Annex A
(normative)

Input and method selection data sheet — Template

A.1 General

The template in Annex A of this document shall be used to specify the choices between methods, the required input data and references to other standards.

NOTE 1 Following this template is not enough to guarantee consistency of data.

NOTE 2 Informative default choices are provided in Annex B. Alternative values and choices can be imposed by national/regional regulations. If the default values and choices of Annex B are not adopted because of the national/regional regulations, policies or national traditions, it is expected that:

— national or regional authorities prepare data sheets containing the national or regional values and choices, in line with the template in Annex A; or

— by default, the national standards body will add or include a national annex (Annex NA) to this document, in line with the template in Annex A, giving national or regional values and choices in accordance with their legal documents.

NOTE 3 The template in Annex A is applicable to different applications (e.g. the design of a new building, certification of a new building, renovation of an existing building and certification of an existing building) and for different types of buildings (e.g. small or simple buildings and large or complex buildings). A distinction in values and choices for different applications or building types could be made:

— by adding columns or rows (one for each application), if the template allows;

— by including more than one version of a Table (one for each application), numbered consecutively as a, b, c, … For example: Table NA.3a, Table NA.3b.

— by developing different national/regional data sheets for the same standard. In case of a national annex to the standard these will be consecutively numbered (Annex NA, Annex NB, Annex NC, ...).

NOTE 4 In the section "Introduction" of a national/regional data sheet information can be added, for example about the applicable national/regional regulations.

NOTE 5 For certain input values to be acquired by the user, a data sheet following the template of Annex A, could contain a reference to national procedures for assessing the needed input data. For instance, reference to a national assessment protocol comprising decision trees, tables and pre-calculations.

The shaded fields in the tables are part of the template and consequently not open for input.

A.2 References

The references, identified by the EPB module code number, are given in Table A.1.

Table A.1 — References

Reference	**Reference document** [a]	
	Number	**Title**
M1-4	*No. 63*	Regulation no 63, adopted on 11.12.2018, 'Minimum requirements for energy performance of buildings', *(määrus nr 63, "Hoone energiatõhususe miinimumnõuded", https://www.riigiteataja.ee/akt/107072020011)*
M1-6		
M1-8		
M1-13		
M2-4	*No. 58*	Regulation no 58, adopted on 05.06.2015, 'Methodology for calculating energy efficiency of buildings' (määrus nr 58, "Hoone energiatõhususe arvutamise metoodika", https://www.riigiteataja.ee/akt/107072020012?leiaKehtiv)
M2-5		
M2-8		
M3-1		
M3-4 [b]	*No. 36*	Regulation no 36, adopted on 30.04.2015, 'Requirements for issuing an energy performance certificate and for energy performance certificate', (määrus nr 36, "Nõuded energiamärgise andmisele ja energiamärgisele", https://www.riigiteataja.ee/akt/107072020013?leiaKehtiv)
M3-5		
M4-1		
M4-4 [b]		
M4-5		
M5-1		'The Building Code', adopted 11.02.2015 ("Ehitusseadustik", vastu võetud 11.02.2015, https://www.riigiteataja.ee/akt/129062022005?leiaKehtiv)
M5-5		
M5-6		
M6-1		
M6-4 [b]		
M6-5		

Reference	Reference document [a]	
	Number	Title
M7-1		
M7-4 [b]		
M7-5		
M9-1		
M10-1		

[a] If a reference comprises more than one document, the references can be differentiated.

[b] Informative.

A.3 Selection of main method

Table NA.2a — Choice between hourly or monthly calculation method, new buildings (see 5.2)

Type of object and/or application	Heating energy	Cooling energy	Internal summer temperature
Description	Choice [a]	Choice [a]	Choice [a]
Only hourly method allowed	Yes	Yes	Yes
Only monthly method allowed	No	No	No
Both methods are allowed	No	No	No

[a] Only one Yes per column possible.

[b] Add more columns if needed to differentiate between type of object, type of building or space, type of application or type of assessment. Use the list of identifiers from ISO 52000-1:2017, Tables A.2 to A.7 (normative template, with informative default choices in Tables B.2 to B.7).

In single family buildings monthly method can be used as an alternative method.

