

CHANGES TO THE HOME-HEATING APPLIANCES REGISTER OF PERFORMANCE (HARP) DATABASE

1. Introduction

The Sustainable Energy Authority of Ireland (SEAI) is Ireland's national energy authority with a mission to promote and assist the development of sustainable energy. This encompasses environmentally and economically sustainable production, supply and use of energy, in support of Government policy, across all sectors of the economy. Its remit relates mainly to improving energy efficiency, advancing the development and competitive deployment of renewable sources of energy and combined heat and power, and reducing the environmental impact of energy production and use, particularly in respect of greenhouse gas emissions.

One of SEAI's responsibilities is to assist the Department of Communications, Energy and Natural Resources and the Department of the Environment, Heritage and Local Government in implementing the EU Energy Performance of Buildings Directive (EPBD) [2002/91/EC] in Ireland.

Articles 4 and 5 of the EPBD require that new buildings meet minimum energy performance requirements, which in Ireland's case are specified in the Building Regulations and Technical Guidance Document Part L.

Furthermore, Article 7 of the EPBD requires that an energy performance certificate is made available to prospective buyers or tenants when a building is constructed, sold or rented out. Throughout these Guidance Notes this requirement will be termed "Building Energy Rating" (BER). A BER includes the certificate and the advisory report.

In Ireland, the approach is to adopt an official national method and one official software tool that all Registered Domestic BER Assessors will use to carry out a BER for a dwelling.

The official national method has been developed and is entitled the "Dwelling Energy Assessment Procedure" (DEAP) and is used to demonstrate compliance with the Building Regulations Part L and for preparing BERs.

To support Registered BER Assessors a database of heating appliances has been developed. This is known as the **Home Heating Appliances Register of Performance or HARP**. The HARP database is published on the SEAI website (www.seai.ie/harp) and the data is publicly accessible.

The database is updated monthly. Manufacturers make submissions to the database for relevant products and, provided verification checks are satisfactory, performance data is added. Data must be submitted on the listed application forms to the database administrators (KIWA GASTEC at CRE).

A number of aspects of the HARP database have recently been updated including:

- The scope of the database has been expanded to allow for the inclusion of a wider range of product types.
- The product listings pages have been updated to enhance usability of the listings. Products are now
 easier to find on HARP. The original detailed search function for gas/oil boilers is still available to
 users.



2. Products currently listed

Up to April 2011, the products listed on the database are:

- Gas and oil fired boilers
- Gas and oil fired cooker boilers
- Solid fuel boilers
- Solar panels
- Heat pumps

3. Additional Products to be included in the database

As of May 2011, it is possible to make submissions in respect of additional product types. These are:

- Gas and oil room heaters (without back boiler)
- Solid fuel room heaters (without back boiler)
- Heat Pumps the range of heat pump types has been expanded and now includes:
 - Air/water
 - Water/water
 - Brine/Water
 - Exhaust Air/water
 - ➢ Air/air
 - Water/air
 - Brine/air
 - Direct exchange
 - Exhaust air using brine loop

4. Rules for accepting products

In order for products to be listed on the HARP database the manufacturer or distributor¹ must make a formal application using the forms provided for the relevant product types. These application forms are available under this link.

In general these forms consist of:

- Data entry and declaration form (used to provide basic data on product and signed by the authorised person confirming accuracy of submission)
- Badged data entry form (used when the same appliance may be sold under another market name)
- Testing Laboratory/Notified Body declaration statement (used to confirm validity of test results)

As well as providing the above information the submitter will also be expected to provide the following evidence:

Evidence of the product identity

The primary purpose of inclusion on the database is to enable BER Assessors to obtain performance data on a specific product type. Therefore, when inspecting a dwelling an Assessor should be able to easily identify the specific product and model. They can then obtain the **correct** product data from the database. It is essential therefore that the product name details listed on the HARP database match what appears **and is visible** on the product when installed.

¹ If a distributor should make the submission, authority must be obtained from the manufacturer giving express permission for the named distributor to make the submission.



Therefore you are required to submit photographs clearly showing how an Assessor can arrive at the product identity matching the product entry on the HARP database. The product identity is defined as the combination of the Brand Name and Model Name and must be unique for each entry on the database. For this purpose, BER Assessors are not expected to use tools for the purpose of identifying the specific product. Ideally product labelling should be on the front of the appliance clearly visible. Further guidance is given in the application guidance packs for each product type.

Experience has shown that demonstrating product identity is one of the most common reasons for delays in successfully submitting products to the database. Making sure this is right at the start is key to a quick and successful submission.

Please note that in some cases labelling on products itself is not practical/acceptable (e.g. solar panels – due to location they are often inaccessible). It should be noted that product data plates are often located in places inaccessible to Assessors (e.g. behind casing) and these cannot automatically be assumed to be a source of product identity. However, data plates still need to be supplied as part of the submission as they contain valuable data pertinent to the submission. Please refer to specific product application guidance packs for more information.

Evidence of Product Performance

The database is intended to provide information of product performance (efficiency). To this end it is a requirement that the evidence of this performance comes from an accredited third party. This is generally an ISO 17025 accredited laboratory (or BED Notified Body where applicable).

