

Draft standard

Commissione Tecnica	UNI/CT 202 Isolanti e isolamento – Metodi di calcolo e di prova (UNI/TS 11300-1)
Gruppo di Lavoro	-
Coordinatore Funzionario Tecnico	
Codice progetto Codice norma	Appendice Nazionale UNI EN ISO 52010-1
Titolo	Energy performance of buildings – External climatic conditions Part 1: Conversion of climatic data for energy calculations
Note	

ABOUT THIS DOCUMENT

The following is a sample text showing how to compile a national application document of an EN-EPB standard (mandate M/480).

Each EN-EPB standard requires a national application document that provides the data listed in normative annex A by confirming or replacing default data given in informative annex B.

The following text has been taken from a draft produced during the editing process of the application document for EN 52.XXX being developed in Italy. It is not the final document and it is neither intended to represent the Italian position nor to give any preference and/or support to any option. It only shows a possible approach on how prepare such national annexes.

It is distributed on request of EPB-Center because it is deemed useful to give an example of the possible contents of a national application document.

The document was released without any comment and/or rationale of the choices.

Any comment and/or explanation added shall be clearly identified as not being part of the original text.

Annex NA (normative)

Input and method selection data sheet — Choices for Italy

General

The template in [Annex A](#) to 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.

NA.1 References

The references, identified by the EPB module code number, are given in [Table B.1](#).

Table NA.1 — References

Reference	Reference document	
	Number	Title
Mx-ya	...	...
	...	...

^a In this document there are no choices in references to other EPB standards. The Table is kept to maintain uniformity between all EPB standards.

NA.2 Climatic input data

Table NA.2 — Weather station and climatic data set (See [6.3.2](#))

Name	Value					
Identifier for climatic data set						
Station and/or name of data set						
	Symbol	Unit	Value	Validity interval ^a	Origin	Varying ^b
latitude	φ_w	°		–90 to +90	station	No
longitude ^c	λ_w			–180 to +180	station	No
time zone	TZ	h		–12 to +12	station	No
First day of time series (day of the year)	$n_{\text{day;start}}$	-		1 to 366	station	No
Last day of time series (day of the year)	$n_{\text{day;end}}$	-		1 to 366	station	No
Day of the week for January 1		-		Monday to Sunday (day 1 to 7)	station	No
Daylight saving time? ^c						
Leap day included						
Specific other information						
Name	Value					
Reference to documentation on application range and type of data						

^a Practical range, informative.

^b “Varying”: value may vary over time: different values per time interval, for instance: hourly values or monthly values (not constant values over the year).

^c If Yes: additional information to be added.

NA.3 Calculation method

Table NA.3 — Method to assess direct (beam) irradiance if not available from weather station (See 6.4.2)

Method		Choice Yes/No ^a
1	Default method	NO
2	Other method	YES
In case of method 2:		
	Reference to procedure:	UNI 10349-1
^a Only one choice possible.		

Table NA.4 — Solar reflectivity of the ground ($\rho_{\text{sol;grnd}}$) (See 6.4.3)

Name	Value ^a
Fixed value	NO
Dependent on ground condition, listed in climatic data file	NO
Dependent on local ground condition (near the inclined surface)	YES
Values available in climatic data file	NO
^a Only one choice possible.	

If fixed value:

Not applicable and therefore no Table NA.5 is given.

If dependent on ground condition:

Table NA.6 — Solar reflectivity of the ground; if dependent on ground conditions

Description of ground condition ^a	Value for solar reflectivity of the ground, $\rho_{\text{sol;grnd}}$ [-]
See UNI 10349-1 prospetto C.2	
^a Example; rows can be added or deleted.	

Table NA.7 — Choice between options and methods for calculation of shading by external objects (See 6.4.5.1)

Application ^b	All applications	
Description	Choice	
Effect of shading calculated in this document?	No	
If Yes:	Choice ^a	
Only method 1, Simplified method (shading of direct radiation)	Yes	
Only method 2, Detailed method (shading of direct and diffuse radiation)	No	
Both methods are allowed	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 NA.8 — Number of skyline segments, $n_{sh;segm}$ for input solar shading objects (See 6.4.5.2)

Application ^b	All applications	
Description	Value of $n_{sh;segm}$ ^a	Value of $n_{sh;segm}$ ^a
Maximum number of segments over 360 degrees	15	
Fixed width (= $360 / n_{sh;segm}$) ^c	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 If not fixed, the width of each segment can be adapted to the width of the shading object, with limitation of maximum number of segments $n_{sh;segm}$.		

Table NA.9 — Choice between methods for calculation of illuminance (See 6.4.6)

Application ^a	All applications	
Description	Choice	Choice
Method 1, Default method, or Method 2, Alternative method	Method 1	
If choice is method 2:	Description	Description
Describe method 2	Not applicable	