Regulation no 63, § 17. Energiatõhususe nõuetele vastavuse tõendamine lihtsustatud tõendamismeetodil (Simplified verification method of energy performance).
https://www.riigiteataja.ee/akt/113122018014?leiaKehtiv

In case of small buildings to prove compliance, a dynamic simulation calculation is used to calculate the energy demand. The Ministry of Economic Affairs and Communications (MEAC) in cooperation with Tallinn University of Technology have prepared a small buildings energy efficiency calculator. It is publicly available on the webpage of the MEAC. https://www.mkm.ee/ehitus-ja-elamumajandus/keskkonnasaastlikkus/energiatohusus-ja-sisekliima

Table NA.2b — Choice between hourly or monthly calculation method, existing buildings (major renovation) (see 5.2)

Type of object and/or application	Heating energy	Cooling energy	Internal summer temperature
Description	Choice	Choice	Choice
Only hourly method allowed	Yes	Yes	Yes
Only monthly method allowed	No	No	No
Both methods are allowed	No	No	No

[a] Only one Yes per column possible.

[b] Add more columns if needed to differentiate between type of object, type of building or space, type of application or type of assessment. Use the list of identifiers from ISO 52000-1:2017, Tables A.2 to A.7 (normative template, with informative default choices in Tables B.2 to B.7).

In single family buildings monthly method can be used as an alternative method.

Regulation no 63, § 17. Energiatõhususe nõuetele vastavuse tõendamine lihtsustatud tõendamismeetodil (Simplified verification method of energy performance).
https://www.riigiteataja.ee/akt/113122018014?leiaKehtiv

In case of small buildings to prove compliance, a dynamic simulation calculation is used to calculate the energy demand. The Ministry of Economic Affairs and Communications (MEAC) in cooperation with Tallinn University of Technology have prepared a small buildings energy efficiency calculator. It is publicly available on the webpage of the MEAC. https://www.mkm.ee/ehitus-ja-elamumajandus/keskkonnasaastlikkus/energiatohusus-ja-sisekliima

A.4 Zoning

Table NA.3a — Thermal zoning rules (see 6.4.2.12)

	Application: Calculation of energy need for heating and cooling	
Description [b]	**Apply the described method?**	**If "No": Alternative method** If the described method is not used, describe details of the alternative method or give reference to source document
Zoning step 1. Assessment of thermal envelope	Yes	
Zoning step 2. Grouping according to space category	Yes, building class	
Zoning step 3. Grouping in case of large openings	No	Not applicable
Zoning step 4. Split to have same combination of services	Yes, building class	
Zoning step 5. Further grouping according to similar thermal conditions of use	No	Not applicable
Zoning step 6. Split according to specific system or subsystem properties	Yes, heating and DC-ventilation systems	
Zoning step 7. (Further) split to have sufficient homogeneity in thermal balance	No	Not applicable
Zoning step 8. (Further) grouping of thermally unconditioned zones	No	Not applicable
Zoning step 9. Simplification in case of small thermal zones	Yes, area less than 10%	
Zoning step 10. Simplification in case of very small thermal zones	No	Not applicable

[a] Add more columns to differentiate per application, if needed.

[b] Additional rows may be added for alternative steps.

Table A.4 — Options of thermally unconditioned zone types and default values (see 6.4.5)

Situation	**Default value of $b_{ztu;m}$ in case of a thermally unconditioned zone, type: external** [a]
All situations	0
Internal thermally unconditioned zone type allowed?	
Choice	No
If Yes: (optionally) specify default values for the adjustment factor (free text)	
Situation	**Default value of $b_{ztu;m}$ in case of a thermally unconditioned zone, type: internal** [a]
<free text>	0 to 1

[a] Add more rows if needed.

Table A.5 — Default contribution of ventilation in external construction of a thermally unconditioned zone (see 6.4.5.4)

Application	**All applications**
Description	**Choice**
Default allowed?	No
If Yes:	
Coefficient for default contribution of ventilation, $c_{ztu;ve}$	0

[a] Add more columns if needed.

Note: No definition or requirements for unconditioned zones.

