

COMMISSION REGULATION (EU) [XXX/XXXX]

of [XX/XX/XXXX]

implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ~~domestic household ovens, hobs and range hoods~~cooking fume extractors and repealing COMMISSION REGULATION (EU) No 66/2014

(Text with EEA relevance)

Article 1

Subject matter and scope

1. This Regulation establishes eco-design requirements for the placing on the market and putting into service of ~~domestic household ovens~~ (including when incorporated in cookers), ovens equipped with a microwave heating function and microwave ovens, ~~domestic household hobs and domestic household electric range hoods~~cooking fume extractors, including when sold for non-~~domestic household~~ purposes.

2. This Regulation shall not apply to:

(a) appliances that use energy sources other than electricity or gas;

~~(b) appliances which offer 'microwave heating' function;~~

~~(c) small ovens;~~

~~(d) portable ovens;~~

(e) heat storage ovens;

(f) ovens which are heated with steam as a primary heating function;

(g) covered gas burners in hobs;

(h) outdoor cooking appliances;

~~(i) appliances designed for use only with gases of the 'third family' (propane and butane);~~

(j) grills.

Article 2

Definitions

In addition to the definitions set out in Article 2 of Directive 2009/125/EC, the following definitions shall apply for the purpose of this Regulation:

- (1) 'oven' means an appliance or part of an appliance which incorporates one or more cavities using electricity and/or gas ~~in which food is prepared by use of a conventional or fan-forced mode;~~
- (2) 'cavity' means the enclosed compartment in which the temperature can be controlled for preparation of food;
- (3) 'multi-cavity oven' means an oven with two or more cavities, each of which is heated separately;

- (4) 'small oven' means an oven where all cavities have a width and depth of less than 250 mm or a height less than 120 mm with a cavity volume below 10 litres;
- (5) 'portable oven' means an oven with a product mass of less than 18 kilograms, provided it is not designed for built-in installations;
- (6) 'microwave heating' means heating of food using electromagnetic energy;
- ~~(7)(1) 'conventional mode' means the operation mode of an oven only using natural convection for circulation of heated air inside the cavity of the oven;~~
- ~~(8)(1) 'fan forced mode' means a mode when a built-in fan circulates heated air inside the cavity of the oven;~~
- ~~(9)(1) 'cycle' means the period of heating a standardised load in a cavity of an oven under defined conditions;~~
- (10)(7) 'cooker' means an appliance consisting of an oven and a hob using gas or electricity;
- ~~(11)(1) 'operation mode' means the status of the oven or hob during use;~~
- (12)(8) 'heat source' means the main energy form for heating an oven or hob;
- (13)(9) 'electric hob' means an appliance or part of an appliance which incorporates one or more cooking zones and/or cooking areas including a control unit and which is heated by electricity;
- (14)(10) 'gas hob' means an appliance or part of an appliance which incorporates one or more cooking zones including a control unit and which is heated by gas burners of a minimum power of 1,16 kW;
- ~~(15)(11) 'hob' means an 'electric hob', a 'gas hob' or a 'mixed hob';~~
- (16)(12) 'covered gas burners' means closed or sealed gas range burners covered with a heavy-duty glass or ceramic cover, which forms a smooth, seamless cooking surface;
- ~~(17)(13) 'mixed hob' means an appliance with one or more electrically heated cooking zones or areas and one or more cooking zones heated by gas burners;~~
- ~~(18)(14) 'cooking zone' means a part, with a diameter of at least 100 mm, of a hob where cookware is placed and heated with not more than one piece of cookware heated at a time; the area of the cooking zone may be visibly marked on the surface of the hob;~~
- ~~(19)(15) 'cooking area' means a part of an area of an electric hob heated by an inducted magnetic field, where cookware is placed for heating without visible marking for the cookware and where more than one item of cookware can be used simultaneously;~~
- (16) 'Cooking fume extractor' means an appliance with a fan and filter intended to collect and treat cooking fumes, which can be operated in recirculation mode or extraction mode.
- (17) 'Recirculation mode' means a mode of a cooking fume extractor that discharges the air back into the room, which includes an odour-reduction filter.
- (18) 'Extraction mode' means a mode of a cooking fume extractor that discharges the air to the outside of the building by means of ducting.
- ~~(20) 'range hood' means an appliance, operated by a motor which it controls, intended to collect contaminated air from above a hob, or which includes a downdraft system intended for installation adjacent to cooking ranges, hobs and similar cooking products, that draws vapour down into an internal exhaust duct;~~
- ~~(21) 'automatic functioning mode during the cooking period' means a condition in which the air flow of the range hood during the cooking period is automatically controlled through sensor(s), including as regards humidity, temperature, etc.;~~

- (22) 'fully automatic range hood' means a range hood in which the air flow and/or other functions are automatically controlled through sensor(s) during 24 hours including the cooking period;
- (23) 'best efficiency point' (BEP) means the range hood operating point with maximum fluid dynamic efficiency (FDE_{hood});
- (24) 'average illumination' (E_{middle}) means the average illumination provided by the lighting system of the range hood on the cooking surface, measured in lux;
- (25) 'off mode' means a condition in which the equipment is connected to the mains power source but is not providing any function, or only provides an indication of off-mode condition, or only provides functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2004/108/EC of the European Parliament and of the Council (1);
- (26) 'standby mode' means a condition where the equipment is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only reactivation function, or reactivation function and only an indication of enabled reactivation function, and/or information or status display, which may persist for an indefinite time;
- (27) 'reactivation function' means a function facilitating the activation of other modes, including the active mode, by remote switch including remote control, internal sensor, or timer to a condition providing additional functions, including the main function;
- (28) 'information or status display' means a continuous function providing information or indicating the status of the equipment on a display, including clocks;
- (29)(19) 'end-user' means a consumer buying or expected to buy a product;
- (30)(20) 'equivalent model' means a model placed on the market with the same technical parameters as another model placed on the market under a different commercial code number by the same manufacturer or importer.

Article 3

Ecodesign requirements and timetable

1. The ecodesign requirements, including timing, for ~~domestic household~~ ovens, hobs and ~~range hood~~ cooking fume extractors are set out in Annex II.
2. Compliance with ecodesign requirements shall be measured and calculated in accordance with the methods set out in Annex III.

