

Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 2: Kitchen ventilation hoods; design and safety requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 2: Kitchen ventilation hoods; design and safety requirements

Équipement pour cuisines professionnelles - Éléments de ventilation pour cuisines professionnelles - Partie 2: Hottes de ventilation pour cuisine - Conception et exigences de sécurité

Bauelemente in gewerblichen Küchen - Einrichtungen zur Be- und Entlüftung - Teil 2: Küchenlüftungshauben; Gestaltungs- und Sicherheitsanforderungen

This European Standard was approved by CEN on 22 July 2016.

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European foreword

This document (EN 16282-2:2016) has been prepared by Technical Committee CEN/TC 156 "Ventilation for buildings", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

The activities of CEN/TC 156/WG 14, cover the calculation of the air volume and the design and testing of major components of ventilation equipment for commercial kitchens.

The structure of the standard series is as follows:

EN 16282 *Equipment for commercial kitchens – Components for ventilation in commercial kitchens*

- *Part 1: General requirements including calculation method*
- *Part 2: Kitchen ventilation hoods; design and safety requirements*
- *Part 3: Kitchen ventilation ceilings; design and safety requirements*
- *Part 4: Air inlets and outlets; design and safety requirements*
- *Part 5: Air duct; design and dimensioning*
- *Part 6: Aerosol separators; design and safety requirements*
- *Part 7: Installation and use of fixed fire suppression systems*
- *Part 8: Installations for treatment of cooking fumes; requirements and testing*

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1 Scope

This European Standard specifies requirements for the design, construction and operation of kitchen ventilation hoods, including technical safety, ergonomic and hygienic features.

This European Standard is applicable to ventilation systems in commercial kitchens, associated areas and other installations processing foodstuffs intended for commercial use. Kitchens and associated areas are special rooms in which meals are prepared, where tableware and equipment is washed, cleaned, food is stored and food waste areas.

This European Standard is applicable to ventilation hoods except those used in domestic kitchens.

A method of verification of each requirement is also specified. Unless otherwise specified, the requirements of this standard need to be checked by way of inspection and/or measurement.

NOTE Please note the possible existence of additional or alternative local national regulations on installation, appliance requirements and inspection, maintenance and operation.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 573-3, *Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products*

EN 1717, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

EN 10088-1, *Stainless steels - Part 1: List of stainless steels*

EN 12464-1:2011, *Light and lighting - Lighting of work places - Part 1: Indoor work places*

EN 12665, *Light and lighting - Basic terms and criteria for specifying lighting requirements*

EN 16282-3, *Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 3: Kitchen ventilation ceilings - Design and safety requirements*

prEN 16282-6, *Equipment for commercial kitchens - Components for ventilation of commercial kitchens - Part 6: Aerosol separators; design and safety requirements*

EN 50274, *Low-voltage switchgear and controlgear assemblies - Protection against electric shock - Protection against unintentional direct contact with hazardous live parts*

EN 50310, *Telecommunications bonding networks for buildings and other structures*

EN 50525-2-(all parts), *Electric cables — Low voltage energy cables of rated voltages up to and including 450/750 V (U0/U)*

EN 60204-1, *Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1)*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN ISO 3274, *Geometrical product specifications (GPS) - Surface texture: Profile method - Nominal characteristics of contact (stylus) instruments (ISO 3274)*

EN ISO 4287, *Geometrical product specifications (GPS) - Surface texture: Profile method - Terms, definitions and surface texture parameters (ISO 4287)*

EN ISO 4288, *Geometrical product specifications (GPS) - Surface texture: Profile method - Rules and procedures for the assessment of surface texture (ISO 4288)*

EN ISO 12543 (all parts), *Glass in building — Laminated glass and laminated safety glass*

EN ISO 13565-1, *Geometrical product specifications (GPS) - Surface texture: Profile method; surfaces having stratified functional properties - Part 1: Filtering and general measurement conditions (ISO 13565-1)*

EN ISO 13565-2, *Geometrical product specifications (GPS) - Surface texture: Profile method; surfaces having stratified functional properties - Part 2: Height characterization using the linear material ratio curve (ISO 13565-2)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

kitchen ventilation hood

air terminal device which provides the facility to capture, contain and remove process pollutant and which can also provide a point of supply air back into the room space

Note 1 to entry: A hood can be equipped with lighting and can be a means of housing various types of filtration and can be integrated in flat ceilings in accordance with EN 16282-3.

Note 2 to entry: The lighting device is an integral part.

3.2

kitchen

part of a building where cooking processes are carried out, their connecting floors and distribution corridors, ancillary rooms such as food stores, cold rooms, food preparation areas and appliances are being cleaned

3.3

collection area

free volume within a hood bounded by internal surfaces and lowest hood edge

3.4

compartment

enclosed area behind the face of the separator which is connected to the outgoing air duct

3.5

aerosol

separated grease/oil/water mixture

3.6

separator

device for the efficient separation of airborne solid or liquid particles, based on the effect of mechanical forces that deflect the particles out of the airflow