Table A.6 — Choice of spatial temperature averaging in residential buildings (see 6.4.6)

Description		Choice [a]
Application of the given formula for spatial temperature averaging		No
If No:		
No application of the given formula for spatial temperature averaging	It is assumed that the same temperature set-point for heating applies also to partly or moderately thermally conditioned residential spaces.	Yes
	Calculate the fully and partly or moderately thermally conditioned residential spaces as separate, thermally uncoupled thermal zones.	Not applicable
	Calculate the fully and partly or moderately thermally conditioned residential spaces as separate, thermally coupled thermal zones.	Not applicable
[a] Only one Yes possible.		
In case of application of the formula		**Value**
$f_{mod;t}$		Not applicable
$f_{mod;sp}$		Not applicable
$H_{int;spec}$ (W/K)		Not applicable

Table A.7 — Choice between calculations with thermally coupled or uncoupled thermal zones (see 6.4.7)

Application	All applications	….[b]
Description	**Choice [a]**	**Choice [a]**
Thermally uncoupled calculations	No	Yes/No
Thermally coupled calculations	Yes	Yes/No
Both methods are allowed	No	Yes/No

[a] Only one Yes per column possible.

[b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.). Note the link with the choice in Table A.9

Table A.8 — Default thermal coupling properties in case of thermally coupled zones (see 6.4.7)

		Choice	
Heat transfer part	**Quantity**	**Default value**	**Unit**
Transmission heat transfer between zones *z* and *y*	Not applicable	Not applicable	…
ventilation heat transfer from zone *z* to zone *y*	Not applicable	Not applicable	…
ventilation heat transfer from zone *y* to zone *z*	Not applicable	Not applicable	…[a]
[a] Add more rows if needed			

A.5 Hourly calculation procedures

Table A.9 — Factor for consideration of internal heat gains in design heat load calculation (see 6.5.4.5.2)

Application	All applications	….[a]
Description	**Choice**	**Choice**
Value for factor $f_{H;ig}$	Not applicable	0 to 1

[a] Add more rows if needed.

Note: In the national heat load calculation, heat loads are not taken into account and hourly calculations are not required.

Table A.10 — Alternative choices in modelling (see 6.5.5.2, 6.5.6.3.1 and 6.5.7.1)

Description	Choice	If choice is No, describe or give reference to the applied alternative method
Use the method in 6.5.5.2 to calculate the actual temperatures and loads	Yes	Not applicable
Use method in 6.5.6.3.1 for the calculation of the thermal (longwave) radiation exchange	Yes	Not applicable
Use method in 6.5.7.1 for the conversion of physical properties of building elements into properties per layer (node)	Yes	Not applicable
NOTE In case of one or more "No", the procedures are validated using the validation cases in 7.2, as described in that subclause. *Note: No detailed requirements for hourly dynamic calculation.*		

Table A.11 — Convective fractions (see 6.5.6.2)

$f_{int;c}$ [a]	$f_{sol;c}$	$f_{H;c}$	$f_{C;c}$
Not applicable	Not applicable	Not applicable	Not applicable
[a] Can be differentiated per source type. *Note: No detailed requirements for hourly dynamic calculation.*			

Table A.12 — Specification of internal partitions (see 6.5.6.3.1)

	Choice
Internal partitions need to be specified?	No
If By default: specify the default thermal characteristics	
Default characteristics	**Specification** [a]
Not applicable	Not applicable
[a] Add more rows if needed. *Note: No detailed requirements for hourly dynamic calculation.*	

Table A.13 — Distribution of mass of opaque and ground floor elements (see 6.5.7.2 and 6.5.7.3)

Class Not applicable	Specification of the class Not applicable
Class I (mass concentrated at internal side)	Construction with external thermal insulation (main mass component near inside surface) , or equivalent
Class E (mass concentrated at external side)	Construction with internal thermal insulation (main mass component near outside surface) , or equivalent
Class IE (mass divided over internal and external side)	Construction with thermal insulation in between two main mass components, or equivalent
Class D (mass equally distributed)	Uninsulated construction (e.g. solid or hollow bricks, heavy or lightweight concrete, or lightweight construction with negligible mass (e.g. steel sandwich panel), or equivalent
Note: No detailed requirements for hourly dynamic calculation.	

