Commercial Combination Ovens

To provide feedback to SEAI on the proposed Triple E eligibility criteria changes and to submit your answers to specific questions of interest to SEAI, please use the stakeholder engagement feedback form:

Feedback Form

Commercial Combination Ovens
Summary of proposed Triple E eligibility criteria changes.

To facilitate a refinement of the eligibility criteria for Commercial Combination Ovens it is proposed to make the following amendment:

• Refinement of efficiency requirements and standards references

The proposed eligibility criteria document is contained on the following pages. Please follow this link to view the currently published eligibility criteria.
Triple E Eligibility Criteria

Category: Catering and Hospitality Equipment
Technology: Commercial Combination Ovens

Commercial electric and gas combination ovens are used in commercial kitchens and catering. They are categorised as electric (both full and half-size) and gas convection ovens (full-size only) where cookery within one unit is possible by using a combination of convection heat and steam.

Commercial combination ovens are considered to include the following:

Electric-powered combi ovens
Electric-powered combi ovens are defined as half-size (capacity for a min. five pans\(^1\)) and full-size (capacity for a min. 10 pans).

Gas convection ovens
Gas convection ovens are defined as full-size only (capacity for a min. ten pans).

Commercial Combination Ovens Eligibility Criteria
To be included on the Triple E Register, the specific Commercial Combination Oven must meet all the relevant requirements set out below.

**Note:** Supporting documentation that clearly demonstrates Triple E compliance according to the conditions below will be required as part of the Triple E checking process. Detailed information on the types of documents accepted can be found in the separate Supporting Documentation guidelines.

**General eligibility criteria**
(applicable to all Commercial Combination Ovens)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All equipment and/or components must be CE marked as required by the specific EU directive(s).</td>
</tr>
</tbody>
</table>

\(^1\) Pan size as per Gastronorm
2 **Must comply with the Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)**\(^2\) and **Waste Electrical and Electronic Equipment (WEEE)**\(^3\) regulations.

3 **Must have the option to be supplied with an integrated condenser hood to regulate climate control in the location where it will operate or a heat exchanger to transfer heat from the steam exhaust to the incoming water.**

### Electric-powered combi ovens – specific eligibility criteria
(to be met in addition to the general eligibility criteria)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
</tr>
</thead>
</table>
| 4   | Must achieve a minimum cooking efficiency of **70%** (both half and full-size units).  
• At least 49% (steam mode)  
• At least 74% (convection mode) |
| 5   | Must not exceed **1.6 kW** (for full-size ovens) or **1.0 kW** (for half-size ovens) in electrical energy consumption while operating at a stabilised temperature set point (standby rate) |

### Gas Convection Ovens – specific eligibility criteria
(to be met in addition to the general eligibility criteria)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
</tr>
</thead>
</table>
| 6   | Must achieve a minimum cooking efficiency of the following:  
• 44%. At least 44% (steam mode)  
• At least 54% (convection mode) |
| 7   | Must not exceed **3.8 kWh** gas consumption while operating at a stabilised temperature set point (standby rate) |

---


Guidance on product details and supporting documentation

NOTE: The following information is not part of the official criteria document published within the relevant Statutory Instrument. It has been added here for guidance purposes only in order to help you to provide (a) product details and (b) the required supporting documentation.

All information contained in this guidance document is subject to change without notice.

Technical information required in product submission

The following are the specific technical values required as part of the product submission for this technology:

**Combination Oven product type**
You must select which type of oven your product is. Only one type can be chosen per submitted product.

**Cooking Efficiency (%)**
The cooking efficiency of the product as a percentage is required as a value. It must be entered as a number only without the % symbol. There should also be no spaces or full stops after the number submitted. The figure must comply with the minimum cooking efficiency criteria requirements of the type of combination oven chosen.

**Standby Energy Rate (kW)**
The Standby Energy Rate of the product in kW is required. This is the energy consumption of the unit when it is operating at a stabilised temperature set point. It must be entered as a number only without any unit symbol. There should also be no spaces or full stops after the number submitted. The figure must comply with the Standby Energy Rate criteria requirements for the type of combination oven chosen.

Supporting documentation required

Described below is the list of documents that are accepted as proof of compliance for the specific Combination Ovens condition.

**Note:** This information will only be requested AFTER you submit your product’s basic details online.

**Important Notes to Product Providers**
Please ensure that you read the “Important Notes to Product Providers” section at the end of this document prior to submitting documentation.
**General eligibility criteria**
(applicable to all Combination Ovens)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
<th>Supporting Documentation Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Products must be CE-marked</td>
<td>Official and published manufacturer’s technical data sheet or brochure that demonstrates CE marking compliance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A copy of an official signed declaration on headed paper which confirms CE marking compliance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Official declarations should explicitly state the product for which CE marking is being confirmed (i.e. do not provide a letter simply stating general compliance with the relevant Triple E Condition).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where a document is used to demonstrate conformance for a number of products or range of products it should clearly specify each individual product covered by that document.</td>
</tr>
<tr>
<td>2.</td>
<td>Products must satisfy the RoHS directive and the WEEE Directive (latest applicable versions)</td>
<td>Official and published manufacturer’s technical data sheet or brochure that demonstrates the requirements of the condition.</td>
</tr>
</tbody>
</table>
3. Must have the option to be supplied with an integrated condenser hood to regulate climate control in the location where it will operate or a heat exchanger to transfer heat from the steam exhaust to the incoming water.

