



No

Yes

Product application checklist

Please complete in BLOCK CAPITALS

Showers 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

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 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) Tested in a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing').
- c) Tested by an independent laboratory (i.e. 'independent testing').
- d) Representative testing

Please refer to the <i>ETL Testing Framework for details of the requirements that must be satisfied for each of these product testing options.

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

1.3 Where a representative sample of the test data has been cross-checked and verified by an independent body:

a) What is the name of the independent laboratory?

b) What is the laboratory's registration number (where accredited)?

1.	Product testing and certification (continued)	No	Ye		
1.4	Where product testing has been witnessed by an independent body, what was the name of the witness? (Please include contact details).				
1.5	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)?				
1.6	Is the application for: (Please select one).				
	a) A single unique product – in this case go to 2.1				
	b) A range of products, which are variants of the same basic design				
	c) One or more additional models to a range of products already on the ETPL				
1.7	If representative testing has been used, what are the 'representative models'?				
	ETL Product ID number Product name and model number				

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, at least one model must be tested in each group of products.

A report documenting performed model calculations, showing all significant calculation steps, shall be submitted with the application.

No Yes

No

Yes

- 2. Product type
- **2.1 Product Category:** (Please select one).
 - a) Shower valve
 - b) Shower head
 - c) Shower system
 - d) Electric shower

3. Eligibility Requirements

3.1 Is the shower product for non-domestic applications?

3.2 If the product is a shower valve, please confirm if:

- a) It has a thermostatic valve (except for electric showers)
- b) Complies with EN 1111:2017 Sanitary tapware. Thermostatic mixing valves (PN 10). General technical specification (as applicable)
- c) Complies with EN 1287:2017 Sanitary tapware. Low pressure thermostatic mixing valves. General technical specification (as applicable)

3.3 If the product is a shower head, please confirm if it:

- a) Complies with BS EN 1112:2008 Sanitary tapware, which specifies the dimensional, leak tightness, mechanical, hydraulic and acoustic characteristics with which shower outlets shall comply (as applicable).
- 3.4 If the product is a shower system, does it comply with the eligibility requirements set out in Q3.2 and Q3.3 for both shower valves and shower heads?
- 3.5 If the product is an electric shower, does it comply with all the relevant safety standards? Please insert the name of the safety standards.

4. Performance requirements

Please only answer the questions applicable to the products applied for.

4.1 Shower valves:

- a) Does the product provide a maximum available flow rate (Q_{max}) at 9 l/min without user behaviour features, and 10.6 l/min with UBFs incorporated?
- b) Can the product achieve pressure independency in line with testing requirements within section 1.4.3.2 of the ETL criteria?

4.2 Shower heads:

- a) Does the product provide a maximum available flow rate (Q_{max}) at 9 l/min without user behaviour features, and 10.6 l/min with UBFs incorporated?
- b) Can the product achieve pressure independency in line with testing requirements within section 1.4.3.2 of the ETL criteria?
- c) Can the product achieve spray coverage in line with testing requirements within section 1.4.3.3 of the ETL criteria?

4.3 Shower systems:

- a) Does the product provide a maximum available flow rate (Q_{max}) at 9 l/min without user behaviour features, and 10.6 l/min with UBFs incorporated?
- b) Can the product achieve pressure independency in line with testing requirements within section 1.4.3.2 of the ETL criteria?
- c) Can the product achieve spray coverage in line with testing requirements within section 1.4.3.3 of the ETL criteria?

4.4 Electric showers:

a) Does the product have a maximum available flow rate (Q_{max}) of 4.5 l/min?

5. Measurement and calculations

5.1 Please confirm which standards shall be used to determine the products eligibility:

- a) EN 1111:2017 Sanitary tapware. Thermostatic mixing valves (PN 10). General technical specification.
- b) EN 1287:2017 Sanitary tapware Low pressure thermostatic mixing valves General technical specification.
- c) BS EN 1112:2008 Shower outlets for sanitary tapware for water supply systems type 1 and type 2. General technical specification.
- d) Unified Water Label (UWL) scheme as published in January 2023.
- 5.2 Does the procedure for flow rate testing of mixer showers (shower valves) and shower outlets (shower heads) follow the Unified Water Label (UWL) scheme as published in January 2023?

5.3 Has the maximum flow rate (Q_{max}) been calculated in line with the following description?

The maximum flow rate (Q_{max}) shall be calculated in line with the Unified Water Label scheme (UWL) scheme as published in January 2023:

- 1. Connect the shower outlet/valve to the test apparatus
- 2. Adjust the shower plate horizontally facing downwards
- 3. Make sure that pressure P2 is reached at the centre of the face plate of the shower head
- 4. Report flow rate Q after stabilization

No Yes

Yes

No

5. Measurement and calculations (continued)

5.4 Does the procedure for testing electric showers follow the formula for flow rate calculation in line with Unified Water Label (UWL) scheme as published in January 2023, as per Table 1.1. in the ETL criteria?

Table 1 Fixed parameters for flow rate calculation

Fixed parameters for flow rate calculation			
Outlet temperature	42°C		
Inlet temperature	15°C		
Operating voltage	240V		
Density of water	≈ 1kg/l		
Specific heat capacity of water	4,18 kJ/(kg K)		

$$Q\left[\frac{l}{min}\right] = 60\left[\frac{s}{min}\right] \times \left(\frac{P_{electric \ shower} \ [kW]}{4, 18\left[\frac{kJ}{kg \times K}\right] \times (T_{out} - T_{in})}\right) \times 1\left[\frac{kg}{l}\right]$$

5.5 Regarding the pressure independency requirement, please confirm that the product's lowest flow rate shall not be less than 60% of the maximum flow rate where:

- the flow rate at the reference pressure (3 bar) is \leq 8.0 l/min and (Yes/No)
- the flow rate at the lower pressure (1.5 bar) shall be \geq 60% of the maximum available flow rate
- 5.6 Regarding the spray coverage requirement, does the product follow the testing procedure for shower outlets (shower heads) as identified within the UWL scheme as published in January 2023?

6

6. Summary of documents to be included

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 <u>online application</u>.

- 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 Product List (ETPL) 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 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 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 product meets the following standards, where applicable, to determine product eligibility:
 - i) EN 1111:2017 Sanitary tapware. Thermostatic mixing valves (PN 10). General technical specification .
 - EN 1287:2017 Sanitary tapware Low pressure thermostatic mixing valves General technical specification.
 - BS EN 1112:2008 Shower outlets for sanitary tapware for water supply systems type 1 and type 2. General technical specification. The following standard, where applicable, shall be used to determine product performance.
 - iv) Unified Water Label (UWL) scheme as published in January 2023.
 - v) Details of the test procedures/standards used to determine product performance.
 - vi) A declaration certifying the accuracy of the test reports and confirming that:
 - The test facilities used comply with the minimum specifications outlined in the test standard, and the required test conditions were 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.

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 one detailed test report has been submitted per product range.

Please refer to the <u>ETL Testing Framework</u> for further guidance on the submission of test results, and minimum information requirements.

- d) Evidence that a quality assurance system/procedures is/are in place to control the specification, design, manufacturing and testing of the products.
- e) Signed application checklist.

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

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No Yes

Showers

7. 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 <u>here</u>.

Signature:

Date:

For more information:

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