Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 4: Air inlets and outlets; Design and safety requirements



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 16282-4:2016 sisaldab Euroopa standardi EN 16282-4:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 16282-4:2016 consists of the English text of the European standard EN 16282-4:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 16.11.2016.	Date of Availability of the European standard is 16.11.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

#### ICS 97.040.99

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <a href="mailto:www.evs.ee">www.evs.ee</a>; telefon 605 5050; e-post <a href="mailto:info@evs.ee">info@evs.ee</a>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

## EUROPEAN STANDARD

### NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

November 2016

EN 16282-4

ICS 97.040.99

#### **English Version**

# Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 4: Air inlets and outlets; design and safety requirements

Équipement pour cuisines professionnelles - Éléments de ventilation pour cuisines professionnelles - Partie 4 : Entrées et sorties d'air ; conception et exigences de sécurité Bauelemente in gewerblichen Küchen - Einrichtungen zur Be- und Entlüftung - Teil 4: Luftdurchlässe; Gestaltungs- und Sicherheitsanforderungen

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

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, 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

Cont	eents	Page
Europ	oean foreword	 3
1	Scope	4
2	Normative references	 4
3	Terms and definitions	 5
4 4.1 4.2	DesignationsSupply air sideExtract air side	 6
5 5.1 5.2 5.2.1 5.2.2 5.3 5.4	Construction and function  General remarks  Adjustment in the room  Supply air passage devices  Extract air passage devices  Design, construction and function  Air passage devices materials and surfaces	7 7 7 7
6	Technical safety requirements	
7 7.1 7.2	Hygienic requirementsGeneral remarksCleaning intervals	9 10
8 8.1 8.2	Instructions Installation instructions Operating instructions	 10 10

#### **European foreword**

This document (EN 16282-4:2016) 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

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### 1 Scope

This European Standard specifies the requirements covering the construction and operation of air inlets and outlets components 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.

This European Standard is applicable to ventilation systems 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 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 10088-1, Stainless steels - Part 1: List of stainless steels

prEN 16282-1, Equipment for commercial kitchens - Components for ventilation of commercial kitchens - Part 1: General requirements including calculation method

EN 16282-2, Equipment for commercial kitchens - Components for ventilation of commercial kitchens - Part 2: Kitchen ventilation hoods; design and safety 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 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)