



No

Yes

# Product application checklist

Please complete in BLOCK CAPITALS

# **Professional Refrigerated Storage Cabinets**

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

### **1.1** Is the application for: (*Please select one*).

- a) A single unique product which has been tested in accordance with the criteria *in this case go straight to 1.4.*
- b) A product which is based on the data for a 'representative model' which is not yet listed on the ETL (the representative model should be submitted at the same time as this application) - in this case the test data presented must be for a 'representative model', go straight to 1.3.
- c) A product which is based on the data for a 'representative model' which is already listed on the ETL *in this case go to 1.2.*

### 1.2 What are the 'representative models':

- a) Product name and model number.
- b) ETL Product ID number.

# **1.3** If the application is on the basis of a 'representative model' indicate the basis of its selection: (*Please select those which apply*).

- a) Cosmetic differences to the exterior (any model may be selected to be the representative model).
- b) Heaters (door, trim etc.), fans, defrosts, lighting and other accessories (the model with the greatest energy consumption must be the representative model).
- c) Cabinets with the same refrigeration system components but different refrigerants (the model with the greatest energy consumption must be the representative model).

If two or more of the above variations are used the rules set out above must be combined when selecting the representative model.

No

Yes

## 1. Product testing and certification (continued)

1.4 Does the product have an appropriate Conformity Assessment mark?

If so, to which directive?

#### 1.5 Has the product been tested?

- a) In a test room which conforms to BS EN 16825:2016.
- b) Under Climate Class IV (30°C, 55% RH).
- c) In a test room which conforms to an equivalent test standard where the resulting performance data can be shown to be equivalent to that obtained under BS EN 16825:2016. Please state which alternative test standard has been used:

#### 1.6 Was the product loaded and temperature tested in accordance with BS EN 16825:2016?

#### **1.7** 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')
- Tested in 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 the ETL Testing Framework.

- 1.8 Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?
- 1.9 Where a representative sample of the test data has been cross-checked and verified by an independent body:
  - a) What is the name of independent laboratory?
  - b) What is the laboratory's registration number (where accredited)?
- **1.10** Where product testing has been witnessed by an independent body, what was the name of the witness? (*Please include contact details*).
- 1.11 Where products have been tested by an independent accredited laboratory:
  - a) What is the name of independent accredited laboratory?
  - b) What is the laboratory's registration number (where accredited)?

No

Yes

## 2. Product type

- 2.1 Is the cabinet fitted with "solid faced doors, lids or drawers" that are normally closed, but can be opened to access the contents of a single compartment, obscure the contents of the cabinet when closed and enable users to access the contents without stepping into the refrigerated space?
- 2.2 Is the cabinet a 'plug in' (integral) type?
- 2.3 Which type of product is the cabinet? (Please select one).
  - a) Single door (vertical) cabinet.
  - b) Double door (vertical) cabinet.
  - c) Under counter or counter (counter type) cabinet.
- 2.4 What is the classification of the product according to its temperature range? M1 L1
- 2.5 Does the product have a refrigerant with a Global Warming Potential (GWP) of ≤150?

Please provide the type of refrigerant and the GWP value

**3. Product features** 

3.1 What is the gross internal volume of the cabinet (litres)?

### 3.2 What is the net internal volume \* of the cabinet (litres)?

\*Net volume should be defined as per Section 6.1 of BS EN 16825:2016 and should be measured in compliance with <u>'Calculating the net volume of professional refrigerated storage cabinets</u>'.

## 4. Product performance

#### 4.1 What is the Energy Efficiency Index (EEI) of the product to one decimal place?

The product's EEI must be less than or equal to the values shown in Table 1 below.

## Table 1 Performance thresholds for professional refrigerated storage cabinets

		EEI (ratio) performance threshold	
Туре	Overall external height (mm)	Chiller (M1)	Freezer (L1)
Single door professional refrigerated storage cabinets (vertical)	≥ 1,050	≤ 35.0	≤ 50.0
Double door professional refrigerated storage cabinets (vertical)	≥ 1,050	≤ 50.0	≤ 65.0
Under counter and counter professional refrigerated storage cabinets (counter)	< 1,050	≤ 35.0	≤ 50.0

 $' \geq '$  means 'greater than or equal to'

' $\leq$ ' means 'less than or equal to'

'<' means 'less than'

The Energy Efficiency Index (EEI) is defined as the ratio between AEC (Annual Energy Consumption of the cabinet in kWh/year) and SAEC (Standard Annual Energy Consumption of the cabinet in kWh/year).

The overall external height shall be based on the 'as-installed' product height.

#### 4.2 During testing, what was the measured value of the following parameters:

- a) The highest temperature  $atla \alpha \eta$  of the warmest M-package?
- c) The lowest temperature  $\phi \alpha \lambda$  of the warmest M-package?

To be eligible, products must conform to one of the temperature classifications in Table 2 when tested to BS EN 16825:2016 in climate class IV (30°C, 55% RH).

#### Table 2 Classification according to temperature

Class	The highest temperature Øαη of the warmest M-package equal to or lower than °C	The lowest temperature Øβ of the coldest M-package equal to or higher than °C	The lowest temperature Øαλ of the warmest M-package equal to or lower than °C
Freezer cabinets (L1)	-15	-	-18
Chiller cabinets (M1)	+5	-1	-

# 5. 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 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.
  - iv) Details of how the internal volume was calculated (including diagrams and calculations).

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) 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 used comply 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 the test reports have not been prepared by an independent body, evidence that the accuracy of product performance data has been independently verified or cross-checked by an independent body.
  - 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 refer to the <u>ETL Testing Framework</u> 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:
  - 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 <u>here</u>.

Signature:

Date:

#### For more information:

Web: etl.energysecurity.gov.uk

Phone: +44 20 3096 4800

Email: info@etl.energysecurity.gov.uk

#### Post:

Energy Technology List Coordinator ICF 1st Floor, 62 Threadneedle Street London EC2R 8HP

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