Efficiency Data

2.1 How do I make a submission to the Database?

A submission is made using the data entry forms provided at the back of this guidance booklet. Detailed advice on completing the main data entry form (Appendix 1) is given in section 2.2.

As well as the basic Solid Fuel boiler data you will need to provide, there are several accompanying forms and pieces of evidence you will also need to supply. To help clarify what this is a table is presented below listing the forms you will need in various submission scenarios. Although this cannot be guaranteed to be exhaustive in all cases it should cover most.

Solid Fuel Boiler Submission Scenarios and Forms/Evidence required

Forms/Evidence required	Solid Fuel Boiler submission scenario	
	Boiler tested on fuel it burns	Badged Boiler
Manual Data Entry Form (1)	✓	✓
Badged Boiler Form (2)	N.A.	✓
Product Identification Photographs (3)	✓	✓
Dataplate	✓	✓
Solid Fuel Boiler Efficiency Directive compliant results declaration (4 or 5)	✓	✓

Note: Numbers in brackets indicate the Appendix number where the appropriate form or further information can be found.

For each Solid Fuel boiler, the accompanying paperwork as indicated in the above matrix must be submitted. As a further aid, a submission checklist is provided in Appendix 7.

It is important that all forms requiring signature (apart from the Notified Body Declarations) be signed by the Technical Director [or authorised equivalent signatory] of the submitting company.

2.2 Data Entry

A set of manual data entry forms is included in Appendix 1 – please photocopy as many as you need for all of your product data. One complete set of forms should be completed for each Solid Fuel boiler.

Please take great care when writing in each of the boxes. Special care is needed when recording results from any testing body. Please note that the accreditation information must be substantiated with appropriate copies of accreditation certificates and test reports (your Notified Body must confirm results via the Declaration given in Appendix 5). Failure to provide this evidence will prevent your product from receiving its full listing in the database. **Each form contains a signature box for the Technical Director or the equivalent person in your organisation to affirm the quality of the information supplied.** Please note that you are also required to send an actual dataplate [as affixed to the appliance] for each Solid Fuel boiler submitted.

The data entry form has been designed with subsequent data input in mind. Overleaf are some explanatory notes to help you fulfil the Government's requirements.

NB MANDATORY ENTRIES FOR SOLID FUEL BOILERS ARE PRINTED IN BOLD

There is a requirement for consistency in naming (a) your Company (b) the brand and (c) the actual models submitted. We will be making amendments as and when required to both categories and you should pay particular attention to that when checking your confirmation reports.

Entry 1 Manufacturer Name [up to 50 characters]

This is the name of the Solid Fuel boiler manufacturer or company responsible for the Solid Fuel boiler at the time the Solid Fuel boiler was manufactured – as it appears on the Solid Fuel boiler casing and/or the owners' instruction leaflets. **Please omit punctuation marks and spaces between initials.** Once we have confirmed a manufacturer name this format will be used for all future Solid Fuel boiler entries appearing under that name.

Entry 2 Current Name [up to 50 characters]

This is the current name of the Manufacturer or Company responsible for this Solid Fuel boiler in the UK. This may be different to the original name – if not mark “as above”.

NB If the same Solid Fuel boiler model is sold under more than one Manufacturer's name, then you should complete the Solid Fuel boiler Identity Form in Appendix 3 giving the other identities so that separate entries can be included on the database.

Entry 3 Address [up to 365 characters in total]

This format is as recommended in BS7666: Part 3 Section 2 Table 1 – hence the terminology. If your company does not have a UK address, then please try to match the format as closely as possible.

- Secondary addressable object name [e.g. Design Division] - up to 60 characters
- Primary addressable object name [e.g. Big House] - up to 60 characters
- Designated Street name - up to 100 characters
- Locality name [if appropriate] - up to 35 characters
- Town/city name - up to 30 characters
- Administrative area name [e.g. County] - up to 30 characters
- Postcode - up to 20 characters
- Country – if not UK - up to 30 characters

Entry 4 Telephone number [up to 25 characters]

Entry 5 Website address [up to 75 characters]

This is the actual home website address for the manufacturer [in the usual www.****.co.uk or .com configuration]. It will be used to provide a hotlink from each Solid Fuel boiler record to the specific manufacturer's website.

