

# DIN EN ISO 13789:2018-04 (E)

## Thermal performance of buildings - Transmission and ventilation heat transfer coefficients - Calculation method (ISO 13789:2017)

---

<b>Contents</b>		<b>Page</b>
European foreword.....		3
Foreword.....		5
Introduction.....		6
<b>1</b>	<b>Scope</b> .....	<b>11</b>
<b>2</b>	<b>Normative references</b> .....	<b>11</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>12</b>
<b>4</b>	<b>Symbols and subscripts</b> .....	<b>14</b>
4.1	Symbols.....	14
4.2	Subscripts.....	14
<b>5</b>	<b>Description of the method</b> .....	<b>15</b>
5.1	Output.....	15
5.2	General description.....	15
<b>6</b>	<b>Calculation of heat transfer coefficients</b> .....	<b>15</b>
6.1	Output data.....	15
6.2	Calculation time intervals.....	17
6.3	Input data.....	17
6.4	Measurement of dimensions.....	18
6.5	Boundaries of conditioned space.....	18
<b>7</b>	<b>Transmission heat transfer coefficient</b> .....	<b>20</b>
7.1	Basic formula.....	20
7.2	Mean thermal transmittance of building fabric.....	20
7.3	Direct transmission between internal and external environments.....	21
7.4	Transmission heat transfer coefficient through the ground.....	22
7.5	Transmission heat transfer coefficient through unconditioned spaces.....	22
7.6	Heat transfer to adjacent buildings.....	23
<b>8</b>	<b>Ventilation heat transfer coefficient</b> .....	<b>24</b>
<b>9</b>	<b>Additional conventions</b> .....	<b>24</b>
9.1	General.....	24
9.2	Transmission heat transfer coefficient through the ground.....	24
9.3	Variable thermal transmittance.....	24
9.4	Air change rates of unconditioned spaces.....	24
9.5	Conventional values of surface heat transfer coefficient.....	25
<b>10</b>	<b>Report</b> .....	<b>26</b>
<b>Annex A (normative) Input and method selection data sheet — Template</b> .....		<b>27</b>
<b>Annex B (informative) Input and method selection data sheet — Default choices</b> .....		<b>30</b>
<b>Annex C (normative) Temperature in an unconditioned space</b> .....		<b>33</b>
<b>Bibliography</b> .....		<b>34</b>