Official and published manufacturer’s technical data sheet or brochure that demonstrates the requirements of the condition.

**Electric-powered combi ovens – specific eligibility criteria**
(to be met in addition to the general eligibility criteria)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
<th>Supporting Documentation Requirement</th>
</tr>
</thead>
</table>
| 4.  | Must achieve a minimum cooking efficiency of the following (both half and full-size units).  
  • At least 49% (steam mode)  
  • At least 74% (convection mode) | Accredited certification that the minimum cooking efficiency of the product has been obtained by testing according to the named standard, and demonstrating that the cooking efficiency of the product meets or exceeds the values shown.  
OR  
Evidence of official testing by manufacturer or independent test lab carried out according to the principles outlined in the named standard, and demonstrating that the cooking efficiency of the product meets or exceeds the values shown. Test reports should be of the format described in the ‘Important notes to Product Providers’ section of this document.  
Accepted Standard:  
ASTM F1496: Standard test method for performance of convection ovens  
ASTM F2861: Standard Test Method for Enhanced Performance of Combination Oven in Various Modes |
|   | The product must not exceed 1.6 kW (for full-size ovens) or 1.0 kW (for half-size ovens) in electrical energy consumption while operating at a stabilised temperature set point (standby rate) | Official and published manufacturer’s technical data sheet or brochure that demonstrates the requirements of the condition. |
**Gas-powered combi ovens – specific eligibility criteria**
(to be met in addition to the general eligibility criteria)

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
<th>Supporting Documentation Requirement</th>
</tr>
</thead>
</table>
| 6.  | Must achieve a minimum cooking efficiency of the following:  
     • At least 44% (steam mode)  
     • At least 54% (convection mode) | Accredited certification that the minimum cooking efficiency of the product has been obtained by testing according to the named standard, and demonstrating that the cooking efficiency of the product meets or exceeds the values shown.  
**OR**  
Evidence of official testing by manufacturer or independent test lab carried out according to the principles outlined in the named standard, and demonstrating that the cooking efficiency of the product meets or exceeds the values shown. Test reports should be of the format described in the ‘Important notes to Product Providers’ section of this document.  
Accepted Standard:  
ASTM F1496: Standard test method for performance of convection ovens  
ASTM F2861: Standard Test Method for Enhanced Performance of Combination Oven in Various Modes |
| 7.  | The product must not exceed 3.6 kW gas consumption while operating at a stabilised temperature set point (standby rate) | Official and published manufacturer’s technical data sheet or brochure that demonstrates the requirements of the condition. |
Important notes for product providers

General
There should be a clear link between all supporting documentation supplied and the product being submitted. This will typically take the form of a product code or product name that can be cross referenced between the submitted product and relevant supporting documentation. If product codes / names have been changed since publication of the supporting documentation, then official evidence of this must be provided with the supporting documentation supplied.

Any deviation from these requirements will result in the supporting documentation not being considered adequate for the purposes of demonstrating compliance with the criteria conditions. This will in turn delay the submission and/or result in the product not being considered eligible.

Where the Triple E criteria or help documentation references compliance to appropriate rather than specific standards, the onus is on the product provider to ensure that supporting documentation supplied references recognised standards that apply to the submitted product, i.e. the product must be covered under the scope of a recognised standard.

If any product submitted is later found not to meet the performance or specification criteria, then this product will cease to be considered eligible for the Triple E.

Note: When supplying the supporting documentation through the online process you must ensure that the correct page number(s) of the document is referenced when demonstrating compliance with the relevant condition. An explanatory note should also be given where more than one page number is referenced.
Test Report

A test report must include an outline of the complete test, including:

- Introduction
- Details on test conditions
- The specific model details of the product tested
- The steps taken in the test
- The results
- Graphical representations
- Conclusion

All documents should be on headed paper and the document should be officially signed off.

All documentation must be in English or include adequate translation.

Certification

Where certificates are provided, all tests must be carried out by an organisation that is accredited by a national accreditation body recognised via the European Cooperation for Accreditation (preferred) or the International Accreditation Forum. All documentation must be in English or include adequate translation.

Scientific Equivalence

Some Triple E criteria conditions allow for scientifically equivalent tests and/or standards to be used. In the event that a product has not been designed, manufactured or tested to the specific standard named, then documentation relating to an equivalent internationally recognised standard may be used (where the phrase ‘Or scientific equivalent’ is included in the Triple E condition or help documentation). In such applications, the onus will be on the product submitter to demonstrate satisfactory equivalence of the standards. However, submissions which reference such supporting documentation may take longer to process, and if the product provider does not provide satisfactory evidence of equivalence, then the product will not be considered eligible for the Triple E register.

All documentation must be in English or include adequate translation.

Note: Where specific standards are cited in a condition or in the Triple E help documentation, then documentation demonstrating that the relevant products have been designed, manufactured or tested to these specific standards is preferred. Scientific equivalence is considered the exception rather than the norm.