Table A.14 — Specific heat capacity of opaque and ground floor elements (see 6.5.7.2 and 6.5.7.3)

Class Not applicable	$\kappa_{m;op}$ $J/(m^2 \cdot K)$ Not applicable	Specification of the class Not applicable
Very light	50 000	Construction containing no mass components, other than e.g. plastic board and/or wood siding, or equivalent
Light	75 000	Construction containing no mass components other than 5 to 10 cm lightweight brick or concrete, or equivalent
Medium	110 000	Construction containing no mass components other than 10 to 20 cm lightweight brick or concrete, or less than 7 cm solid brick or heavy weight concrete, or equivalent

Heavy	175 000	Construction containing 7 to 12 cm solid brick or heavy weight concrete, or equivalent
Very heavy	250 000	Construction containing more than 12 cm solid brick or heavy weight concrete, or equivalent
Note: No detailed requirements for hourly dynamic calculation.		

Table A.15 — Solar absorption coefficient of external opaque surfaces (see 6.5.7.2)

	Choice
Differentiation in solar absorption coefficient?	Not applicable
If Yes: specify the procedure to classify the three categories (free text)	
Category	**Specification**
Category 1 α_{sol} **= 0,3** **(light colour)**	Not applicable
Category 2 α_{sol} **= 0,6** **(intermediate colour)**	Not applicable
Category 3 α_{sol} **= 0,9** **(dark colour)**	Not applicable
	Choice
If No: choose the default category	Not applicable

Table A.16 — Coefficient to limit assumed temperature in adjacent thermally unconditioned zone (see 6.5.9)

Application	**All applications**	.... [a]
	$c_{ztu,h;max}$	$c_{ztu,h;max}$
Value	Not applicable	Not applicable

[a] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).
Note: No detailed requirements for hourly dynamic calculation. No national definition or requirements for unheated premises.

Table A.17 — Specific heat capacity of air and furniture (see 6.5.11)

$\kappa_{m;int}$ J/(m^2·K)
Not applicable

Table A.18 — View factor to the sky (see 6.5.13.3)

	Unshaded horizontal roof	**Unshaded vertical wall**
F_{sky}	Not applicable	Not applicable
Note: No detailed requirements for hourly dynamic calculation.		

Table A.19 — Difference between external air temperature and sky temperature (see 6.5.13.3)

Climatic region [a]	**Sub-polar areas**	**Tropics**	**Intermediate zones**
$\Delta\theta_{sky;t}$ (K)	Not applicable	Not applicable	Not applicable

[a] Add more columns if needed to differentiate between climatic regions.

Table A.20 — Choice of method for moisture absorption and desorption in materials (see 6.5.14.1)

Application	**All applications**	.... [a]
Description	**Choice**	**Choice**
Moisture absorption and desorption calculated?	No	Yes/No
If No:	*G*abs;*zt*;*t* = 0	*G*abs;*zt*;*t* = 0
If Yes: give reference to method	Not applicable	<free text>
[a] Add more columns if needed.		

Table A.21 — Choice of glazing area or frame area fraction (see E.2.1)

Description	**Choice** [a]
For each window: free choice between glazing area or fixed frame fraction	Yes
For all windows the same choice: either glazing area or fixed frame fraction	No
For all windows: only glazing area allowed	No
For all windows: only fixed frame fraction	No
[a] Only one Yes per column possible.	
In case of frame fraction:	F_{fr}
Frame fraction fixed value	Not applicable

Table A.22 — Factors related to the solar energy transmittance (see E.2.2.1)

Correction and weighting factor for *g*-value non-scattering and scattering transparent glazings and blinds:

F_w	a_g	alt_g °
Not applicable	Not applicable	Not applicable

Default values of the total solar energy transmittance at normal incidence, g_n, for typical types of glazing [a]

Type	g_n
Single glazing	Not applicable
Double glazing	Not applicable
Double glazing with selective low-emissivity coating	Not applicable
Triple glazing	Not applicable
Triple glazinf with two selective low-emissivity coatings	Not applicable
Double window	Not applicable

Default values of the reduction factor, for typical types of blinds [a]
Not applicable

Blind type	**Optical properties of blind**		**Reduction factor with**	
	absorption	**transmission**	**blind inside**	**blind outside**
White venetian blinds	0,1	0,05 0,1 0,3	0,25 0,3 0,45	0,1 0,15 0,35
White curtains	0,1	0,5 0,7 0,9	0,65 0,8 0,95	0,55 0,75 0,95
Coloured textiles	0,3	0,1 0,3 0,5	0,42 0,57 0,77	0,17 0,37 0,57
Aluminium-coated textiles	0,2	0,05	0,2	0,08

[a] Add more rows or columns if needed.