Article 4

Conformity assessment

1. The conformity assessment procedure referred to in Article 8 of Directive 2009/125/EC shall be the internal design control system set out in Annex IV to that Directive or the management system set out in Annex V to that Directive.
2. For the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC, the technical documentation file shall contain a copy of the calculation set out in Annex II to this Regulation.
3. Where the information included in the technical documentation for a model has been obtained by calculation on the basis of design, or extrapolation from other equivalent appliances, or both, the technical documentation shall include details of such calculations or extrapolations, or both, and of tests undertaken by manufacturers to verify the accuracy of the calculations undertaken. In such

cases, the technical documentation shall also include a list of all other equivalent models where the information contained in the technical documentation was obtained on the same basis.

4. If the manufacturer or importer places on the market equivalent models, the manufacturer or importer shall include a list of all other equivalent models.

Article 5

Verification procedure for market surveillance purposes

~~Member States' authorities shall apply the verification procedure described in Annex III to this Regulation when~~ When performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC for to ensure compliance with requirements set out in Annex II to this Regulation, the Member States' authorities shall apply the verification procedure described in Annex V to this Regulation.

Article 6

Circumvention and software and firmware updates

1. Manufacturers, importers or authorised representatives shall not place on the market products designed to be able to detect they are being tested (for example by recognising the test conditions or test cycle) and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters in the technical documentation or included in any documentation provided.
2. Manufacturers, importers or authorised representatives shall not prescribe test instructions, specifically for when product are being tested, that have the effect of altering the behaviour or properties of those products in order to obtain a more favourable result for any of the declared values of the parameters set out in this Regulation.
3. Manufacturers, importers or authorised representatives shall not place on the market or put into service products designed to alter their behaviour or properties within a short period after being put into service resulting in a degrading of any of the declared values of the parameters set out in this Regulation.
4. The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update. No performance change shall occur as a result of rejecting the update.
5. A software update shall never have the effect of changing the product's performance in a way that makes it noncompliant with the ecodesign requirements set out in this Regulation applicable at the time of the placing on the market or putting into service of the appliance.

Article 67

Indicative benchmarks

The indicative benchmarks for best-performing appliances available on the market at the time of entry into force of this Regulation are set out in Annex ~~IV~~V.

Article 78

Review

The Commission shall review this Regulation in the light of technological progress and present the result of this review to the Consultation Forum no later than 7 years after the entry into force of the Regulation. The review shall assess, amongst others, the feasibility of: ~~potential requirements to enhance the recovery and recycling of the appliances; durability and lifetime requirements; the inclusion of professional and commercial appliances; and fume and odour removal requirements.~~

Article 9

Repeal

Commission Regulation (EU) No 66/2014 shall be repealed with effect from [Date of application].

Article 810

Entry into force and application

1.–This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

2.–It shall apply from [OP – please insert date – two years after entry into force of this Regulation]~~4 year after the entry into force.~~

However, article 6 shall apply from [OP – please insert date – entry into force of this Regulation].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, XX Month XXXX.

For the Commission

The President

Ursula VON DER LEYEN

ANNEX I

Definitions applicable for Annexes II to VI

- (1) ‘conventional mode’ means the operation mode of an oven only using natural convection for circulation of heated air inside the cavity of the oven;
- (2) ‘fan-forced mode’ means a mode when a built-in fan circulates heated air inside the cavity of the oven;
- (3) ‘cycle’ means the period of heating a standardised load in a cavity of an oven under defined conditions;
- (4) ‘operation mode’ means the status of the oven or hob during use;
- (5) ‘automatic functioning mode during the cooking period’ means a condition in which the air flow of the cooking fume extractor during the cooking period is automatically controlled through sensor(s), including as regards humidity, temperature, etc.;
- (6) ‘fully automatic cooking fume extractor means a cooking fume extractor in which the air flow and/or other functions are automatically controlled through sensor(s) during 24 hours including the cooking period;

- (7) 'best efficiency point' (BEP) means the cooking fume extractor operating point with maximum fluid dynamic efficiency (FDE);
- (8) 'average illumination' (Emiddle) means the average illumination provided by the lighting system of the cooking fume extractor on the cooking surface, measured in lux;
- (9) 'off mode' means a condition in which the equipment is connected to the mains power source and is not providing any function, or it is in a condition providing only:
- a. an indication of off mode condition;
 - b. functionalities intended to ensure electromagnetic compatibility under Directive 2014/30/EU of the European Parliament and of the Council;
- (10) 'standby mode' means a condition where the equipment is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only one or more of the following functions, which may persist for an indefinite time:
- a. reactivation function;
 - b. reactivation function and only an indication of enabled reactivation function;
 - c. information or status display;
- (11) 'reactivation function' means a function that via a remote switch, a remote control, an internal sensor or timer provides a switch from standby mode to another mode, including active mode, providing additional functions;
- (12) 'information or status display' means a continuous function providing information or indicating the status of the equipment on a display, including clocks. A simple light indicator is not considered a status display;

ANNEX II

Ecodesign requirements

1. ENERGY EFFICIENCY, AIR FLOW, ~~AND~~ ILLUMINATION ~~AND~~, ODOUR REDUCTION AND EMISSION REQUIREMENTS

1.1. For domestic household ovens

1.1.1 Energy efficiency requirements

Cavities of domestic household ovens (including when incorporated in cookers) shall comply with maximum Energy Efficiency Index limits as indicated in Table 1 below.

For household electric ovens:

$$EEI_{cavity} < 100 \times f(V)$$

Where:

$$f(V) = 3.3 \times 10^{-7} \times V^3$$

V: the Volume of the oven cavity in litres

Table 1 For household gas ovens:

$$EEI_{cavity} < 96$$

Energy Efficiency Index limits for cavities of domestic household ovens (EEI_{cavity})

-	<u>Domestic Household electric & gas oven</u>
From 1 year after the entry into force	EEIcavity < 146
From 2 years after the entry into force	EEIcavity < 121
From 5 years after the entry into force	EEIcavity < 96

From 5 years after entry into force, for multi-cavity ovens (including when incorporated in cookers), at least one cavity shall comply with the maximum Energy Efficiency Index as indicated in Table 1 as applicable from 5 years after entry into force whereas the other cavities shall comply with the maximum Energy Efficiency Index as indicated in Table 1 as applicable from 2 years after entry into force.

1.1.2 Low power mode requirements

- Availability of 'off mode' and/or 'standby mode': household ovens shall provide 'off mode' and/or 'standby mode', and/or another condition which does not exceed the applicable power consumption requirements for 'off mode' and/or 'standby mode' when the equipment is connected to the mains power source.

— Power consumption in 'off mode': the power consumption in any off-mode condition shall not exceed 0,50 W.

— Power consumption in 'standby mode(s)': the power consumption in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.

— The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.