Entry 6 Brand Name [up to 50 characters]

This is the name of the product brand. It is anticipated that this name will reflect the manufacturer name. It is intended that this field be used for the brand instead of including it in the Model Name (e.g. model name: ACME 123 would be Brand Name: ACME; Model Name 123).

Entry 7 Model Name [up to 50 characters]

This should be the name as it appears on the Solid Fuel boiler casing or leaflet of owners' instructions.

NB As highlighted in Entry 2's notes, separate entries are required for each model if the same Solid Fuel boiler is sold under more than one model or brand name.

Entry 8 Model qualifier [up to 30 characters]: -

This is for recording any special qualifier to the model name, which may have been used to discriminate between different versions of the same model.

Entry 9 Product ID [up to 40 characters]

This is the Solid Fuel boiler identifier which, when used in conjunction with the manufacturer's name, is unique for the model and all other characteristics affecting efficiency. Where known, this provides an effective short cut for identification. Alternatively, it could be any other **unique** identifier chosen by the manufacturer and clearly **marked on the Solid Fuel boiler**. If not known, please leave blank.

Entry 10 First year of manufacture if known [up to 4 characters]

If you do not know, give your best estimate of the year or just leave blank.

Entry 11 Final year of manufacture [up to 8 characters]

Enter “current” if the model is still in production. If the model is no longer produced, but you do not know the final year of manufacture, then either enter your best estimate of the year or simply enter “obsolete”.

Entry 12 Fuel [2 digits]

NB If the same Solid Fuel boiler may be used for more than one type of fuel, then a separate Data Entry and Declaration Form is required for each fuel type.

Fuel	Code	Notes
House Coal	11	
Smokeless Fuel	12	
Anthracite Nuts	13	
Anthracite Grains	20	
Wood Logs	21	
Wood Pellets	23	

Entry 13 Main Type [1 digit]

Type	Code	Notes
Open Fire with Boiler	1	BS EN
Closed Room Heater with Boiler	2	BS EN 13240
Independent Boiler	3	BS EN

Entry 14 Flue Type [1 digit]

Definition	Entry code	Notes
Unknown	0	
Open	1	Open flued: The boiler will take its combustion air from the room, and discharge outside of the room
Room-Sealed	2	Room sealed: The boiler air supply and point of discharge of the flue system are outside of the room in which the boiler is installed.
Either	3	Where a boiler can operate with both an open or room-sealed flue and the dataplate makes no distinction.
Open Chimney	4	

Entry 15 Fan Assistance [1 digit]

Definition	Entry code	Notes
Unknown	0	
No-fan	1	
Fan	2	A fan assisted boiler is a boiler with a fan designed to supply air or remove products of combustion.

Entry 16 Burner Control [1 digit]

Definition	Entry code	Notes
Unknown	0	
Manual	1	Where the boiler firing rate is not controlled by thermostat or other device.
Electrical / Mechanical	2	Capable of being switched between full and minimum burn rate (or off) by electrical or other signal from a thermostat or time switch.

Entry 17 Fuel Feed [1 digit]

Definition	Entry code	Notes
Unknown	0	
Manual Feed	1	
Gravity Feed	2	Fuel is stored in a hopper or chamber and fed by means of gravity into boiler
Screw Feed	3	Fuel is delivered from external source to boiler by means of a mechanical screw.
Other	4	

Entry 18 Electrical Power (Firing) [up to 4 digits] – if measured

Definition	Entry code	Notes
Boiler on	Input actual value (W)	This is the average electrical power consumed while the boiler is firing at its highest rating, in Watts. This includes fans, motors, heaters and other electrical equipment but should exclude any pump used to circulate water outside the boiler.

Entry 19 Electrical Power (Not Firing) [up to 4 digits]

Definition	Entry code	Notes
Boiler off	Input actual value (W)	This is the average electrical power consumed while the boiler is adjusted to fire at its highest rating (but is not firing), in Watts. This includes fans, motors, heaters and other electrical equipment but should exclude any pump used to circulate water outside the boiler

Entry 20 Boiler Output Power (to water) [bottom of range]

[number of up to 7 characters - e.g. nnn.nnn]

For a boiler with a single rated output, this figure should be the nominal output power (to water) of the boiler part of the Solid Fuel in kW. (Note: If the boiler is capable of modulating then this power **MUST** be the same as the Boiler Power (top of range) as recorded in Entry 17)

For range rated boiler this should be the minimum output power of the range declared by the manufacturer.