Note: No detailed requirements for hourly dynamic calculation and its output data.

Table A.23 — Rules for operation of shutters (see G.2.2.1.2)

Application		All applications
Control level	**Rules**	**Rules**
0 Manual operation	Closed after sunset, if occupied. Open after sunrise, if occupied, but not during sleeping hours.	Not applicable
1 Motorized operation with manual control	Same	Not applicable
2 Motorized operation with automatic control	Closed after sunset, open after sunrise.	Not applicable
3 Combined light/blind/HVAC control	Same [b]	Not applicable

[a] Add more columns if needed.

[b] Conservative rule; a level 3 combined control is not covered in the table.

Table A.24 — Rules for operation of solar shading devices (see G.2.2.1.2)

Application		All applications
Control level	**Rules**	**Rules**
0 Manual operation	Closed if solar irradiance >300 W/m^2 Open if solar irradiance <200 W/m^2	Not applicable
1 Motorized operation with manual control	Same	Not applicable
2 Motorized operation with automatic control	Closed if solar irradiance >200 W/m^2 Open if solar irradiance <200 W/m^2 and ≥2 hours passed since closing	Not applicable
3 Combined light/blind/HVAC control	Same [b]	Not applicable

[a] Add more columns if needed.

[b] Conservative rule; a level 3 combined control is not covered in the table.

Table A.25 — Choices between options and methods for calculation of shading by external objects (see F.1)

Application [b]	**Not applicable**			**Not applicable**		
Description	**Choice**			**Choice**		
Calculation of the effect of shading by distant objects included in this document?	Yes			n.a.		
When calculating solar shading on building elements: which types of distant shading objects (not on site) may or shall be taken into account or ignored NOTE For instance landscape (such as hills or dikes), vegetation (such as trees), other constructions (such as buildings)	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:
	Landscape (e.g. hills, dikes), other constructions (e.g. buildings)	Vegetation (e.g. trees)	-	n.a.	n.a.	n.a.
When calculating solar shading on opaque building elements such as roofs or facades: which types of on site	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:

shading objects can or shall be ignored NOTE For instance rebates, overhangs or other shading objects from the own building(s) on site	-	-	Rebates, overhangs or other shading objects from the own building(s) on site	n.a.	n.a.	n.a.
When calculating solar shading on transparent building elements: NOTE For instance window rebates, overhangs and side fins	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:
	Window rebates, overhangs and side fins if depth larger than 20% of window height resp. width	Other window rebates, overhangs and side fins	-	n.a.	n.a.	n.a.
Specific subdivision rules for the calculation of solar shading on building elements	None			None		
Choice between the two methods for the solar shading calculation:	Choice [a]			Choice [a]		
Method 1, Shading of direct radiation	Yes			n.a.		
Method 2, Shading of direct and diffuse radiation	No			n.a.		
In case of method 2: give reference to calculation procedure	n.a.			n.a.		
[a] Only one Yes per column possible. [b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.)						
Note: No detailed requirements for hourly dynamic calculation and its output data.						

Table A.26 — Number of skyline segments, $n_{sh;segm}$ for input solar shading objects (see F.3.3)

Application [b]	**All applications**	**....**
Description	Value of $n_{sh;segm}$ [a]	Value of $n_{sh;segm}$ [a]
Maximum number of segments over 360 degrees	Not applicable	8 to 36
Fixed width (= 360 / $n_{sh;segm}$) [c]	Not applicable	Yes/No
[a] Practical range, informative. [b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.). [c] f not fixed, the width of each segment can be adapted to the width of the shading object, with limitation of maximum number of segments $n_{sh;segm}$.		

A.6 Monthly calculation procedures

Table A.27 — Monthly ventilation heat transfer coefficient (see 6.6.6.2)

Application	**All applications**	.... [b]
Description	Choice [a]	Choice [a]
Method A	Not applicable	Not applicable
Method B [c]	Not applicable	Not applicable
Both methods [c]	Not applicable	Not applicable
[a] Only one Yes per column possible. [b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).		