— Power management: when household ovens are not providing the main function, or when other energy-related product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into:

— 'standby mode', or

— 'off mode', or

- another condition which does not exceed the applicable power consumption requirements for ‘off mode’ and/or ‘standby mode’ when the equipment is connected to the mains power source.
- The power management function shall be activated before delivery.
- If the standby mode provides for a connection to a network and provides networked standby, the power consumption of this mode shall not exceed 2.00 W.
- After 15 minutes of inactivity, the appliance shall switch automatically to off mode or standby mode
- If the appliance provides for a delayed start, the power consumption of this condition, including any standby mode, shall not exceed 4.00 W. The delayed start shall not be programmable by the user for more than 24 h later.
- Any appliance that can be connected to a network shall provide the possibility to activate and deactivate the network connection(s). The network connection(s) shall be deactivated by default.

1.2. For domestic household hobs

1.2.1 Energy efficiency requirements for household hobs

The domestic household hobs shall have the maximum energy consumption limits for electric hobs (E_{Electric hob}) and the minimum energy efficiency limits for gas-fired hobs (E_{Gas hob}) as indicated in Table 2.

Table 2

Energy efficiency performance limits for domestic household hobs (E_{Electric hob} and E_{Gas hob})

<u>Electric Radiant and solid plate hob</u> (E_{Electric hob} in Wh/kg)	<u>Induction hob</u> (E_{Electric hob} in Wh/kg)	<u>Gas-fired hob</u> (E_{Gas hob} in %)
E _{Electric hob} < 210	E _{Electric hob} < 187	E _{Gas hob} > 53
E _{Electric hob} < 200		E _{Gas hob} > 54
E _{Electric hob} < 195		E _{Gas hob} > 55

1.2.2 Emission requirements for gas household hobs

[Placeholder for NO_x emissions; The NO_x emissions of gas hobs as calculated according to the method presented in Annex X will not be higher than XX mg/kWh. CH₄ emissions (leakage)?]

1.2.3 Low power modes

- Availability of ‘off mode’ and/or ‘standby mode’: household hobs shall provide ‘off mode’ and/or ‘standby mode’, and/or another condition which does not exceed the applicable power consumption requirements for ‘off mode’ and/or ‘standby mode’ when the equipment is connected to the mains power source.

— Power consumption in ‘off mode’: the power consumption in any off-mode condition shall not exceed 0,50 W.

— Power consumption in ‘standby mode(s)’: the power consumption in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.

— The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.

— Power management: when household hobs are not providing the main function, or when other energy-related product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into:

— ‘standby mode’, or

— ‘off mode’, or

— another condition which does not exceed the applicable power consumption requirements for ‘off mode’ and/or ‘standby mode’ when the equipment is connected to the mains power source.

— The power management function shall be activated before delivery.

— If the standby mode provides for a connection to a network and provides networked standby, the power consumption of this mode shall not exceed 2.00 W.

— After 15 minutes of inactivity, the appliance shall switch automatically to off mode or standby mode

Any appliance that can be connected to a network shall provide the possibility to activate and deactivate the network connection(s). The network connection(s) shall be deactivated by default.

1.3. ~~For domestic range hoods~~ household cooking fume extractors

1.3.1. ~~Energy Efficiency Index (EEI_{hood}) and Fluid Dynamic Efficiency (FDE_{hood})~~ (EEI_{cfe}) and Fluid Dynamic Efficiency (FDE_{cfe})

~~The domestic household range hood cooking fume extractors shall have the maximum EEI_{hood} and the a minimum FDE_{hood} limits as indicated in Table 3 below.~~

FDE > 8%

Table 3

~~Energy Efficiency Index (EEI_{hood}) and Fluid Dynamic Efficiency (FDE_{hood}) for domestic range hoods~~

	EEI_{hood} <u>EEI_{cfe}</u>	FDE_{hood} <u>FDE_{cfe}</u>
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From 1 year after the entry into force	EEIhoodEEIcfe < 120	FDEhoodFDEcfe > 3
From 3 years after the entry into force	EEIhoodEEIcfe < 110	FDEhoodFDEcfe > 5
From 5 years after the entry into force	EEIhoodEEIcfe < 100	FDEhoodFDEcfe > 8

1.3.2. Air flow

From 1 year after the entry into force, the domestic Household range hood cooking fume extractors with a maximum air flow in any of the available settings higher than 650 m³/h shall automatically revert to an air flow lower than or equal to 650 m³/h in a time limit as defined in Annex III. The average air flow Q_{avg} shall be lower than or equal to 450 m³/h.

1.3.3. Low power modes for domestic household range hood cooking fume extractors

(1) From 18 months after the entry into force:

— Power consumption in ‘off mode’: the power consumption in any off-mode condition shall not exceed 1,00 W.

— Power consumption in ‘standby mode(s)’: The power consumption in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W.

— The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W.

— Availability of ‘off mode’ and/or ‘standby mode’: domestic household range hood cooking fume extractors shall provide ‘off mode’ and/or ‘standby mode’, and/or another condition which does not exceed the applicable power consumption requirements for ‘off mode’ and/or ‘standby mode’ when the equipment is connected to the mains power source.

(2) From 3 years and 6 months after the entry into force:

— Power consumption in ‘off mode’: the power consumption in any off-mode condition shall not exceed 0,50 W.

— Power consumption in ‘standby mode(s)’: the power consumption in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.

— The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.

— Power management: when domestic household range hood cooking fume extractors are not providing the main function, or when other energy-using product(s) are not dependent on its

functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into:

- ‘standby mode’, or
- ‘off mode’, or
- another condition which does not exceed the applicable power consumption requirements for ‘off mode’ and/or ‘standby mode’ when the equipment is connected to the mains power source.
- The power management function shall be activated before delivery.
- For ~~range hood~~ cooking fume extractors with automatic functioning mode during the cooking period and fully automatic ~~range hood~~ cooking fume extractors, the delay time after which the product switches automatically into the modes and conditions as referred to in the previous point shall be one minute after the motor and lighting have both been switched off either automatically or manually.
 - If the standby mode provides for a connection to a network and provides networked standby, the power consumption of this mode shall not exceed 2.00 W.
 - After 15 minutes of inactivity, the appliance shall switch automatically to off mode or standby mode
 - If the appliance provides for a delayed start, the power consumption of this condition, including any standby mode, shall not exceed 4.00 W. The delayed start shall not be programmable by the user for more than 24 h later.
 - Any appliance that can be connected to a network shall provide the possibility to activate and deactivate the network connection(s). The network connection(s) shall be deactivated by default.