Entry 21 Boiler Output Power (to water) [top of range]

[number of up to 7 characters - e.g. nnn.nnn]

For a single output boiler this figure should be the nominal output power (to water) of the boiler in kW i.e. the same as Entry 16.

For range-rated boilers, this should be the maximum nominal output power of the range declared by the manufacturer.

Boilers with Nominal Outputs greater than 70kW are not permitted on the database.

(Note: If the power is only available in BTU/hr then it should be converted using the factor 1BTU/hr = 0.000293kW).

Entry 22 Boiler Output Power at Minimum Burn Rate

[number of up to 7 characters - e.g. nnn.nnn]

This is the output power of the boiler in kW at the minimum burn rate at which the fire can be sustained. This will only apply to those boilers with continuous firing. This figure is not a mandatory requirement of the database.

Entry 23 Energy Efficiency Class

[number of up to 4 characters]

The energy efficiency class as defined for the proposed European energy label. Definition and format have not yet been decided. This field is being left blank until the European energy-labelling scheme has been defined.

Entry 24 SAP seasonal efficiency [number up to 4 characters]

Note: GaC will calculate this figure and notify manufacturers of their results during a 7 day checking period.

This may be entered by the manufacturer or left blank. If entered, it must be rounded to the nearest 0.1%. The method of calculation is given in Appendix 6 of this booklet.

Entry 25 Efficiency Category [1 digit]

Definition	Entry code	Notes
HETAS Declaration	1	
Certified Measurement to BS EN Standard	2	

SAP Default	3	Estimated from SAP 2005
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Entry 26 Measured Fuel Input at Full Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of fuel input energy, on a gross calorific value basis, when boiler is operating at full output power, in kW. Independently certified evidence of this value will be required.

Entry 27 Measured Heat to Water at Full Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of heat output to water when boiler is operating at full output power, in kW. This must be measured in the same test as the measurement of rate of fuel input given in Entry 23. Independently certified evidence of this value will be required.

Entry 28 Measured Heat to Room at Full Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of heat output to room when boiler is operating at full output power, in kW. This must be measured in the same test as the measurement of rate of fuel input given in Entry 23. Independently certified evidence of this value will be required.

Entry 29 Measured Fuel Input at Part Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of fuel input energy, on a gross calorific value basis, when boiler is operating at part output power, in kW. Independently certified evidence of this value will be required.

Entry 30 Measured Heat to Water at Part Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of heat output to water, when boiler is operating at part output power, in kW. This must be measured in the same test as the measurement of rate of fuel input given in Entry 26. Independently certified evidence of this value will be required.

Entry 31 Measured Heat to Room at Part Output Power

[number up to 7 characters to one decimal place e.g. nnn.nnn]

Certified rate of heat output to room when boiler is operating at part output power, in kW. This must be measured in the same test as the measurement of rate of fuel input given in Entry 26. Independently certified evidence of this value will be required.

Entry 32 Boiler type for ple test [2 digits]

Method used for part load efficiency test. At present all entries to be blank.

Entry 33 Additional Ventilation Rate [up to 4 digits]

Ventilation rate in m³/h for appliances that are not room-sealed.

Entry 34 Product Identification

As defined in section 1.2 and Appendix 3

Entry 35 Date

Date that form is submitted.

Entry 36-38 Name, Position & Signature of Person completing form

Is should be noted that this form must be signed by the Technical Director or equivalent of the company making the submission. If someone other then the Technical Director signs the forms it is a requirement that suitable documentary evidence of the authority of the signatory is provided.

Appendix 1

Manual Data Entry

Form

[one to be completed for each Solid Fuel boiler model submitted]

PRODUCT CHARACTERISTICS DATABASE

Solid Fuel Boiler Data Entry and Declaration Form

(One to be completed for each Solid Fuel boiler type you wish to appear on the Product Characteristics Database – please photocopy as many forms as you require).

IMPORTANT NOTICE: Where a single appliance can use more than one fuel, SEPARATE DATA ENTRY AND DECLARATION FORMS are required for each fuel type.

