



Energy Technology List

Product application checklist

Please complete in BLOCK CAPITALS

Tank and Vessel Insulation

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 ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.			
1.1	Does the product have an appropriate Conformity Assessment mark? If so, to which directive?		
1.2	Please confirm which of the following standards, where applicable, are used for measuring and calculating the product's performance: a) BS 5422:2023 Method for specifying thermal insulating materials for pipes, tanks, vessels, ductwork and equipment operating within the temperature range -40°C to +700°C b) BS EN ISO 12241:2008 Thermal insulation for building equipment and industrial Installations. Calculation rules c) BS 5970:2012 Thermal insulation of pipework, ductwork, associated equipment and other industrial installations in the temperature range of -100°C to +870°C. Code of practice d) NES Y-50 (2011)		
1.3	Has a Declaration of Performance (DoP) been provided to declare the thermal conductivity used to calculate pipework thickness?		
1.4	For domestic & non-domestic hot water tanks & vessels (Category 3) and domestic & non-domestic heating tanks & vessels (Category 4), is the heat transfer rate determined using the assumptions in Table C.1 of BS 5422:2023, using the calculation methods in EN ISO 12241:2008?		

1.5 How was the product(s) performance tested? *(Please select one).*

- a) In-house testing - Self-certified.
- b) Tested in the manufacturer's in-house laboratory, in accordance with a registered Quality Management System and a representative sample of the test data has been cross-checked and verified by an independent body (i.e. 'self-tested and verified or cross-checked by an independent body').
- c) Tested by a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing').
- d) Tested by an independent laboratory (i.e. 'independent testing')
- e) Representative testing.

Further information regarding the first four routes can be found in Guidance Note 5 on the ETL product testing framework.

<https://www.gov.uk/government/publications/energy-technology-list-etl-product-testing-framework>

1.6 Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?

1.7 Where product testing has been witnessed by an independent body, what was the name of the witness?

(Please include contact details).

1.8 Where products have been tested by an independent laboratory:

- a) What is the name of the independent laboratory?
-
- b) What is the laboratory's registration number (where accredited)?
-

1.9 Is the application for: *(please select one)*

- a) A product submitted with individual performance test data *(go to question 2)*.
- b) A product with the same constructional design as other products where 'Representative models' have been tested and are listed on the ETPL.
- c) A product with the same constructional design as other products that are not yet on the ETPL, and where performance test data is being submitted for 'Representative models' with this application.

1. Product testing and certification (continued)		No	Yes																						
1.10	<p>What are the ‘Representative models’:</p> <table border="1"> <thead> <tr> <th>ETL Product ID number</th> <th>Product model numbers</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>Where applications are being made for two or more tank and vessel insulation products that are made from the same insulation material, with the same thermal conductivity, representative testing may be used. Test data for the tank and vessel insulation material may be used to determine product performance for all tank and vessel insulation products in the representative range.</p> <p>Under this test method, product performance shall be demonstrated by calculating the permitted heat loss (W/m) for the tank and vessel insulation. Manufacturers shall submit supporting information regarding the chosen calculation method, in order to determine its suitability and effectiveness. Thermal conductivity (W/m.K) i.e. the lambda value, shall be determined through product testing.</p> <p>It should be noted that:</p> <ul style="list-style-type: none"> • If a manufacturer voluntarily removes the representative model from the ETL then other products linked with that representative model may or may not be permitted to remain on the ETL. • If any product submitted under these representative model rules is later found not to meet the performance criteria when independently tested, then all products based on the same representative model will be removed from the ETL. 	ETL Product ID number	Product model numbers																						
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2. Product type and features		N/A	No	Yes
2.1	<p>Product category: (please tick one):</p> <ul style="list-style-type: none"> a) Chilled water tanks & vessels b) Process tanks & vessels c) Domestic & non-domestic hot water tanks & vessels d) Domestic & non-domestic heating tanks & vessels 			
2.2	<p>What is the fluid temperature (°C)? (Only answer for chilled water tanks & vessel)</p> <p>_____</p>			
2.3	<p>What is the hot face temperature (°C)? (Only answer for process tanks & vessels)</p> <p>_____</p>			
2.4	<p>What is the temperature of the contents (°C)? (Only answer for domestic & non-domestic heating tanks & vessels)</p> <p>_____</p>			

3.	Product performance	No	Yes
3.1	Please provide the Maximum Permitted Heat Transfer Rate (W/m^2) (<i>answer is required for all product categories</i>)		
3.2	For chilled water tanks & vessels (Category 1), please indicate if the product is compliant with the relevant standards as described below: a) BS EN 5422:2023, Section 7, Tables 10 & 11, Annexes F & H		
3.3	For process tanks & vessels (Category 2), please indicate if the product is compliant with the relevant standards as described below: a) BS EN 5422:2023, Section 10, Table 21, Annexes A & H		
3.4	For domestic & non-domestic hot water tanks & vessels (Category 3), please indicate if the product is compliant with the relevant standards as described below: a) BS EN 5422:2023, Section 8 & 9, Table 17B & 18B, Annexes A & H		
3.5	For domestic & non-domestic heating tanks & vessels (Category 4), please indicate if the product is compliant with the relevant standards as described below: a) BS EN 5422:2023, Section 8 & 9, Table 15B & 16B, Annexes A & H, NES Y-50		

4. Summary of documents to be included

No	Yes
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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.

- 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 ETPL is correct, and that the supplied documentation can evidence the conformity of the products against the requirements the ETL eligibility criteria. If the model names contain any "wildcards" in respect of cosmetic variations please check with ETL Questions 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 ETPL 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 product meets the performance criteria, including:
- i) Manufacturers shall provide a Declaration of Performance (DoP) to declare the thermal conductivity used to calculate pipework thickness.
Categories 3 & 4 should have their heat transfer rate determined using the assumptions in Table C.1 of BS 5422:2023, using the calculation methods in EN ISO 12241:2008.
 - ii) Test reports showing product performance at the standard rating/test conditions
 - iii) Details of the test procedures/standards used to determine product performance.
 - iv) 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.
 - v) Where type testing procedures were used to select representative models for testing, please provide a written explanation of the reasons why these models were chosen, and evidence that the products covered by the representative model(s) are variants of the same constructional 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.

Detailed test reports must always be submitted for acceptance tests or field trials.

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 UK/EU Directives on product safety, including one of the following:
- i) An appropriate Conformity Assessment mark.
- e) Evidence that a quality assurance system/procedures is/are in place to 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 www.gov.uk/guidance/energy-technology-list.

Signature: Date:

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The information provided in this checklist is for product listing requirements. For further information about our Privacy Policy, please refer to the BEIS' Privacy Policy for ETL, [read more](#).

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