## **ENERGY PERFORMANCE OF BUILDINGS**

Ventilation for buildings

Part 1: Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics
Module M1-6
Estonian National Annex

Hoonete energiatõhusus
Hoonete ventilatsioon
Osa 1: Sisekeskkonna lähteandmed hoonete
energiatõhususe projekteerimiseks ja hindamiseks,
lähtudes siseõhu kvaliteedist, soojuslikust keskkonnast,
valgustusest ja akustikast
Moodul M1-6
Eesti standardi rahvuslik lisa



## NATIONAL FOREWORD

This document is

- the Estonian National Annex to the European Standard EN 16798-1:2019. The National Annex gives special requirements in order to apply the European Standard's Annex A in Estonia;
- endorsed with a notification published in the October 2019 issue of the official bulletin of the Estonian Centre for Standardisation.

The proposition to prepare a National Annex was made by the technical committee EVS/TC 27 "Heating and ventilation", it was coordinated by the Estonian Centre for Standardisation and funded by the Ministry of Economic Affairs and Communication.

The National Annex was prepared by Jarek Kurnitski, this document has been approved by EVS/TC 27.

Some of the elements of this document or some of the solutions described in this document may be the subject of patent rights. EVS shall not be held responsible for identifying any or all such patent rights.

Feedback about the content of the standard can be given by using the feedback form on the home page of the Estonian Centre for Standardisation or by e-mail <a href="mailto:standardisakond@evs.ee">standardisakond@evs.ee</a>.

ICS 91.120.10; 91.140.01

## 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, electronical or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

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

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

## **CONTENTS**

Annex N	VA (normative) All national recommended criteria for indoor environment	4
NA.1	General	4
NA.2	Recommended criteria for the thermal environment	4
NA.2.1	Recommended categories for mechanically heated and cooled buildings	4
NA.2.2	Acceptable indoor temperatures of buildings without mechanical cooling systems	6
NA.2.3	Increased air velocity	7
NA.2.4	Recommended indoor temperatures for energy calculations	8
NA.3	Basis criteria for indoor air quality and ventilation rates	8
NA.3.1	Design ventilation air flow rates for non-residential buildings	9
NA.3.2	Design ventilation air flow rates for residential buildings	11
NA.3.3	Ventilation air flow rate during unoccupied periods	13
NA.3.4	The recommended criteria for dimensioning of humidification and dehumidification	13
NA.4	How to define low and very low polluting buildings	14
NA.5	Examples of criteria for lighting	14
NA.6	Indoor system noise criteria of some spaces and buildings	15
NA.7	Criteria for substances in indoor air	
NA.8	Occupant schedules for energy calculations	18
	Occupant schedules for energy calculations	
		3