[c] Method B is only allowed outside the CEN area.

Table A.28 —Dynamics correction factor for ventilation (see 6.6.6.2)

Dynamics correction factor for monthly mean air flow	Value
$f_{ve;dyn;k}$	1

Table A.29 — Solar absorption coefficient of external opaque surfaces (see 6.6.8.2)

	Choice
Differentiation in solar absorption coefficient?	Not applicable
If Yes: specify the procedure to classify the three categories (free text)	
Category	**Specification**
Category 1 α_{sol} **= 0,3 (light colour)**	Not applicable
Category 2 α_{sol} **= 0,6 (intermediate colour)**	Not applicable
Category 3 α_{sol} **= 0,9 (dark colour)**	Not applicable
	Choice
If No: choose the default category	Not applicable

Table A.30 — View factor to the sky (see 6.6.8.3)

	Unshaded horizontal roof	Unshaded vertical wall
F_{sky}	Not applicable	Not applicable

Table A.31 — Difference between external air temperature and sky temperature (see 6.6.8.3)

Climatic region [a]	Sub-polar areas
$\Delta\theta_{sky;m}$ (K)	Not applicable

[a] Add more columns if needed to differentiate between climatic regions.

Table A.32 — Choice between detailed or simple method to determine the internal effective heat capacity (see 6.6.9)

Application	All applications	.... [b]
Description	Choice [a]	Choice [a]
Only detailed method allowed	Yes	Yes/No
Only simple method allowed	No	Yes/No
Both methods allowed	No	Yes/No

[a] Only one Yes per column possible.

[b] Add more columns if needed to differentiate between applications (e.g. construction types or building categories).

Table A.33 — Simple method to determine the internal effective heat capacity. Specification of the classes (see 6.6.9)

Class	Specification of the class
Very light Not applicable	Construction type is dominated by very light constructions as specified in Table A.14
Light Not applicable	Construction type is dominated by light constructions as specified in Table A.14
Medium Not applicable	Construction type is dominated by medium constructions as specified in Table A.14
Heavy Not applicable	Construction type is dominated by heavy constructions as specified in Table A.14
Very heavy Not applicable	Construction type is dominated by very heavy constructions as specified in Table A.14

Table A.34 — Values of the reference numerical parameter $a_{H,0}$ and the reference time constant $\tau_{H,0}$ for the gain utilization factor (see 6.6.10.2)

$a_{H,0}$	$\tau_{H,0}$ h
Not applicable	Not applicable

Table A.35 — Values of the reference numerical parameter $a_{C,0}$ and the reference time constant $\tau_{C,0}$ for the loss utilization factor (see 6.6.10.3)

$a_{C,0}$	$\tau_{C,0}$ h
Not applicable	Not applicable

Table A.36 — Choice between methods A and B for heating intermittency (see 6.6.11.3)

Application	**All applications**	….[b]
Description	**Choice [a]**	**Choice [a]**
Only Method A	Not applicable	Yes/No
Only Method B	Not applicable	Yes/No
Both methods are allowed	Not applicable	Yes/No

[a] Only one Yes per column possible.
[b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).

Table A.37 — Choice between methods A and B for cooling intermittency (see 6.6.11.4)

Application	**All applications**	….[b]
Description	**Choice [a]**	**Choice [a]**
Only Method A	Not applicable	Yes/No
Only Method B	Not applicable	Yes/No
Both methods are allowed	Not applicable	Yes/No

[a] Only one Yes per column possible.
[b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).

If Method A applies	
Correlation factor for method A for intermittent cooling	**Value**
$b_{C;red}$	Not applicable
Note: There is no calculation of discontinuous heating in the national method.	

Table A.38 — Choice between methods A and B for overheating indicator (see 6.6.12)

Application	**All applications**	….[b]
Description	Choice [a]	Choice [a]
Method A	Not applicable	Yes/No
Method B	Not applicable	Yes/No

[a] Only one Yes per column possible.
[b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).

