

## **BSI Standards Publication**

# **Equipment for commercial kitchens - Components for ventilation in commercial kitchens**

Part 8: Installations for treatment of aerosol; Requirements and testing



BS EN 16282-8:2017 BRITISH STANDARD

### National foreword

This British Standard is the UK implementation of EN 16282-8:2017.

The UK participation in its preparation was entrusted to Technical Committee RHE/2/-/1, Ventilation of commercial kitchens.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

# Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 8: Installations for treatment of aerosol; Requirements and testing

Équipement pour cuisines professionnelles - Éléments de ventilation pour cuisines professionnelles - Partie 8: Installation de traitement des fumées de cuisson -Exigences et essais Bauelemente in gewerblichen Küchen - Einrichtungen zur Be- und Entlüftung - Teil 8: Anlagen zur Aerosolnachbehandlung; Anforderungen und Prüfung

This European Standard was approved by CEN on 11 May 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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## **Contents**

Page

Euro	ppean toreword	4
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Designations	7
5 5.1 5.2	Construction and function	8
6 6.1 6.2	Technical safety requirements General Electrical equipment	8
7 7.1 7.2	Hygienic requirements General General hygienic requirements	9
8 8.1 8.2	Instructions Installation instructions Operating instructions	9
9	Markings	10
Annex A (normative) UV-Devices for the treatment of aerosol		11
<b>A.1</b>	Scope	11
A.2	Normative references	11
<b>A.3</b>	Terms and definitions	11
<b>A.4</b>	Designations	11
A.5	Construction and function	11
<b>A.6</b>	Technical safety requirements	12
<b>A.7</b>	Hygienic requirements	13
<b>A.8</b>	Instructions	13
A.9	Markings	14
Anne	ex B (normative) Ozone generator for the treatment of aerosol	15
<b>B.1</b>	Scope	15
<b>B.2</b>	Normative references	15
B.3	Terms and definitions	15
<b>B.4</b>	Designations	15
B.5	Construction and function	15

<b>B.6</b>	Technical safety requirements	16
B.7	Hygienic requirements	17
<b>B.8</b>	Instructions	17
B.9	Markings	17
Anne	x C (normative) Water spray device for the treatment of aerosol	18
<b>C.1</b>	Scope	18
<b>C.2</b>	Normative references	18
<b>C.3</b>	Terms and definitions	18
<b>C.4</b>	Description	18
<b>C.5</b>	Construction and function	18
<b>C.6</b>	Technical safety requirements - Electrical equipment	19
<b>C.7</b>	Hygienic requirements	19
<b>C.8</b>	Instructions	19
<b>C.9</b>	Markings	19
Anne	Annex D (normative) Microbiological treatment of aerosol	
D.1	Scope	20
<b>D.2</b>	Normative references	20
<b>D.3</b>	Terms and definitions	20
<b>D.4</b>	Description	20
D.5	Construction and function	20
<b>D.6</b>	Technical safety requirements	20
D.7	Hygienic requirements	21
<b>D.8</b>	Instructions	21
D.9	Markings	21
Anne	x E (normative) Photo-Catalytic Oxidation device for the treatment of aerosol	22
<b>E.1</b>	Scope	22
<b>E.2</b>	Normative references	22
<b>E.3</b>	Terms and definitions	22
<b>E.4</b>	Description	22
E.5	Construction and function	22
<b>E.6</b>	Technical safety requirements	23
E.7	Hygienic requirements	24
<b>E.8</b>	Instructions	24
E.9	Markings	24
Bibli	ography	25

### **European foreword**

This document (EN 16282-8:2017) 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 January 2018, and conflicting national standards shall be withdrawn at the latest by January 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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 annexes are structured as an alteration or supplement to the individual clauses of the core standard.

EXAMPLE A.5.1 altered/supplemented, i.e. 5.1.

Specific installations for the treatment of aerosol are contained in individual annexes of this standard:

Annex A: UV-Devices for the treatment of aerosol

Annex B: Ozone generator for the treatment of aerosol

Annex C: Water spray device for the treatment of aerosol

Annex D: Microbiological treatment of aerosol

Annex E: Photo-catalytic oxidation device for the treatment of aerosol

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### 1 Scope

This European Standard specifies requirements for the design, construction and operation of installations designed for the treatment of aerosol in kitchens 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 systems except those used in domestic kitchens.

Unless otherwise specified, the requirements of this standard should be checked by way of inspection and/or measurement.

NOTE Please note the possible existence of additional or alternative local national regulations concerning installation, 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 779:2012, Particulate air filters for general ventilation — Determination of the filtration performance

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 60204-1, Safety of machinery - Electrical equipment of machines - Part 1: General requirements

EN 60335-1, Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1)

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

EN 61140, Protection against electric shock — Common aspects for installation and equipment (IEC 61140)

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 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)