NB MANDATORY ENTRIES ARE PRINTED IN BOLD

Entry No	Entry Title	Entry Value					
1.	Manufacturer Name						
2.	Current Name						
3.	Address						
	Second addressable object name						
	Primary addressable object name						
	Designated Street name						
	Locality name						
	Town/City name						
	Administrative area name						
	Postcode						
	Country (if not UK)						
4.	Telephone No						
5.	Manufacturer's Website Address						
6.	Brand Name						
7.	Model Name						
8.	Model Qualifier						
9.	Product ID						
10.	First Year of Manufacture						
11.	Final Year of Manufacture						
12.	Fuel	11	12	13	20	21	23
13.	Main Type	1	2		3		
14.	Flue Type	1	2	3	4		
15.	Fan assistance	1			2		
16.	Burner Control	1			2		
17.	Fuel Feed	1	2	3	4		
18.	Electrical Power* (Firing)					Watts	
19.	Electrical Power* (Not-Firing)					Watts	
20.	Boiler Power (Bottom-of-range)					kW	

Entry No	Entry Title	Entry Value					
21.	Boiler Power (Top-of-range)					kW	
22.	Boiler Power at Minimum Burn Rate					kW	
23.	Energy Efficiency Class						
24.	SAP Seasonal Efficiency					%	
25.	Efficiency Category	1	2	3			
26.	Measured Fuel Input at Full Output					(kW)	
27.	Measured Heat to Water at Full Output					(kW)	
28.	Measured Heat to Room at Full Output					(kW)	
29.	Measured Fuel Input at Part Output					(kW)	
30.	Measured Heat to Water at Part Output					(kW)	
31.	Measured Heat to Room at Part Output					(kW)	
32.	Boiler Type for ple Tests						
33.	Additional Ventilation Rate					(m ³ /h)	
34.	Product Identification (please circle)**	1a	1b	1c	2d	2e	2f
35.	Date of Submission						
36.	Name of Submitter						
37.	Position of Submitter						
38.	Signature of Submitter						

- Notes**
- * The information in these fields is not used in the current version of SAP, but may be used in later versions. It is only requested now to avoid the need to do so later.
 - ** Please identify how product is identified (refer to Appendix 3 for criteria) and circle those combinations that apply

By signing this form I also declare that all the other information included in my returns are correct and that I am the Technical Director (or equivalent).

Appendix 2

Badged Solid Fuel Boiler Form

**[one to be completed for each badged
Solid Fuel boiler submitted & *signed by*
Technical Director or equivalent]**

***[Please note that an actual dataplate for
each model submitted is required]***

PRODUCT CHARACTERISTICS DATABASE

“Badged” Solid Fuel Boiler Form

(Please photocopy as many as you require)

Declaration of Similarity for “Badged” Products		
This form confirms that the Solid Fuel boiler (termed the “Badged model”) is the same in all material respects (excluding cover) including thermal performance as a Solid Fuel boiler (termed the “Master model”) for which a Certificate is available from a Notified Body referenced to the appropriate European Norm.		
Name of “Master Brand”	Name of “Master Model”	“Master Model” Qualifier.
Name of “Badged Brand”	Name of “Badged Model”	“Badged Model” Qualifier.
Badged Model Boiler Power	Lowest rating (kW)	Highest rating (kW)
Are the two Solid Fuel boilers currently made in the same factory?		YES
		NO
If NO, or if the “Master Model” is out of production please enclose details of any QA system that is in place to ensure product quality and similarity.		
I hereby confirm that the “Badged Model” listed above has the same thermal performance as the “Master Model”.		
Signature		Date
Name (Please print)		Position

Appendix 3

Product Identification Route

[Please note that an actual dataplate for each model submitted is required]

Route to Product Identification

As described in section 1.2 it is essential that SAP assessors and home inspectors can readily identify Solid Fuel boilers. To this end a mechanism has been devised to assist in the confirmation that a Solid Fuel boiler can be easily identified.

Firstly the means of identifying the Solid Fuel boiler needs to be established. It is anticipated that the following sets of circumstances may apply to most Solid Fuel boiler products:-

1. What product information is shown on the Solid Fuel boiler case? Is it:
 - a) Full brand and model name and qualifier, giving unique description of this product
 - b) Partial brand and name information
 - c) No brand and name information
2. What product information is visible (by means of a moveable or removable panel) and accessible (without the use of tools) to the householder? Is it:
 - d) Full brand and model name and qualifier, giving unique description of this product
 - e) Partial brand and name information which together with 1b gives unique description of this product
 - f) No brand and name information, or insufficient to provide a unique description

“Unique” means distinct from any other product entered, or about to be entered, in the database.