If Method B applies	
Provide details or reference to details	Not applicable

Table A.39 — The monthly fraction of energy need for humidification (see 6.6.14)

	Monthly fraction of energy need for humidification $f_{HU;m}$
Formula?	Not applicable
If Yes, give formula	for each month m: fHU;m = QH;nd;m/QH;nd;an where QH;nd;m/an is the monthly / annual energy need for heating, as determined in 6.5.4.1, in kWh
If No, give fraction for each month (total = 1)	**Monthly fraction of energy need for humidification $f_{HU;m}$**

January	Not applicable	July	Not applicable
February	Not applicable	August	Not applicable
March	Not applicable	September	Not applicable
April	Not applicable	October	Not applicable
May	Not applicable	November	Not applicable
June	Not applicable	December	Not applicable

Table A.40 — Efficiency of latent heat recovery (see 6.6.14)

Type of heat recovery unit	Efficiency of latent heat recovery $\eta_{HU;rvd}$
Provisions specifically made for transporting moisture from exhaust to supply air (such as a heat recovery wheel with moisture absorbing surface)	Not applicable
Other provisions	Not applicable
[a] Add more rows if needed to differentiate between types.	

Table A.41 — Annually accumulated amount of moisture to be supplied per kg dry air supply (see 6.6.14)

Space category	Annually accumulated amount of moisture to be supplied per kg dry air supply $\Delta x \cdot t_{a;sup}$ (kg h/kg)
All space categories	Not applicable
[a]	
[a] Add more rows if needed to differentiate between types.	

Table A.42 — Choice of glazing area or frame area fraction (see E.2.1)

Description	Choice [a]
For each window: free choice between glazing area or fixed frame fraction	Yes
For all windows the same choice: either glazing area or fixed frame fraction	No
For all windows: only glazing area allowed	No
For all windows: only fixed frame fraction	No
[a] Only one Yes per column possible.	
In case of frame fraction:	F_{fr}
Frame fraction fixed value	0,25

Table A.43 — Factors related to the solar energy transmittance (see E.2.2.1)

Correction and weighting factor for *g*-value non-scattering and scattering transparent glazings and blinds:		
F_w	a_g	alt_g
0,9	Not applicable	Not applicable

Default values of the total solar energy transmittance at normal incidence, g_n, for typical types of glazing [a]	
Type	g_n
Single glazing	0,85
Double glazing	0,75
Double glazing with selective low-emissivity coating	0,67
Triple glazing	0,7
Triple glazing with two selective low-emissivity coatings	0,5
Double window	0,75

Default values of the reduction factor, for typical types of blinds				
Blind type	**Optical properties of blind**		**Reduction factor with blind inside**	**blind outside**
	absorption	**transmission**		
White venetian blinds	0,1	0,05	0,25	0,1

		0,1 0,3	0,3 0,45	0,15 0,35
White curtains	0,1	0,5 0,7 0,9	0,65 0,8 0,95	0,55 0,75 0,95
Coloured textiles	0,3	0,1 0,3 0,5	0,42 0,57 0,77	0,17 0,37 0,57
Aluminium-coated textiles	0,2	0,05	0,2	0,08

Table A.44 — Movable shutter reduction factor, $f_{sht;with}$, and movable solar shading reduction factor $f_{sh;with}$ (see G.2.2.2.2)

Month	Location: Tallinn, Estonia				
	$f_{sht;with}$ [a]	$f_{sh;with}$ [a]			
		N	E	S	W
1	n.a.	n.a.	n.a.	n.a.	n.a.
2	n.a.	n.a.	n.a.	n.a.	n.a.
3	n.a.	n.a.	n.a.	n.a.	n.a.
4	n.a.	n.a.	n.a.	n.a.	n.a.
5	n.a.	n.a.	n.a.	n.a.	n.a.
6	n.a.	n.a.	n.a.	n.a.	n.a.
7	n.a.	n.a.	n.a.	n.a.	n.a.
8	n.a.	n.a.	n.a.	n.a.	n.a.
9	n.a.	n.a.	n.a.	n.a.	n.a.
10	n.a.	n.a.	n.a.	n.a.	n.a.
11	n.a.	n.a.	n.a.	n.a.	n.a.
12	n.a.	n.a.	n.a.	n.a.	n.a.
Annual	n.a.	n.a.	n.a.	n.a.	n.a.

[a] Add more columns or rows if needed to differentiate between e.g. applications (e.g. building categories, new or existing buildings, etc.), orientations or climates.