1.3.4. Illumination of the lighting

~~From 1 year after entry into force, for~~ For ~~range hood~~ cooking fume extractors which provide for lighting of the cooking surface, the average illumination of the lighting system on the cooking surface (E_{middle}) shall be higher than 40 lux when measured under standard conditions.

1.3.5. Odour reduction factor

From the date of entry into force, recirculation cooking fume extractors shall have a minimum odour reduction factor of 35% measured with the odour filter recommended by the manufacturer.

2. REQUIREMENTS FOR MATERIAL RESOURCE EFFICIENCY

Manufacturers, importers or authorised representatives of household cooking appliances shall ensure that:

(1) Availability of necessary spare parts.

(a) Manufacturers, importers or authorised representatives shall make available spare parts (or compatible parts) for at least, the following components (Table 3):

Table 3. Spare part availability of cooking appliances for professional repairers

<u>Appliance</u>	<u>List of spare parts</u>
<u>Electric ovens</u>	<u>Door hinges, door springs, door glass, door seals, thermostats, sensors, regulators, fans, fan blades, fan motors, displays, heating elements, grill elements, wires & cables, electrical fittings, switches, printed circuit boards, software & firmware</u>
<u>Gas ovens</u>	<u>Door hinges, door springs, door glass, door seals, thermostats, sensors, regulators, fans, fan blades, fan motors, displays, burners, grill elements, igniters, burner valves, safety valves, gas fittings, gas injectors, nozzles, gas pipes, thermocouples, printed circuit boards, software & firmware</u>
<u>Steam ovens (solo & combi)</u>	<u>Door hinges, door springs, door glass, door seals, thermostats, sensors, regulators, fans, fan blades, fan motors, displays, heating elements, grill elements, wires & cables, electrical fittings, switches, water tanks, water pipes & hoses, printed circuit boards, software & firmware</u>
<u>Combi MW ovens</u>	<u>Door hinges, door springs, door glass, door seals, thermostats, sensors, regulators, fans, fan blades, fan motors, displays, heating elements, grill elements, wires & cables, electrical fittings, switches, turntable motors, magnetrons, printed circuit boards, software & firmware</u>
<u>Solo MW ovens</u>	<u>Wires & cables, electrical fittings, switches, displays, turntable motors, magnetrons, printed circuit boards, software & firmware</u>
<u>Hobs</u>	<u>Grill pans, pan support, burner caps, burners, hotplates, ignitors, knobs, lamps, PCB, thermocouples, hob top, valves</u>
<u>Cooking fume extractors</u>	<u>Motor and motor brushes, fan, printed circuit boards, electronic displays, motor protection switches and fuses, software and firmware including reset software, cabinet</u>

Table 3a. Spare part availability of cooking appliances for professional repairers and end users

<u>Appliance</u>	<u>List of spare parts</u>
<u>Electric ovens</u>	<u>Cooking racks, side racks, pans, light bulbs, knobs, door handles,</u>
<u>Gas ovens</u>	<u>Cooking racks, side racks, pans, light bulbs, knobs, door handles</u>
<u>Steam ovens (solo & combi)</u>	<u>Cooking racks, side racks, pans, light bulbs, knobs, door handles</u>
<u>Combi MW ovens</u>	<u>Cooking racks, side racks, pans, light bulbs, knobs, door handles</u>
<u>Solo MW ovens</u>	<u>Knobs, door handles, turntable couplers, glass turntables, turntable roller rings, lamps, feet, waveguide covers</u>
<u>Hobs</u>	<u>Switches</u>

Cooking fume extractors	<u>Speed switches, on/off switches, filters, light sources, plastic peripherals</u>
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- (b) Availability of spare parts referred to in point (a), Table 3, shall be ensured for a minimum period starting at the latest on [Date of application] or two years after the placing on the market of the first unit of the model, whichever is the later date, and ending at least 10 years after placing on the market the last unit of the model concerned. For that purpose, the list of spare parts, the procedure for ordering them and the repair instructions shall be publicly available on the free access website of the manufacturer, importer or authorised representative, at least during the same period and starting at the date referred to in this point;
- (c) availability of spare parts referred to in point (a) Table 3a, shall be ensured for a minimum period starting on the date of placing that unit on the market and ending at least 10 years after placing the last unit of the concerned model on the market. For that purpose, the list of spare parts and the procedure for ordering them and the repair and maintenance information shall be publicly available on the free access website of the manufacturer, importer or authorised representative, at least during the same period and starting at the date referred to in this point
- (d) Manufacturers, importers or authorised representatives of household cooking appliances shall ensure that the spare parts referred to in point 1 (a) can be replaced with the use of commonly available tools and without permanent damage to the appliance.
- (e) during the period referred to in points (b) and (c), manufacturers, importers or authorised representatives shall provide indicative pre-tax prices at least in euro for spare parts listed in point (a), including the indicative pre-tax price of fasteners and tools, if supplied with the spare part, on the free access website of the manufacturer, importer or authorised representative.

(2) Maximum delivery time of spare parts

During the periods of availability of spare parts, the manufacturer, importer or authorised representative shall ensure the delivery of the spare parts within 15 working days after having received the order.

(3) Access to repair and maintenance information

(a) During the period referred to in point 1(b) the manufacturer, importer or authorised representative shall provide access to the appliance repair and maintenance information to professional repairers.

The manufacturer's, importer's or authorised representative's website shall indicate the process for professional repairers to request access to information. In order to accept such a request, the manufacturers, importers or authorised representatives may only require the professional repairer to demonstrate that:

- (i) the professional repairer has the technical competence to repair household tumble dryers and complies with the applicable regulations for repairers of electrical equipment in the Member States where it operates. Reference to an official registration system as professional repairer, where such system is in place in the Member States concerned, shall be accepted as proof of compliance with this point;
- (ii) the professional repairer is covered by insurance covering liabilities resulting from its activity regardless of whether this is required by the Member State;

(b) manufacturers, importers or authorised representatives shall accept or refuse the registration within 5 working days from the date of request;

(c) manufacturers, importers or authorised representatives may charge reasonable and proportionate fees for access to the repair and maintenance information or for receiving regular updates. A fee is reasonable if it does not discourage access by failing to take into account the extent to which the professional repairer uses the information;.

(d) once the request is accepted, a professional repairer shall have access to the requested repair and maintenance information within one working day. The information may be provided for an equivalent model or model of the same family, where relevant;.

(e) The appliance repair and maintenance information referred to in (a) shall include:

- the unequivocal appliance identification;
- a disassembly map or exploded view;
- technical manual of instructions for repair;
- list of necessary repair and test equipment;
- component and diagnosis information (such as minimum and maximum theoretical values for measurements);
- wiring and connection diagrams;
- diagnostic fault and error codes (including manufacturer-specific codes, where applicable);
and
- instructions for installation of relevant software and firmware including reset software.
- information on how to access data records of reported failure incidents stored on the appliance (where applicable);
- electronic board diagrams.

