

## Product application checklist

Please complete in BLOCK CAPITALS

### Heat Recovery Ventilation Units

Manufacturer/supplier name: .....

Applicant's name: .....

Telephone number: .....

#### Product information

Product name: .....

Model number: .....

Please complete each section of this form based on your product's characteristics. Incomplete or incorrect data could affect the processing of your product application.

Each product application should be made on a separate form unless a product's design characteristics are common to all the products. In this instance a single application can be made for multiple products.

#### 1. Product testing and certification

No

Yes

**Where type testing has been applied to demonstrate product performance please ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.**

##### 1.1 What test standard was used to determine product performance?

- a) BS EN 308:1997
- b) ANSI / AHRI 1060 / 1061:2018 (or ANSI / AHRI 1060 /1061:2014 and 2005 will be accepted until further notice)
- c) JIS B 8628: 2017 (or JIS B 8628:2003 which will be accepted until further notice).
- d) An equivalent test standard (*please specify*)

*Where an equivalent test standard has been used, please submit scientific evidence that the resulting performance data is equivalent to that obtained under BS EN 308: 1997.*

##### 1.2 How was the product(s) performance tested? (*Please select one*)

- a) Tested in the manufacturer's in-house laboratory, in accordance with a registered Quality Management System (i.e. 'self-tested')
- b) In-house testing – Self-tested and verified or cross-checked by an independent body
- c) Tested by an independent laboratory (i.e. 'independent testing')
- d) Representative model/s used

*Please refer to Section 2 of ETL Guidance Note 5 "ETL Testing Programme: Energy Technology List (ETL) Product Testing Framework" for details of the requirements that must be satisfied for each of these product testing options.*

1. Product testing and certification (continued)		No	Yes																						
1.3	Where product testing has been done in accordance with a registered Quality Management System, what is its registration number? .....																								
1.4	Where product testing has been witnessed by an independent body, what was the name of the witness? <i>(Please include contact details).</i> .....																								
1.5	Where products have been tested by an independent laboratory: a) What is the name of independent laboratory? ..... b) What is the laboratory's registration number (where accredited)? .....																								
1.6	<p>Is the application for: <i>(Please select one)</i></p> <p>a) A single unique product – in this case go to 2.1.</p> <p>b) A range of products, which are variants of the same basic design.</p> <p>c) One or more additional models to a range of products already on the ETL.</p> <p><b>Products will only be considered to be variants of the same basic design, if they:</b></p> <ul style="list-style-type: none"> <li>• Use the same heat transfer mechanisms as the representative models.</li> <li>• Are constructed from materials with same heat transfer characteristics.</li> <li>• The 100% nominal rated output of the products being applied for is not more than five times, or less than one-fifth, the 100% nominal rated output of the product tested</li> </ul>																								
1.7	<p>If representative testing has been used, what are the “representative models”?</p> <table border="1"> <thead> <tr> <th>ETL Product ID number</th> <th>Product name and model number</th> </tr> </thead> <tbody> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> <tr><td>.....</td><td>.....</td></tr> </tbody> </table> <p><i>The representative models must be selected by dividing the range of products into groups of models with similar design characteristics, and testing a model in each group. The performance of each model in the group must be predicted using a validated mathematical model. As a minimum, one model must be tested in each range of products, as long as the products:</i></p> <p>a) <i>Use the same heat transfer mechanisms as the representative models;</i></p> <p>b) <i>Are constructed from materials with same heat transfer characteristics,</i></p> <p>c) <i>The 100% nominal rated output of the products being applied for is not more than five times, or less than one-fifth, the 100% nominal rated output of the product tested.</i></p> <p><i>The model should be in the lowest quartile of predicted performance of that range. The Ecodesign technical data is required for the other products in the range (where no further test reports are provided for those products) and details should be given of the validated calculation model.</i></p>	ETL Product ID number	Product name and model number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
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2. Product type		No	Yes
2.1	<p><b>What category of product are you applying for? (tick one)</b></p> <p>a) Ventilation Units with plate heat exchangers</p> <p>b) Ventilation Units with rotating heat exchangers (including thermal and desiccant heat wheels)</p>		
2.2	<p><b>In addition to a Heat Exchanger, does the product include:</b></p> <p>a) Fans for supplied and extracted air,</p> <p>b) Filters for supplied and extracted air,</p> <p>c) Sensors with an embedded control system or an interface to an external control unit,</p> <p>d) Housing encompassing the above.</p>		