“Visible” means that the information can easily be seen. Labels or markings that require an individual to use such devices as a ladder or mirror to read the are not considered visible.

In order to meet unique description requirements applications can only be accepted in the following circumstances:

1a OR 1b + 2d or 1b + 2e OR 1c + 2d

In any of the above cases photograph(s) should be provided to demonstrate that the product description can be verified by these routes.

In all other circumstances (i.e., 1b + 2f, or 1c + 2f) applications will be refused, as it will be considered that in such cases the SAP assessor or Home Inspector will not be able to readily identify the product.

PLEASE NOTE: THE ROUTE TO PRODUCT IDENTIFICATION MUST BE IDENTIFIED ON THE MANUAL DATA ENTRY FORM (SEE APPENDIX 1) USING THE CRITERIA GIVEN ABOVE.

Appendix 4

HETAS Declaration Form

**[to be completed by HETAS Ltd as
evidence of Solid Fuel Boiler
Performance]**

DECLARATION MADE BY
HETAS Ltd
ON BEHALF OF
[Insert Name of Manufacturer]

Product Identification Data

Fuel	Brand Name	Model Name	Model Qualifier	Product ID

Performance Results

Test Fuel Used:
 [As detailed in the appropriate European Norm]

Moisture Content of Test Fuel:

Note: **For coal derived fuels moisture is reported on dry basis**
 For wood based fuels moisture is reported on as received basis

Test Results	
Full Output Results	
Measured Fuel Input at Full Output	(kW)
Measured Heat to Water at Full Output	(kW)
Measured Heat to Room at Full Output	(kW)
Part Output Results	
Measured Fuel Input at Part Output	(kW)
Measured Heat to Water at Part Output	(kW)
Measured Heat to Room at Part Output	(kW)

I have undertaken a review of the Technical File containing ITT results for the above named appliance(s) and verify this declaration to be an accurate summary of the performance of those appliances.

Signed on behalf of HETAS: _____

Date: _____

Print Name: _____

Position: _____

Appendix 5

Notified Laboratory Declaration Form

**[to be completed as an alternative to
HETAS Declaration]**

DECLARATION MADE BY
[Insert Name and Number of Notified Test Laboratory]

ON BEHALF OF
[Insert Name of Manufacturer]

Original Solid Fuel Boiler Name	UK Market Name (if different)	ITT Report Number	Fuel used	Measured Full Load Efficiency (% gross)*	Part Load Efficiency (% gross)**

- * If measured on a net basis, then please carry out a conversion to a gross basis based upon the actual fuel used.
- ** Indicate whether this result was measured or calculated [annotate figure with an M or C accordingly]

Test Fuel Used: [As detailed in the appropriate European Norm]

- 1
- 2

Moisture Content of Test Fuel:

- 1
- 2

Note: For coal derived fuels moisture is reported on dry basis
 For wood based fuels moisture is reported on as received basis

The testwork was carried out in accredited / certified laboratory Ref. No:

We hereby declare that the full and part load efficiency test results detailed above have been obtained by means deemed to satisfy the essential requirements of the Construction Products Directive using the following European Norm to demonstrate compliance *[Insert appropriate EN number]*. The water temperature criteria defined in the European Norm [see below] have been satisfied in obtaining these results.

Type of Boiler	Range of Power	Efficiency at rated output	Efficiency at part load
	kW	Average boiler-water temperature	Average boiler-water temperature
Standard boilers	4 to 400	70°C	≥ 50°C

Signed on behalf of [Insert name of Notified Body]: _____

Date: _____

Print Name: _____

Position: _____

Insert Official Stamp of Notified Laboratory if available and/or use official headed paper

Appendix 6

SAP Calculations - 2009

**[the seasonal efficiency procedure
explained]**

Extracted from “The Government’s Standard Assessment Procedure for Energy Rating of Dwellings 2009 Edition”

Appendix J: Seasonal efficiency for solid fuel boilers from test data

This appendix specifies how to obtain a seasonal efficiency from test data on a solid fuel boiler that is provided in the boiler database. A database record for a solid fuel boiler includes:

- SAP seasonal efficiency, %
- Fuel input, heat to water and heat to room from test at full load, kW
- Fuel input, heat to water and heat to room from test at part load, kW

J1 SAP seasonal efficiency is given

If the SAP seasonal efficiency is given, that value is used for both space and water heating, and the other data is disregarded.