(f) without prejudice to intellectual property rights, third parties shall be allowed to use and publish unaltered repair and maintenance information initially published by the manufacturer, importer or authorised representative and covered by point (e) once the manufacturer, importer or authorised representative terminates access to that information after the end of the period of access to repair and maintenance information.

(4) Manufacturers, importers or authorised representatives of household tumble dryers shall make available software and firmware updates for a minimum of 10 years after the placing of the last unit of a model on the market and these software and firmware updates shall be provided free of charge.

(5) Requirements for dismantling for material recovery and recycling while avoiding pollution.

Manufacturers, importers or authorised representatives shall ensure that household tumble dryers are designed in such a way that the materials and components referred to in Annex VII to Directive 2012/19/EU of the European Parliament and of the Council¹ can be removed from the appliance with the use of commonly available tools.

Manufacturers, importers or authorised representatives shall fulfil the obligations laid down in Point 1 of Article 15 of Directive 2012/19/EU.

¹ Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p. 38).

23. PRODUCT INFORMATION REQUIREMENTS

From 1 year after entry into force, the following product information shall be provided in the technical documentation of the product, the booklet of instructions and on the free access websites of manufacturers of domestic household ovens, hobs and range hood cooking fume extractors, their authorised representatives, or importers:

- (1) the technical parameters set out in 3.1, 3.2. and 3.3 of this section, measured and calculated in accordance with Annex III,
- (2) any specific precautions that shall be taken when the appliance is assembled, installed or maintained;
- (3) information relevant for disassembly, recycling and/or disposal at end-of-life;
- (4) the technical documentation for the purposes of conformity assessment pursuant to Article 4 shall contain the elements specified in point (a);

(a) short title or reference to the measurement and calculation methods used to establish compliance with the above requirements;

(b) information relevant to users in order to reduce total environmental impact (e.g. energy use) of the cooking process.

From 1 year after entry into force, the technical documentation and a part for professionals of the free access websites of manufacturers, their authorised representatives, or importers shall contain information relevant for non-destructive disassembly for maintenance purposes and information relevant for dismantling, in particular in relation to the motor, if applicable, and any batteries, recycling, recovery and disposal at end of life.

23.1. For domestic household ovens

Table 4a

Common information for domestic household ovens

	Symbol	Value	Unit
Model identification			
Type of oven			
Mass of the appliance	M	XX,X	kg
Number of cavities		X	
Heat source per cavity (electricity or gas)			
Volume per cavity	V	X	l
Energy consumption (electricity) required to heat a standardised load in a cavity of an electric heated oven	E _{Electric cavity}	X,XX	kWh/cycle

during a cycle in conventional mode per cavity (electric final energy)			
Energy consumption required to heat a standardised load in a cavity of an electric heated oven during a cycle in fan forced mode per cavity (electric final energy)	E_{Electric cavity}	X,XX	kWh/cycle
Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in conventional mode per cavity (gas final energy)	E_{Gas cavity}	X,XX X,XX	MJ/cycle kWh/cycle (1)
Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in fan forced mode per cavity (gas final energy)	E_{Gas cavity}	X,XX X,XX	MJ/cycle kWh/cycle
Energy Efficiency Index per cavity	E_{EIcavity}	X,X	-
(1) 1 kWh/cycle = 3,6 MJ/cycle.			

Table 4b

Information for household ovens including when incorporated in cookers and ovens equipped with microwave heating without turntable

<u>Energy consumption (electricity) required to heat a standardised load in a cavity of an electric heated oven during a cycle in conventional mode per cavity (electric final energy)</u>	<u>E_{Electric cavity}</u>	<u>X,XX</u>	<u>kWh/cycle</u>
<u>Energy consumption required to heat a standardised load in a cavity of an electric heated oven during a cycle in fan-forced mode per cavity (electric final energy)</u>	<u>E_{Electric cavity}</u>	<u>X,XX</u>	<u>kWh/cycle</u>
<u>Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in conventional mode per cavity (gas final energy)</u>	<u>E_{Gas cavity}</u>	<u>X,XX</u> <u>X,XX</u>	<u>MJ/cycle</u> <u>kWh/cycle (1)</u>
<u>Energy consumption required to heat a standardised load in a gas-fired cavity of an oven during a cycle in fan-forced mode per cavity (gas final energy)</u>	<u>E_{Gas cavity}</u>	<u>X,XX</u> <u>X,XX</u>	<u>MJ/cycle</u> <u>kWh/cycle</u>
<u>Energy Efficiency Index per cavity</u>	<u>E_{EIcavity}</u>	<u>X,X</u>	<u>-</u>

Table 4c

Information for microwave ovens

<u>Maximum Output power</u>	<u>P</u>	<u>X,XX</u>	<u>W</u>
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Energy Efficiency	<u>EE</u>	<u>X.X</u>	<u>%</u>
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2.2. For ~~domestic~~household hobs

2.2.1. ~~Domestic~~Household electric hobs

Table 5a

Information for ~~domestic~~household electric hobs

	Symbol	Value	Unit
Model identification			
Type of hob			
Number of cooking zones and/or areas		X	
Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates)			
For circular cooking zones or area: diameter of useful surface area per electric heated cooking zone, rounded to the nearest 5 mm	∅	X,X	cm
For non-circular cooking zones or areas: length and width of useful surface area per electric heated cooking zone or area, rounded to the nearest 5 mm	L W	X,X X,X	cm
Energy consumption per cooking zone or area calculated per kg	E C electric cooking	X,X	Wh/kg
Energy consumption for the hob calculated per kg	E C electric hob	X,X	Wh/kg

2.2.2. ~~Domestic~~Household gas-fired hobs

Table 5b

Information for ~~domestic~~household gas-fired hobs

	Symbol	Value	Unit
Model identification			

Type of hob			
Number of gas burners		X	
Energy efficiency per gas burner	EEgas burner	X,X	
Energy efficiency for the gas hob	EEgas hob	X,X	
[placeholder for NOx emissions]		X	mg/kWh
[placeholder for CH4 emissions]			

