



SLOVENSKI STANDARD
oSIST prEN 18289:2026
01-marec-2026

Prezračevanje stavb - Kovinski prezračevalni kanali - Zahteve in preskusne metode

Ventilation for buildings - Metallic ventilation ducts - Requirements and test methods

Lüftung in Gebäuden - Standard für metallische Luftleitungen - Anforderungen und Prüfmethode

Ventilation des bâtiments - Conduits de ventilation métalliques - Exigences et méthodes d'essai

Ta slovenski standard je istoveten z: prEN 18289

[oSIST prEN 18289:2026](https://standards.iteh.ai/catalog/standards/sist/11d856bc-5e31-402b-a158-c6a53f522244/osist-pren-18289-2026)

<https://standards.iteh.ai/catalog/standards/sist/11d856bc-5e31-402b-a158-c6a53f522244/osist-pren-18289-2026>

ICS:

91.060.40	Dimniki, jaški, kanali	Chimneys, shafts, ducts
91.140.30	Prezračevalni in klimatski sistemi	Ventilation and air-conditioning systems

oSIST prEN 18289:2026

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 18289

January 2026

ICS 91.140.30

Will supersede EN 12237:2003, EN 14239:2004, EN 1505:1997, EN 1506:2007, EN 1507:2006

English Version

Ventilation for buildings - Metallic ventilation ducts - Requirements and test methods

Ventilation des bâtiments - Conduits de ventilation
métalliques - Exigences et méthodes d'essai

Lüftung in Gebäuden - Standard für metallische
Luftleitungen - Anforderungen und Prüfmethoden

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 156.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 General requirements	8
4.1 Materials	8
4.2 Joints	8
5 Dimensions and geometry of rectangular ducts and duct fittings	8
5.1 General	8
5.2 Geometry	9
5.3 Inner throats	13
5.4 Splitters	13
5.5 Tolerances for rectangular ducts	14
6 Dimensions of circular ducts and fittings	14
6.1 General	14
6.2 Recommended and additional nominal sizes	15
6.3 Joints	16
6.4 Bends	16
6.4.1 General	16
6.4.2 Pressed bends	17
6.4.3 Segmented bends	17
6.5 Branches and T-pieces	18
6.5.1 Branches	18
6.5.2 Transformation pieces	21
6.5.3 Closures	23
6.6 Tolerance	23
6.6.1 Tolerance for circular ducts	23
6.6.2 Tolerance for circular fittings	23
7 Classification	25
7.1 Air tightness and strength	25
7.2 Strength criteria for rectangular ducts and fittings	26
7.3 Strength criteria for circular ducts and fittings	26
8 Airtightness measurement	26
8.1 General	26
8.2 Correction of leakage	27
8.3 Method for airtightness testing	27
8.4 Test rig example for a set of components	28
8.5 Test procedure for a set of components (ductwork) leakage	28
8.6 Calculation of the set of components air leakage factor f_c	28
8.7 Test rig example for a single duct component	29
8.8 Test procedure of single components	29
8.9 Calculation of the surface area	29
8.10 Calculation of the single component air leakage factor f_c	29
9 Mechanical strength testing	29
9.1 General	29
9.2 Test sample	29
9.3 Test procedure rectangular components	30
9.4 Determination of the deflection	31
9.5 Test procedure for components	31
9.5.1 Test procedure	31
9.5.2 Performance criteria	32

9.5.3	Test setup	32
10	Measurement accuracy and test reports	32
10.1	General requirements	32
10.2	Air flow measurement	33
10.3	Differential pressure measurement	33
10.4	Ambient pressure	33
10.5	Temperature measurement	33
10.6	Deflection, bulging or carving	33
11	Leakage test report	33
11.1	General data	33
11.2	Test result	34
12	Strength test report	34
12.1	General data	34
12.2	Test result	35
Annex A	(normative) Surface area calculation	36
A.1	General	36
A.2	Calculation rules	36
A.3	Example of Measurement and calculation of a circular components	37
A.4	Example of Measurement and calculation of a rectangular set of components	38
Annex B	(normative) Correction of air flow rate according to ambient conditions	39
Annex C	(informative) Example for rectangular set of components	41
C.1	Drawing	41
C.2	Table of parts	43
Bibliography	44

Document Preview

[oSIST prEN 18289:2026](https://standards.iteh.ai/catalog/standards/sist/11d856bc-5e31-402b-a158-c6a53f522244/osist-pren-18289-2026)

<https://standards.iteh.ai/catalog/standards/sist/11d856bc-5e31-402b-a158-c6a53f522244/osist-pren-18289-2026>

prEN 18289 (E)**European foreword**

This document (prEN 18289:2026) has been prepared by Technical Committee CEN/TC "156 Ventilation for buildings", the secretariat of which is held by BSI.

This document is currently submitted to the CEN Enquiry.

This document will supersede [EN 1505:1997 \[1\]](#), [EN 1506:2007 \[2\]](#), [EN 1507:2006 \[3\]](#), [EN 12237:2003 \[4\]](#) and [EN 14239:2004 \[5\]](#).

prEN 18289:2026 includes the following significant technical changes with respect to the previous editions:

- Change of the flow correction method
- Clarification of test methods and definitions

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[oSIST prEN 18289:2026](#)

<https://standards.iteh.ai/catalog/standards/sist/11d856bc-5e31-402b-a158-c6a53f522244/osist-pren-18289-2026>