Appendice nazionale UNI EN ISO 52003-1 "Energy performance of buildings - Indicators, requirements, ratings and certificates - Part 1: General aspects and application to the overall energy performance".

Annex A
(normative)

Input and method selection data sheet — Italian choices

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.

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 documents.

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.

Specific information concerning Annex A and Annex B of this document:

The reporting tables allow full freedom of choice at national or regional level.

Typically, different choices will be made according to the type of work, notably for new constructions (or equivalent) or works on existing buildings. Furthermore, there may be differentiations according to other criteria, such as between residential and non-residential buildings. Each different application area will thus have its own set of tables if different choices are made. The application domain of every set shall be clearly specified.

A.2 References

The references, identified by the EPB module code number, are given in a table complying with the format given in Table A.1 (template).

Table A.1 — References

Reference	Reference document[a]	
	Number	Title
M1–6[b]	prEN 16798–1[c]	*Energy performance of buildings – Ventilation of 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)
M1–14[b]	EN 15459-1	*Energy performance of buildings — Economic evaluation procedure for energy systems in buildings — Part 1: Calculation procedures, Module M1-14*
M2–4[b]	ISO 52018-1	*Energy performance of buildings — Indicators for partial EPB requirements related to thermal energy balance and fabric features — Part 1: Overview of options (ISO 52018-1:2017)*
M3–4[b]	EN 15316–1	*Energy performance of buildings — Energy performance of buildings — Energy needs for heating and cooling, internal temperatures and sensible and latent heat loads - Part 1: Calculation procedures (ISO 52016-1:2017)*
M4–4[b]	EN 16798–9	*Energy performance of buildings — Ventilation for buildings — Part 9: Calculation methods for energy requirements of cooling systems (Module M4–1, M4–4 M4–9) — General*
M5–4[b]	EN 16798–3	*Energy performance of buildings — Ventilation for buildings — Part 3: For non-residential buildings — Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)*
M6–4[b]	EN 16798-3	See M5–4
M7–4[b]	EN 16798-3	See M5–4
M8–4[b]	EN 15316-1	See M3–4
M9–4[b]	EN 15193–1	*Energy performance of buildings — Energy requirements for lighting — Part 1: Specifications, Module M9*
M10–4[b]	EN 15232-1	*Energy performance of buildings — Part 1: Impact of Building Automation, Controls and Building Management - Modules M10-4,5,6,7,8,9,10*

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

[b] Informative.

[c] Under preparation.

A.3 Energy performance requirements

Table A.2 should be seen in conjunction with all the partial EPB requirements (which are beyond the scope of this document, e.g. concerning technical systems). Partial EPB requirements related to the fabric are discussed in ISO 52018, which also provides reporting templates for the corresponding EPB features.

Table A.2 — Default choices with respect to the overall EPB requirements (see 9.5)

Application: New and existing buildings		
Overall energy performance feature	**Requirement?**	**Exceptions*?**
Total primary energy use	X	(1)
Non-renewable primary energy use	X	(1)
Renewable primary energy use	X	(1)
Renewable energy ratio	X	(1)
Greenhouse gas emissions: CO_2	X	(1)
Energy policy factors (define*)		

(1) The application of this performance indicator is regulated by Legislative Decree 192/2015 and subsequent amendments and application decrees.

Motivation for the requirement mix:

The first requirement on the total primary energy use ensures that in a first instance energy saving techniques are applied to a sufficient extent.
The forth, complementary requirement on the renewable energy ratio ensures that renewable energy is applied to an extent that is warranted, respect to the total primary energy use.
The second and third quantities are not directly used for verifying compliances with minimum EPB requirements, but just as intermediate values to calculate the renewable energy ratio.
The third and fifth quantities are used instead for energy certification only.

Table A.3 — Numeric indicator used for the requirement on the total primary energy use (see 9.5)

Numeric indicator	Choice
Total primary energy use per useful floor area [kWh/m^2]	(1)
Total primary energy use [kWh]	(1)

(1) Values calculated using National Reference Building as regulated by Legislative Decree 192/2005 and subsequent amendments and application decrees.

Table A.4 — Numeric indicator used for the requirement on the non-renewable primary energy use (see 9.5)

Numeric indicator	Choice
Non-renewable primary energy use per useful floor area [kWh/m^2]	(1)
Non-renewable primary energy use [kWh]	(1)

(1) Values calculated using National Reference Building as regulated by Legislative Decree 192/2005 and subsequent amendments and application decrees.

Table A.5 — Numeric indicator used for the requirement on the renewable primary energy use (see 9.5)

Numeric indicator	Choice
Renewable primary energy use per useful floor area [kWh/m^2]	(1)
Renewable primary energy use [kWh]	(1)
Renewable energy ratio	(1)
(1) Values calculated using National Reference Building as regulated by Legislative Decree 192/2005 and subsequent amendments and application decrees.	

A.4 Rating

Table A.6 — Energy rating methods (see 10.2 and 10.3)

Method	Choice[a]
1) Default energy rating method with two reference points (see 10.2)	NO
2) Default energy rating method with a single reference point (see 10.2)	YES
3) Other energy rating method (see 10.2)	NO
Method 2.:	**Parameters**
Numbering of the classes 1 to 7	A to G
4 Subclasses to expand the A class (top class A4)	**A4,A3,A2,A1**
Boundary for the reference position, n_{ref}	1 (A1)

A.5 Label model

Table A.7 — Graphical representation of the rating (see 11.3)

Method	Choice[a]
1. Default model for the graphical representation of the rating (see 11.3)	YES
2. Other model for the graphical representation of the rating (see 11.3)	NO