23.2.3. DomesticHousehold mixed gas and electric hobs

Table 5c

Information for domestichousehold mixed hobs

	Symbol	Value	Unit
Model identification			
Type of hob			
Number of electric cooking zones and/or areas		X	
Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates) per electric cooking zone and/or area			
For circular electric cooking zones: diameter of useful surface area per electric heated cooking zone, rounded to the nearest 5 mm	∅	X,X	cm
For non-circular electric cooking zones or areas: length and width of useful surface area per electric heated cooking zone or area, rounded to the nearest 5 mm	L W	X,X X,X	cm
Energy consumption per electric cooking zone or area calculated per kg	EElectric cooking	X	Wh/kg
Number of gas fired burners		X	
Energy efficiency per gas burner	EEgas burner	X,X	
Note: placeholder for NOx emissions for gas burners			

23.3. For domestic household range hood cooking fume extractors

Table 6

Information for domestic household range hood cooking fume extractors

	Symbol	Value	Unit
Model identification			
Annual Energy Consumption	AEC_{hood} AEC_{cfe}	X,X	kWh/a
Time increase factor	f	X,X	
Fluid Dynamic Efficiency	FDE_{hood} FDE	X,X	
Energy Efficiency Index	EEl_{hood} EEl_{cfe}	X,X	
Measured air flow rate at best efficiency point	QBEP	X,X	m ³ /h
Measured air pressure at best efficiency point	PBEP	X	Pa
Maximum air flow	Qmax	X,X	m ³ /h
Average 9-point air flow	Q_{avg}	X,X	m ³ /h
Measured electric power input at best efficiency point	WBEP	X,X	W
Nominal power of the lighting system	WL	X,X	W
Average illumination of the lighting system on the cooking surface	Emiddle	X	lux
Measured power consumption in standby mode	Ps	X,XX	W
Measured power consumption in networked standby	P_{ns}	X,XX	W
Measured power consumption in off mode	Po	X,XX	W
Sound power level	LWA	X	dB
Odour reduction factor	ORF	X	%

For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using a reliable, accurate and reproducible method that take into account the generally recognised state-of-the-art measurement and calculation methods, including harmonised standards the reference numbers of which have been published for the purpose in the Official Journal of the European Union, or using other reliable, accurate and reproducible methods that take into account the generally recognised state-of-the-art and are in conformity with the provisions in this Annex. They shall meet the technical definitions, conditions, equations and parameters set out in this Annex.

Where a parameter is declared pursuant to Article 4, its declared value shall be used by the manufacturer, importer or authorised representative for the calculations in this Annex.

1. DOMESTIC OVENS CALCULATIONS

1.1. Household ovens

Energy efficiency index EEI is calculated as follows:

The energy consumption of a cavity of a domestic household oven shall be measured for one standardised cycle, in a conventional mode and in a fan forced mode, if available, by heating a standardised load soaked with water. It shall be verified that the temperature inside the oven cavity reaches the temperature setting of the thermostat and/or the oven control display within the duration of the test cycle. The energy consumption per cycle corresponding to the best performing mode (conventional mode or fan forced mode) shall be used in the following calculations.

For each cavity of a domestic household oven, the Energy Efficiency Index (EEI_{cavity}) shall be calculated according to the following formulas:

Household for household electric ovens:

$$EEI_{cavity} = \frac{E_{electric\ cavity}}{0.86} \times 100$$

~~$$EEI_{cavity} = \frac{EC_{electric\ cavity}}{SEC_{electric\ cavity}} \times 100$$~~

~~$$SEC_{electric\ cavity} = 0,0042 \times V + 0,55$$~~

(in kWh)

for domestic household gas ovens:

$$EEI_{cavity} = \frac{E_{gas\ cavity}}{5.89} \times 100$$

~~$$EEI_{cavity} = \frac{EC_{gas\ cavity}}{SEC_{gas\ cavity}} \times 100$$~~

~~$$SEC_{gas\ cavity} = 0,044 \times V + 3,53$$~~

(in MJ)

Where:

- EE_{cavity} = Energy Efficiency Index for each cavity of a domestic household oven, rounded to the first decimal place,
- $SE_{electric\ cavity}$ = Standard Energy Consumption (electricity) required to heat a standardised load in a cavity of a domestic electric heated oven during a cycle, expressed in kWh, rounded to the second decimal place,
- $SE_{gas\ cavity}$ = Standard Energy Consumption required to heat a standardised load in a cavity of a domestic gas-fired oven during a cycle, expressed in MJ, rounded to the second decimal place,
- V = Volume of the cavity of the domestic oven in litres (L), rounded to the nearest integer,
- $EC_{electric\ cavity}$ = Energy Consumption required to heat a standardised load in a cavity of a domestic household electric heated oven during a cycle, expressed in kWh, rounded to the second decimal place,
- $EC_{gas\ cavity}$ = Energy Consumption required to heat a standardised load in a gas-fired cavity of a domestic household oven during a cycle, expressed in MJ, rounded to the second decimal place.

21.2. DOMESTICHOUSEHOLD HOBS

2.1. DomesticHousehold electric hobs

The energy consumption of a domestic household electric hob ($EC_{electric\ hob}$) is measured in Wh per kg of water heated in a normalised measurement (Wh/kg) considering all cookware pieces under standardised test conditions and rounded to the first decimal place.

2.2. DomesticHousehold gas hobs

The energy efficiency of gas burners in a domestic household hob is calculated as follows:

$$EE_{gas\ burner} = \frac{E_{theoretic}}{E_{gas\ burner}} \times 100$$

Where:

- $EE_{gas\ burner}$ = energy efficiency of a gas burner in % and rounded to the first decimal place,
- $E_{gas\ burner}$ = energy content of the consumed gas for the prescribed heating in MJ and rounded to the first decimal place,
- $E_{theoretic}$ = theoretic minimum required energy for the corresponding prescribed heating in MJ and rounded to the first decimal place.

The energy efficiency of the gas hob ($EE_{gas\ hob}$) is calculated as the average of the energy efficiency of the different gas burners ($EE_{gas\ burner}$) of the hob.

2.3. DomesticHousehold mixed electric/gas hobs

~~Domestic Household~~ mixed electric and gas hobs are treated in the measurements as two separate appliances. Electric cooking zones and cooking areas of the ~~domestic household~~ mixed hobs shall follow the provisions of the previous Section 2.1 and cooking zones heated by gas burners shall follow the provisions of the previous Section 2.2.

1.3. DOMESTICHOUSEHOLD RANGE HOOD COOKING FUME EXTRACTORS

1.1.1. Fluid dynamic efficiency

Fluid dynamic efficiency at a specific speed is calculated as follows:

$$FDE_i = \frac{3}{\sum_{j=1}^3 \frac{1}{\frac{p_{i,j} Q_{i,j}}{3600 W_{i,j}}}}$$

Where:

- FDE_i is the fluid dynamic efficiency at the speed i
- p means pressure delivered;
- Q means airflow delivered;
- W means power consumed;
- j = 1: Crossing point with pressure curve 150 Pa at 200 m³/h;
- j = 2: Crossing point with pressure curve 30 Pa at 200 m³/h;
- j = 3: Crossing point with pressure curve 15 Pa at 200 m³/h.