3. Product performance		No	Yes									
3.1	<p><b>What is the product's maximum rated air flow in metres cubed per hour?</b></p> <p>.....</p>											
3.2	<p><b>Does the product meet the relevant performance thresholds set out in Table 1 below at its maximum rated air flow?</b></p> <p><i>Table 1 Performance requirements for Heat Recovery Ventilation Units.</i></p> <table border="1"> <thead> <tr> <th>Product category</th> <th>Dry Heat Recovery Efficiency</th> <th>Pressure drop (in pascals)</th> </tr> </thead> <tbody> <tr> <td>1 Units with plate heat exchangers</td> <td>&gt;= 78%</td> <td>&lt;= 250 Pa across each side.</td> </tr> <tr> <td>2 Units with rotating heat exchangers</td> <td>&gt;= 78%</td> <td>&lt;= 200 Pa across each side.</td> </tr> </tbody> </table> <p>"&gt;=" means "greater than or equal to"</p> <p>"&lt;=" means "less than or equal to"</p> <p><i>The dry heat recovery efficiency shall be calculated using the formula for thermal efficiency in Annex IX of Commission Regulation (EU) No 1253/2014 and test data collected when rating the product's performance in heating mode at the test conditions specified in the selected standard for the type of product.</i></p> <p><i>For avoidance of doubt, test data should be presented to zero decimal places. As an example, a plate heat exchanger with a minimum dry heat recovery efficiency of 77.4%, or a pressure drop of 250.5 pascals, would be deemed to be a fail.</i></p>	Product category	Dry Heat Recovery Efficiency	Pressure drop (in pascals)	1 Units with plate heat exchangers	>= 78%	<= 250 Pa across each side.	2 Units with rotating heat exchangers	>= 78%	<= 200 Pa across each side.		
Product category	Dry Heat Recovery Efficiency	Pressure drop (in pascals)										
1 Units with plate heat exchangers	>= 78%	<= 250 Pa across each side.										
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#### 4. Summary of documents to be included

No Yes

Please send ONE copy of each of the following documents:

If the relevant information in support of the questions above is contained within a larger document, please indicate the location of the relevant information. Note that all documentation submitted must directly refer to the model numbers for which you are making this application. Documentation should be added to your online application at [https://etl.beis.gov.uk/engetl/fox/live/ETL\\_LOGIN/login](https://etl.beis.gov.uk/engetl/fox/live/ETL_LOGIN/login)

- a. A technical sales brochure or leaflet for the product clearly summarising:
- i) The key features of the product (ideally including photographs of the product's exterior).
  - ii) The product's operation (i.e. in-built functionality) and intended applications (i.e. usage).
  - iii) Any product selection options (including optional extras, alternative configurations etc.).

*This documentation should contain sufficient detail to enable the assessor to confirm that the proposed entry on the Energy Technology List (ETL) is correct, and uniquely represents a single product of fixed design (as defined by the rules of the ETL). If the model names contain any 'wildcards' in respect of cosmetic variations please check with [ETLQuestions@carbontrust.com](mailto:ETLQuestions@carbontrust.com) that this is permitted before submitting your application.*

- b. A technical specification for the product, including:
- i) Details of the model numbers covered (including individual features of each model).
  - ii) The product's design ratings (electrical, mechanical, thermal, flow rates, energy use etc.).
  - iii) A description of how to install the product including connection/wiring diagrams. Where the product must be assembled, configured and/or commissioned on site before use, please include instructions.

*This documentation should contain sufficient detail to enable the assessor to confirm that each product entry on the ETL has the design features specified in the eligibility criteria for that category of product. Please indicate on the checklist where information on specific design features is located in the documentation.*

- c. Evidence that the products the performance criteria, including:
- i) Test reports showing product performance at the standard rating/test conditions.
  - ii) Details of the test procedures/standards used to determine product performance.
  - iii) A declaration certifying the accuracy of the test reports and confirming that:
    - The test facilities complied with the minimum specifications outlined in the test standard, and the required test conditions where applied during testing.
    - All measurement equipment used in testing was calibrated by an accredited laboratory, or its calibration is otherwise traceable back to national standards.
    - Appropriate quality assurance procedures have been used to verify or cross-check the accuracy and repeatability of the test procedures and test results.
  - iv) Where representative testing has been used, please include details of selection method used, and evidence that the products covered by the representative model(s) are variants of the same basic design.

*Please note that summary test reports will only be accepted, where the accuracy of the test reports has been certified by a recognised independent body, or where two detailed test reports (or in the case of representative testing one detailed test report) have been submitted per product range and per laboratory used.*

*Please refer to ETL Guidance Note 5 "ETL Testing Programme: Energy Technology List (ETL) Product Testing Framework" for further guidance on the submission of test results, and minimum information requirements.*

- d. A Declaration of Conformity with Directives on product safety, including:
- i) An appropriate Conformity Assessment mark.
- e. Evidence that a quality assurance system/procedures is/are in place to:
- i) Control the specification, design, manufacturing and testing of the products.
- f. Signed application checklist.

*Please note that all product documentation provided must be written in, or translated into, English*

## 5. Declaration

I confirm that the information given above is correct to the best of my knowledge and that I have read and agree to the terms and conditions governing the management of the Energy Technology List.

A copy of the terms and conditions can be found at <https://www.gov.uk/guidance/energy-technology-list>.

Signature: ..... Date: .....

### For more information:

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<https://www.gov.uk/guidance/energy-technology-list>

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