

Equipment for commercial kitchens - Components for
ventilation in commercial kitchens - Part 5: Air duct;
Design and dimensioning

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16282-5:2017 sisaldab Euroopa standardi EN 16282-5:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 16282-5:2017 consists of the English text of the European standard EN 16282-5:2017.
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English Version

Equipment for commercial kitchens - Components for
ventilation in commercial kitchens - Part 5: Air duct;
Design and dimensioning

Équipement pour cuisines professionnelles - Éléments
de ventilation pour cuisines professionnelles - Partie 5:
Conduit d'air - Conception et dimensionnement

Bauelemente in gewerblichen Küchen - Einrichtungen
zur Be- und Entlüftung - Teil 5: Luftleitungen;
Gestaltung und Dimensionierung

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.

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European foreword

This document (EN 16282-5:2017) 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of an identical text or by endorsement, at the latest by January 2018, and conflicting national standards shall be withdrawn at the latest by January 2018.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 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 the air duct in commercial 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 and food is stored and food waste areas.

This European Standard is applicable to kitchen 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 should 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 779, *Particulate air filters for general ventilation — Determination of the filtration performance*

EN 1507, *Ventilation for buildings - Sheet metal air ducts with rectangular section - Requirements for strength and leakage*

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

EN 12097, *Ventilation for Buildings - Ductwork - Requirements for ductwork components to facilitate maintenance of ductwork systems*

EN 12237, *Ventilation for buildings - Ductwork - Strength and leakage of circular sheet metal ducts*

EN 12599, *Ventilation for buildings - Test procedures and measurement methods to hand over air conditioning and ventilation systems*

EN 13779, *Ventilation for non-residential buildings - Performance requirements for ventilation and room-conditioning systems*

3 Terms and definitions

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

3.1

kitchen extract air

air discharged out of the kitchen (negative pressure)

3.2

fire damper

device limiting the spread of fire and/or fumes through air ducts, alone or together with other elements, for a specified period of time