Fluid dynamic efficiency of the cooking fume extractor is calculated as follows:

$$FDE = \sum_{i=1}^3 FDE_i \frac{t_i}{(t_1 + t_2 + t_3)}$$

Where:

FDE is the fluid dynamic efficiency of the cooking fume extractor

i = 1 is minimum speed

i = 2 is maximum speed

i = 3 is boost speed

t₁ = 20 min

t₂ = 30 min

t₃ = 10 min

1.3.12. Calculation of the Energy Efficiency Index (EEI~~hood~~EEIcfe)

The Energy Efficiency Index (~~EEI_{hood}~~EEIcfe) is calculated as:

$$EEI = \frac{FDE}{FDE_{ref}}$$

$$FDE_{ref} = 0.0001 \cdot W + 0.0678$$

$$W = \sum_{i=1}^3 W_i \frac{t_i}{(t_1 + t_2 + t_3)}$$

Where W_i is the electric power input of the household cooking fume extractor in watts at the different speeds i .

~~$$EEI_{hood} = \frac{AEC_{hood}}{SAEC_{hood}} \times 100$$~~

and is rounded to the first decimal place.

Where:

- $SAEC_{hood}$ = Standard Annual Energy consumption of the domestic household range hood cooking fume extractor in kWh/a, rounded to the first decimal place,
- AEC_{hood} = Annual Energy Consumption of the domestic household range hood cooking fume extractor in kWh/a, rounded to the first decimal place.

The Standard Annual Energy Consumption ($SAEC_{hood}$) of a domestic range hood shall be calculated as:

~~$$SAEC_{hood} = 0,55 \times (W_{BEP} + W_L) + 15,3$$~~

Where:

- W_{BEP} is the electric power input of the domestic range hood at the best efficiency point, in Watt and rounded to the first decimal place,
- W_L is the nominal electric power input of the lighting system of the domestic range hood on the cooking surface, in Watt and rounded to the first decimal place.

The 1.3.3. Annual Energy Consumption ($AEC_{CFE_{hood}}$) of a domestic range hood is calculated as:

(i) for the fully automatic domestic household range hood cooking fume extractors:

$$AEC_{CFE} = \left[\frac{(W \times t_h \times f)}{60 \times 100} + \frac{P_0 \times (1440 - t_H \times f)}{2 \times 60 \times 1000} + \frac{P_S \times (1440 - t_H \times f)}{2 \times 60 \times 1000} \right] \times 365$$

~~$$AEC_{hood} = \left[\frac{(W_{BEP} \times t_H \times f) + (W_L \times t_L)}{60 \times 1000} + \frac{P_0 \times (1440 - t_H \times f)}{2 \times 60 \times 1000} + \frac{P_S \times (1440 - t_H \times f)}{2 \times 60 \times 1000} \right] \times 365$$~~

(ii) for all other domestic household range hood cooking fume extractors:

$$AEC_{CFE} = \frac{(W \times t_h \times f)}{60 \times 100} \times 365$$

$$\text{AEC}_{\text{hood}} = \frac{W_{\text{BEP}} \times (t_{\text{H}} \times f) + W_{\text{L}} \times t_{\text{L}}}{60 \times 1000} \times 365$$

Where:

AEC_{CFE} is the annual energy consumption of the household cooking fume extractor in kWh/y, rounded to the second decimal place;

W is the electric power input of the household cooking fume extractor defined in point 1.3.1 in watts, rounded to the first decimal place;

— t_{L} is the average lighting time per day, in minutes ($t_{\text{L}} = 120$),

— t_{H} is the average running time per day for domestic household range hood cooking fume extractors, in minutes ($t_{\text{H}} = 60$),

— P_{o} is the electric power input in off mode of the domestic household range hood cooking fume extractor, in Watt and rounded to the second decimal place,

— P_{s} is the electric power input in standby mode of the domestic household range hood cooking fume extractor, in Watt and rounded to the second decimal place,

— f is the time increase factor, calculated and rounded to the first decimal place, as:

$$f = 2 - \frac{(FDE \times 3.6)}{100}$$

$$f = 2 - (FDE_{\text{hood}} \times 3,6) / 100$$

3.2. Calculation of the Fluid-Dynamic Efficiency (FDE_{hood})

The FDE_{hood} at the best efficiency point is calculated by the following formula, and is rounded to the first decimal place:

$$FDE_{\text{hood}} = \frac{Q_{\text{BEP}} \times P_{\text{BEP}}}{3600 \times W_{\text{BEP}}} \times 100$$

Where:

— Q_{BEP} is the flow rate of the domestic range hood at best efficiency point, expressed in m³/h and rounded to the first decimal place,

— P_{BEP} is the static pressure difference of the domestic range hood at best efficiency point, expressed in Pa and rounded to the nearest integer,

— W_{BEP} is the electric power input of the domestic range hood at the best efficiency point, expressed in Watt and rounded to the first decimal place.

3.3.1.3.4. Calculation on the limitation of the exhaust air

3.3.1. Domestic t_{limit} range hoods with a maximum air flow in any of the available setting higher than 650 m³/h shall automatically revert to an air flow lower than or equal to 650 m³/h in a time t_{limit} . This is the time limit to extract a volume of air of 100 m³ by the domestic range hood operating with an airflow higher than 650 m³/h, before automatically switching to an airflow of 650 m³/h or lower. It is calculated, expressed in minutes and rounded to the nearest integer as:

$$t_{\text{limit}} = \frac{6\,000 \text{ m}^3}{Q_{\text{max}}} \quad (2)$$

Where:

— Q_{max} is the maximum air flow of the ~~domestic household range hood~~ cooking fume extractor, including intensive/boost mode if present, in m³/h and rounded to the first decimal place.

The mere presence of a manual switch or setting decreasing the air flow of the appliance to a value lower than or equal to the value required in accordance with Annex II point 1.3.2 ~~650 m³/h~~ is not considered fulfilling this requirement.