In some cases, the accredited body may not actually carry out the test results themselves. The following are examples of what test results are deemed as being acceptable for a product or range of products:

- The accredited body have carried out the testing of the product to the relevant standard at their own test facility. Documentation from the accredited body states that the results apply to the product or range of products being submitted to HARP.
- The accredited body have overseen/monitored the testing of the product or range of products at another test facility such as the manufacturer's test lab. Documentation from the accredited body endorses the test results to the relevant standard being submitted to HARP.
- The accredited body have a method of auditing another test facility to ensure that they are satisfied with the test results to the relevant standard which that test facility produces. The test results for the product being submitted to HARP should fall under that audit regime.

If there are a range of products covered by a single test result or test results are stated to cover a larger number of products, then this is acceptable, provided there is documentation showing that an accredited body is satisfied with this approach.

To help a summary of the evidence required for each product type is given below:

Gas & Oil Boilers

Results of full and part load efficiency tests carried out in accordance with Boiler Efficiency Directive (BED) and issued by BED Notified Body.

Gas and oil fired cooker boilers

Results of full and part load efficiency tests carried out in accordance with Boiler Efficiency Directive (BED) and issued by BED Notified Body.

Solid fuel boilers and solid fuel room heaters (with or without boiler)

Results of efficiency tests carried out in accordance with relevant European Standards and issued by ISO 17025 accredited test laboratory. The relevant standards are detailed in the HARP application forms for these



products and also in Appendix E and Appendix J of the <u>DEAP manual</u>. There are several relevant standards, depending on the type of appliance in question.

HETAS is the official UK body recognised by government to approve solid fuel domestic heating appliances, fuels and services. The <u>HETAS list</u> of products with fuel types and efficiencies can be used as a source of test data for solid fuel heaters in HARP.

Solar Thermal Collectors

Results of efficiency tests carried out in accordance with EN12975-2:2006 and issued by ISO 17025 accredited test laboratory. As an alternative, data sheets from the SPF Database or datasheets provided from the Solar Key Mark Database may be acceptable as evidence for HARP submission test data.

Heat Pumps

Performance is assessed against EN 14511-2 and reported as Coefficient of Performance (COP). COP data may also have been assessed in accordance with EN 255-2. In the case of Direct Exchange heat pumps COP data obtained in accordance with the draft European Standard prEN 15879 may also be used. In ALL cases the laboratory confirming these results must be accredited to ISO 17025 for the appropriate standard(s). Specific details of the test conditions are given in the Heat Pump Application Form and Notes.

In cases where only partial test data is available for a given heat pump then it may be possible to use that data in combination with conservative default values to determine the Seasonal Performance Factor (SPF). Specific details are given in the Heat Pump Application Form and Notes.

It should be noted that EHPA or Eurovent listed products can also be included in the database. These tend to use "partial test data" and would therefore be treated in this way. EHPA listing is only possible if the laboratory is ISO 17025 accredited for the relevant test standard. Test results available on the "WPZ" heat pump listing are also suitable for the purposes of HARP submissions.

The HARP Heat Pump submission forms now request the heat pump rated heating capacity as defined in EN 14511-2. Heat pumps currently listed on HARP have been updated to show the rated capacity based on the method provided in the HARP heat pump submission form (Entry 13) and EN 14511-2 test data originally received with the HARP submission for these products. If suppliers require further clarification on the resulting rated capacity value they should contact the HARP administrators.

Gas & Oil Roomheaters (with and without back boilers)

Results of efficiency tests carried out in accordance with relevant European Standards as detailed in the relevant HARP application form and <u>DEAP manual</u> Appendix E and issued by an ISO 17025 accredited test laboratory. There are several relevant standards, depending on the type of appliance in question.

Use of Greener Homes Scheme data for HARP

If data for products has already been submitted to the SEAI's Greener Homes Scheme then it may be possible to use this as evidence of compliance with some of the requirements for HARP. Under the Greener Homes Scheme evidence of performance data will already have been submitted. This **may** be sufficient to satisfy HARP requirements.

If data has already been supplied to the Greener Homes Scheme then please inform the HARP administrators who will in turn request this information from SEAI's Greener Homes team directly. The HARP administrators will then review to see if the data is suitable for the purposes of HARP. If is deemed acceptable then the following information will still be required in order to complete a HARP submission:

- a. Signed manual HARP entry form
- b. Photographic evidence showing the route to product identification



c. Product Data plates

If the data supplied to the Greener Homes Scheme is not suitable for the purposes of HARP then the HARP administrators will advise on what further data needs to be supplied in order to complete the submission for review.

Information about supporting data required can be found in the guidance packs which can be found here. The guidance packs on this website have been updated to reflect the changes detailed in this document.



6. HARP Contact Details

General Enquiries

Enquiries in respect of applications and data held on the HARP database should be sent to the HARP Administrators by one of the following means:

Post

HARP Administrator KIWA GASTEC at CRE The Orchard Business Centre Stoke Orchard Cheltenham Gloucestershire GL52 7RZ UK

Telephone

+353-(0)1-8082125

Fax

00 44 1242 676506

E-mail

HARP@seai.ie

Other Issues

Matters relating to the concept of the HARP database or DEAP methodologies should be directed to SEAI. The contact details in this case are available under:

http://www.seai.ie/Your Building/BER/BER Contact Info/.

An FAQ document answering commonly asked questions in relation to HARP submissions is published under this <u>link</u>.