Table A.45 — Choices between options and methods for calculation of shading by external objects (see F.1)

Application [b]	All applications			Not applicable		
Description	Choice			Choice		
Calculation of the effect of shading by distant objects included in this document?	Yes			n.a.		
When calculating solar shading on building elements: which types of distant shading objects (not on site) may or shall be taken into account or ignored. NOTE: For instance, landscape (such as hills or dikes), vegetation (such as trees), other constructions (such as buildings)	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:
	Landscape (such as hills or dikes), other constructions (such as buildings)	Vegetation (such as trees)	-	n.a.	n.a.	n.a.
When calculating solar shading on opaque building elements such as roofs or facades: which types of on site shading objects can or shall be ignored. NOTE: For instance, rebates, overhangs or other shading objects from the own building(s) on site	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:
	-	-	Rebates, overhangs or other shading objects from the	n.a.	n.a.	n.a.

			own building(s) on site			
When calculating solar shading on transparent building elements: NOTE: For instance, window rebates, overhangs and side fins.	Shall be taken into account:	May be taken into account:	Shall be ignored:	Shall be taken into account:	May be taken into account:	Shall be ignored:
	Window rebates, overhangs and side fins if depth larger than 20% of window height resp. width	Other window rebates, overhangs and side fins	-	n.a.	n.a.	n.a.
Specific subdivision rules for the calculation of solar shading on building elements	None			n.a.		
Choice between the two methods for the solar shading calculation:	**Choice** [a]			**Choice** [a]		
Method 1, Shading of direct radiation	No			n.a.		
Method 2, Shading of direct and diffuse radiation	Yes			n.a.		
In case of method 2: give reference to calculation procedure	n.a.			n.a.		

[a] Only one Yes per column possible.
[b] Add more columns if needed to differentiate between applications (e.g. building categories, new or existing buildings, etc.).

Table A.46 — Parameters for monthly solar shading due to overhangs (See F.3.5.1.2)

Period:		Summer: June – September			
Orientation		A_1	B_1	A_2	B_2
North hemisphere	**South hemisphere**	Not applicable	Not applicable	Not applicable	Not applicable
S	N	Not applicable	Not applicable	Not applicable	Not applicable
SE-SW	NE-NW	Not applicable	Not applicable	Not applicable	Not applicable
E-W	E-W	Not applicable	Not applicable	Not applicable	Not applicable
NE-NW	SE-SW	Not applicable	Not applicable	Not applicable	Not applicable
N	S	Not applicable	Not applicable	Not applicable	Not applicable

Table A.47 — Parameters for monthly solar shading due to fins (See F.3.5.1.2)

Period:		Summer: June – September		
Orientation	A_1	B_1	A_2	B_2
North hemisphere	**South hemisphere**	Not applicable	Not applicable	Not applicable
S	N	Not applicable	Not applicable	Not applicable
SE-SW	NE-NW	Not applicable	Not applicable	Not applicable
E-W	E-W	Not applicable	Not applicable	Not applicable
NE-NW	SE-SW	Not applicable	Not applicable	Not applicable

Table A.48 — Parameters for monthly solar shading by obstacles or overhangs; more detailed method (See F.3.1.2 and F.3.5.2.2)

Location:	40º north latitude Not applicable								
Period:	Winter: October – May								
Orientation	**Weight, $w_{obst;m;i}$ per sector** **Not applicable**				**Solar altitude, $\alpha_{sol;m;i}$ per sector** **Not applicable**				**Fraction direct solar irradiation $f_{sol;dir;m}$** **Not applicable**
	1	**2**	**3**	**4**	**1**	**2**	**3**	**4**	
N	0	0	0	0	-	-	-	-	0
NE	0	0	0	1,00	-	-	-	7,6	0,1
E	0	0	0,31	0,69	-	-	9	20,8	0,5
SE	0	0,14	0,58	0,28	-	9,2	22,2	24	0,7
S	0,06	0,4	0,47	0,07	9,4	22,8	22,6	9,7	0,75
SW	0,22	0,63	0,15	0	24,2	22	9,6	-	0,7
W	0,70	0,3	0	0	20,6	9,5	-	-	0,5
NW	1,00	0	0	0	8,7	-	-	-	0,1