

SLOVENSKI STANDARD
SIST EN 16798-5-1:2018/oprA1:2020
01-januar-2020

Energijske lastnosti stavb - Prezračevanje stavb - 5-1. del: Metode za izračun potrebne energije za sisteme prezračevanja in klimatizacije - Moduli M5-6, M5-8, M6-5, M6-8, M7-5, M7-8 - Metoda 1: Distribucija in proizvodnja - Dopolnilo A1

Energy performance of buildings - Ventilation for buildings - Part 5-1: Calculation methods for energy requirements of ventilation and air conditioning systems (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Method 1: Distribution and generation

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Energetische Bewertung von Gebäuden - Lüftung von Gebäuden - Teil 5-1:
Berechnungsmethoden für den Energiebedarf von Lüftungs- und Klimaanlagen (Module
M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Methode 1: Verteilung und Erzeugung

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Performance énergétique des bâtiments - Ventilation des bâtiments - Partie 5-1:
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Méthodes de calcul des besoins énergétiques des systèmes de ventilation et de
conditionnement d'air (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Méthode 1:
Distribution et g

Ta slovenski standard je istoveten z: [**EN 16798-5-1:2017/prA1**](#)

ICS:

91.140.30	Prezračevalni in klimatski sistemi	Ventilation and air-conditioning systems
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SIST EN 16798-5-1:2018/oprA1:2020 en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 16798-5-1:2017
prA1

December 2019

ICS 91.120.10; 91.140.30

English Version

Energy performance of buildings - Ventilation for buildings
- Part 5-1: Calculation methods for energy requirements of
ventilation and air conditioning systems (Modules M5-6,
M5-8, M6-5, M6-8, M7-5, M7-8) - Method 1: Distribution
and generation

Performance énergétique des bâtiments - Ventilation des bâtiments - Partie 5-1: Méthodes de calcul des besoins énergétiques des systèmes de ventilation et de conditionnement d'air (Modules M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Méthode 1: Distribution et g

Energetische Bewertung von Gebäuden - Lüftung von Gebäuden - Teil 5-1: Berechnungsmethoden für den Energiebedarf von Lüftungs- und Klimaanlagen (Module M5-6, M5-8, M6-5, M6-8, M7-5, M7-8) - Methode 1: Verteilung und Erzeugung

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

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This draft amendment A1, if approved, will modify the European Standard EN 16798-5-1:2017. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

<https://standards.iteh.ai/catalog/standards/sist/149500a-0502-462d-ac44>

This draft amendment 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.

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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.

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

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

EN 16798-5-1:2017/prA1:2019 (E)**Contents**

	Page
European foreword.....	3
1 Modification to 6.4.3.2.6, "Heat recovery"	4
2 Modification to D.1.2.1, "Correction factor for the condensation potential".....	4
3 Modification to D.1.2.2, "Correction factor for the mass flow relation other than 1"	4
4 Modification to D.2, "Data".....	4

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[SIST EN 16798-5-1:2018/prA1:2020](https://standards.iteh.ai/catalog/standards/sist/14f9500a-0502-462d-ac44-f304c5a67abd/sist-en-16798-5-1-2018-pra1-2020)
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European foreword

This document (EN 16798-5-1:2017/prA1:2019) 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.

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[SIST EN 16798-5-1:2018/prA1:2020](#)

<https://standards.iteh.ai/catalog/standards/sist/14f9500a-0502-462d-ac44-f304c5a67abd/sist-en-16798-5-1-2018-pra1-2020>

EN 16798-5-1:2017/prA1:2019 (E)**1 Modification to 6.4.3.2.6, "Heat recovery"**

Replace the text below Formula (44) with the following:

"The calculation of the humidity recovery efficiency for heat exchangers is:

- If HEAT_REC_TYPE = ROT_SORP or ROT_NH or ROT_HYG

$$\eta_{xr} = \eta_{xr;nom} \cdot f_{\Delta x;x} \cdot f_{q;x} \cdot f_{v;x} \cdot f_{n;x} \quad (45a)$$

- else if HEAT_REC_TYPE = OTHER

$$\eta_{xr} = \eta_{xr;nom} \cdot f_{xr;other} \quad (45b)$$

- else

$$\eta_{xr} = 0 \quad (45c)$$

where

$\eta_{xr;nom}$ - is the nominal moisture recovery efficiency at $v_{hr;nom}$

2 Modification to D.1.2.1, "Correction factor for the condensation potential"

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*Replace the text below Formula (D.5a) with the following:
 " (standards.iteh.ai)*

- If HEAT_REC_TYPE = ROT_HYG

[SIST EN 16798-5-1:2018/oprA1:2020](#)

$$f_{\Delta x;x} = \max[0 ; 1 + C_6 \cdot (x_{ETA;hr,in} - x_{esat} - \Delta x_{nom}) ; C_7 + C_8 \cdot (x_{ETA;hr,in} - x_{esat} - \Delta x_{nom})] \quad (D.5b)$$

Delete Formula (D.5c).

3 Modification to D.1.2.2, "Correction factor for the mass flow relation other than 1"

Replace the text in the clause with the following:

"The correction factor for the mass flow relation other than 1 is:

$$f_{q;x} = 1 - C_9 \frac{q_{V;ETA;ahu} - q_{V;SUP;ahu}}{q_{V;SUP;ahu} \cdot f_{ODA,min}} \quad (D.8)$$

where

C_9 - is a constant, depending on the heat recovery type.

4 Modification to D.2, "Data"

Replace Table D.1 with the following:

"Table D.1 — Constants for the calculation

Parameter	HEAT_REC_TYPE		
	ROT_NH	ROT_HYG	ROT_SORP
C_3	1,018 2		
C_4	0,035 2		
C_5	0,276		
e_1	-2,7		
C_6	248	129	16,4
C_7	-0,240	0,476	0,918
C_8	—	23,8	—
$\Delta x_{e,nom}$	0,005 kg/kg dry air		
C_9	0,1	0,1	0,1
C_{10}	-0,200	-0,152	-0,098
C_{11}	1,70	1,53	1,34
C_{12}	1,053 3		
C_{13}	80 000		
C_{14}	15		
e_2	4		

[SIST EN 16798-5-1:2018/oprA1:2020](#)

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