~~3.3.2. For domestic household range hood~~ cooking fume extractors with automatic functioning mode during the cooking period:

— ~~the activation of the automatic functioning mode shall be possible only through a manual operation by the user, either on the hood or elsewhere,~~

— ~~the automatic functioning mode shall revert to manual control after no more than 10 minutes from the moment the automatic function switches off the motor.~~

1.3.5. Calculation of average air flow Q_{avg}

The air flow at a specific speed i , is calculated as follows:

$$Q_i = \frac{1}{3} \sum_{j=1}^3 Q_{i,j}$$

- $j = 1$: Crossing point with pressure curve 150 Pa at 200 m³/h;
- $j = 2$: Crossing point with pressure curve 30 Pa at 200 m³/h;
- $j = 3$: Crossing point with pressure curve 15 Pa at 200 m³/h.

The average air flow is then calculated as:

$$Q_{\text{avg}} = \sum_{i=1}^3 Q_i \frac{t_i}{t_1 + t_2 + t_3}$$

Where:

$i = 1$ is minimum speed

$i = 2$ is maximum speed

$i = 3$ is boost speed

$t_1 = 20 \text{ min}$

$t_2 = 30 \text{ min}$

$t_3 = 10 \text{ min}$

3.4.1.3.6. Illumination of lighting system (E_{middle})

The average illumination of the lighting system on the cooking surface (E_{middle}) is measured under standard conditions in lux and rounded to the nearest integer.

3.5.1.3.7. Noise

The Noise Value (in dB) is measured as the airborne acoustical A-weighted sound power emissions (weighted average value — LWA) of a ~~domestic household range hood~~ cooking fume extractor at the highest setting for normal use, intensive or boost excluded, and rounded to the nearest integer.

~~M1~~

ANNEX ~~III~~IV

Product compliance verification by market surveillance authorities

The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities and shall not be used by the manufacturer or importer as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving compliance or to communicate better performance by any means.

When As part of verifying the compliance of a product model with the requirements laid down in this Regulation pursuant to Article 3(2) of Directive 2009/125/EC, for the requirements referred to in this Annex, the authorities of the Member States shall apply the following procedure:

- (1) The Member State authorities shall verify one single unit of the model.
- (2) The model shall be considered to comply with the applicable requirements if:
 - (a) the values given in the technical documentation pursuant to point 2 of Annex IV to Directive 2009/125/EC (declared values), and, where applicable, the values used to calculate these values, are not more favourable for the manufacturer or importer than the results of the corresponding measurements carried out pursuant to paragraph (g) thereof; and
 - (b) the declared values meet any requirements laid down in this Regulation, and any required product information published by the manufacturer or importer does not contain values that are more favourable for the manufacturer or importer than the declared values; and
 - (c) when the Member State authorities test the unit of the model, the determined values (the values of the relevant parameters as measured in testing and the values calculated from these measurements) comply with the respective verification tolerances as given in Table 7.
- (3) If the results referred to in point 2(a) or (b) are not achieved, the model and all models that have been listed as equivalent models in the manufacturer's or importer's technical documentation shall be considered not to comply with this Regulation.
- (4) If the result referred to in point 2(c) is not achieved, the Member State authorities shall select three additional units of the same model for testing. As an alternative, the three additional units selected may be of one or more different models that have been listed as equivalent models in the manufacturer's or importer's technical documentation.
- (5) The model shall be considered to comply with the applicable requirements if, for these three units, the arithmetical mean of the determined values complies with the respective verification tolerances given in Table 7.

(6) If the result referred to in point 5 is not achieved, the model and all models that have been listed as equivalent models in the manufacturer's or importer's technical documentation shall be considered not to comply with this Regulation.

(7) The Member State authorities shall provide all relevant information to the authorities of the other Member States and to the Commission without delay after a decision being taken on the non-compliance of the model according to points 3 and 6.

The Member State authorities shall use the measurement and calculation methods set out in Annex III.

The Member State authorities shall only apply the verification tolerances that are set out in Table 7 and shall only use the procedure described in points 1 to 7 for the requirements referred to in this Annex. No other tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

Table 7

Verification tolerances

Parameters	Verification tolerances
Mass of the domestic household oven, M	The determined value shall not exceed the declared value of M by more than 5 %.
Volume of the cavity of the domestic household oven, V	The determined value shall not be lower than the declared value of V by more than 5 %.
EC electric cavity, ECgas cavity	The determined values shall not exceed the declared values of ECElectric cavity and ECgas cavity by more than 5 %.
ECElectric hob	The determined value shall not exceed the declared value of ECElectric hob by more than 5 %.
EEgas hob	The determined value shall not be lower than the declared value of EEgas hob by more than 5 %.
WBEP - W_i , WL	The determined values shall not exceed the declared values of WBEP - W_i and WL by more than 5 %.
QBEP , PBEP	The determined values shall not be lower than the declared values of QBEP and PBEP by more than 5 %.
Qmax	The determined value shall not exceed the declared value of Qmax by more than 8 %.

Emiddle	The determined value shall not be lower than the declared value of Emiddle by more than 5 %.
Sound power level, LWA	The determined value shall not exceed the declared value of LWA .
Po , Ps, Pns	The determined values of power consumption Po and Ps shall not exceed the declared values of Po and Ps by more than 10 %.The determined values of power consumption Po and Ps of less than or equal to 1,00 W shall not exceed the declared values of Po and Ps by more than 0,10 W.

▼B

ANNEX V

[Placeholder for transitional method for testing method for gas hobs NOx emissions]

ANNEX VI

Indicative benchmarks

At the time of entry into force of this Regulation, the best-performing domestic household ovens, hobs and range hood cooking fume extractors available on the market in terms of their energy performance were identified as follows:

<u>Domestic Household ovens</u>	Electric	EEcavity = 70,7
	Gas	EEcavity = 75,4
<u>Domestic Household hobs</u>	Electric	EElectric cooking = 169,3
	Gas	EEgas burner = 63,5 %
<u>Domestic Household range hood cooking fume extractors</u>	Air flow	FDEhoodFDEcfe = 22
	Noise	51 dB at 550 m ³ /h;

		57 dB at 750 m ³ /h
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(1) Directive 2004/108/EC of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC (OJ L 390, 31.12.2004, p. 24).

(2) See

$$V = \int_0^t \frac{Q_{\max}}{60} \times dt$$

which can be simplified to

$$t_{\text{limit}} = \frac{V_{\max}}{Q_{\max}} \times 60$$

Where:

- V_{max} is the maximum volume of air to be extracted, set at 100 m³,
- Q_{max} is the maximum air flow of the ~~range hood~~ cooking fume extractor, including intensive/boost mode if present,
- t is the time expressed in minutes and rounded to the nearest integer,
- dt is the total time until the air volume of 100 m³ has been reached,
- t_{limit} is the time limit, expressed in minutes and rounded to the nearest integer, needed to extract 100 m³.