

<b>STN</b>	<b>Zariadenie pre komerčné kuchyne Komponenty na vetranie komerčných kuchýň Časť 8: Zariadenia na úpravu aerosólu Požiadavky a skúšanie</b>	<b>STN EN 16282-8</b>  12 7041
------------	---	--

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

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/17

Obsahuje: EN 16282-8:2017

**125682**

---

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017  
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.



EUROPEAN STANDARD

**EN 16282-8**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2017

ICS 97.040.99

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**Contents**

Page

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

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

## 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)*

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)*

EN ISO 14119, *Safety of machinery - Interlocking devices associated with guards - Principles for design and selection (ISO 14119)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**