J2 SAP seasonal efficiency is not given

If the SAP seasonal efficiency is blank, the appropriate efficiency for use in the calculations is obtained as follows.

J2.1 Part load data is available

The efficiency at full load is obtained from:

$$E_{\text{full}} = 100 \times \frac{\text{(heat to water at full load)} + \text{(heat to room at full load)}}{\text{Fuel input at full load}} \quad (\text{J1})$$

And the efficiency at part load from:

$$E_{\text{part}} = 100 \times \frac{\text{(heat to water at part load)} + \text{(heat to room at part load)}}{\text{Fuel input at part load}} \quad (\text{J2})$$

If the boiler is outside the boundary of the dwelling as defined in section 1, “Dwelling dimensions”, the heat to room is omitted from (J1) and (J2).

The seasonal efficiency is then:

$$\text{Seasonal efficiency} = 0.5 (E_{\text{full}} + E_{\text{part}}) \quad (\text{J3})$$

J2.2 Part load data is not available.

If the data for the part load test is blank, the part load efficiency is taken as 95% of the full load efficiency, so that:

$$\text{Seasonal efficiency} = 0.975 E_{\text{full}} \quad (\text{J4})$$

Appendix 7

SAP Calculations - 2005

**[the seasonal efficiency procedure
explained]**

Extracted from “The Government’s Standard Assessment Procedure for Energy Rating of Dwellings 2005 Edition”

Appendix J: Seasonal efficiency for solid fuel boilers from test data

This appendix specifies how to obtain a seasonal efficiency from test data on a solid fuel boiler that is provided in the boiler database. A database record for a solid fuel boiler includes:

- SAP seasonal efficiency, %
- Fuel input, heat to water and heat to room from test at full load, kW
- Fuel input, heat to water and heat to room from test at part load, kW

J1 SAP seasonal efficiency is given

If the SAP seasonal efficiency is given, that value is used for both space and water heating, and the other data is disregarded.

J2 SAP seasonal efficiency is not given

If the SAP seasonal efficiency is blank, the appropriate efficiency for use in the calculations is obtained as follows.

J2.1 Part load data is available

The efficiency at full load is obtained from:

$$E_{\text{full}} = \frac{\text{(heat to water at full load)} + \text{(heat to room at full load)}}{\text{Fuel input at full load}} \quad (\text{J1})$$

And the efficiency at part load from:

$$E_{\text{part}} = \frac{\text{(heat to water at part load)} + \text{(heat to room at part load)}}{\text{Fuel input at part load}} \quad (\text{J2})$$

If the boiler is outside the boundary of the dwelling as defined in section 1, “Dwelling dimensions”, the heat to room is omitted from (J1) and (J2).

The seasonal efficiency is then:

$$\text{Seasonal efficiency} = 0.5 (E_{\text{full}} + E_{\text{part}}) \quad (\text{J3})$$

J2.2 Part load data is not available.

If the data for the part load test is blank, the part load efficiency is taken as 95% of the full load efficiency, so that:

$$\text{Seasonal efficiency} = 0.975 E_{\text{full}} \quad (\text{J4})$$

Appendix 8

Submission Check List

Solid Fuel Boiler Data Submission Check-list

For each Solid Fuel boiler model you submit, please check that you have included all relevant data and supporting evidence as follows:-

Form or method of data submission	Where you can find it	✓
Manual Data Entry and Declaration Form	Appendix 1	
Solid Fuel boiler Identity Form – your declaration of similarity for “Badged” products	Appendix 2	
An actual example of the Solid Fuel boiler dataplate (i.e. the plate or label fixed to the appliance)	In your product’s technical file/ITT report	
Photographic Evidence of Solid Fuel boiler identification (i.e. photos clearly showing how the product is uniquely identified by the SAP assessor or Home Inspector – making clear whether they are visible [on the case or via accessible control panel])	See Appendix 3	
HETAS Declaration regarding appliance performance	Appendix 4	
In absence of above, we can accept a signed declaration of results from the Notified Laboratory which carried out the tests	Appendix 5	

Please Note: The working language of the database is English – submissions from International Notified Laboratories should be in the English Language

Note: Those items that are mandatory requirements for each Solid Fuel boiler application are highlighted in bold print.