

REHVA



Federation of
European Heating,
Ventilation and
Air Conditioning
Associations



Dissemination and management of the set of EPB standards

Starting up the EPB CENTER

**Your service center for Energy Performance of
Buildings assessment methods.**

www.epb.center

2017: Current Status EPB-standards developed under M/480 on EPBD

- All EPB-standards and connected Technical Reports (EN and ISO) passed **successfully** the Formal Final Vote (except EN16798-1/2) and have been published this summer.
- In Europe, Implementation of these standards via the national EPB regulation is the next step
- Many EU countries will do this, step by step in the coming months/years, however there is a big variation in the legislation framework, building regulation is up to the EU MS's.

Implementation of the EPB standards

- If properly implemented, the benefits are:
 - Harmonisation of the EPB assessment procedures in Europe and possible globally via the use of these standards.
 - This will have an impact on the harmonisation of the **product** and **system requirements** for energy relevant products used in buildings and their HVAC, DHW and lighting systems.
 - Which is expected to have a positive impact on innovation creating a level playing field for energy saving solutions

Leading towards convergence and transparency

- The set of EPB standards is intended to bring convergence and transparency in the EPB assessment methods
- in particular: to check compliance with the minimum energy performance requirements and as information for the energy performance certificate.

EPBD encourages the MS's the use of the EPB set where Flexibility via tailored choices is facilitated.

- Each EPB standard contains a series of choices (“Annex A”) that enables tailoring of the method to the national context.
- Such national or regional choices remain necessary, due to differences in climate, culture & building tradition, policy and legal frameworks.

“Direct use of an EPB standard”:

- The authority **mandatory prescribes**, for the assessment of the EP in the context of their building regulations, the use of this EPB standard¹⁾ in combination with a specific set of choices and values in the form of a **national data sheet**²⁾ according to the template of **Annex A** of this EPB standard. It replaces (a part of) the current National/Regional Energy Performance of Buildings assessment procedures.
- ¹⁾*optionally with an (informative) national foreword.*

national data sheet²⁾

- *2): This data sheet can be a national annex to the standard or a separate datasheet added to the building regulations. Different national data sheets can be prepared, for different applications (e.g. new/existing, residential/Non-residential buildings)*

Some observations regarding the expected use in Europe (10-2017)

- Several countries indicated that they will use the set of EPB standards as they are making use of the in build flexibility
- Other countries indicate to follow the EN ISO 52000-1 and many of the EN ISO and EN EPB standards with some exceptions;
 - where they fill in the gaps with current national values/procedures.
 - or they use ~90% of the standard by deviating outside the Annex A boundaries

Proposed EPBD requirements will encourage the use of EPB standards

- MS's shall describe their national calculation methodology following the national annexes of the overarching standards developed under mandate M/480 : **ISO 52000-1**, 52003-1 (indicators, certificates); 52010-1 (ext climate conditions);
- **52016-1**: Calculation procedures for Energy needs for heating and cooling, internal temperatures and sensible and latent head loads —
- **52018-1**: Options for Indicators for partial EPB requirements related to thermal energy balance and fabric features —
- This is not a requirement to comply with these standards.
- For the time being this requirement is not proposed for the other EPB standards.

EPB Center

- The EPB Center has been set up by REHVA and ISSO (see www.epb.center)
- EPB CENTER: a service center for information and technical support on the new set of EPB standards
- Weena 505, 3013 AL Rotterdam





Our Focus

- We focus on the EPB standards implementation at national and regional levels.
- We are dedicated to provide stakeholders and interested parties with technical support for the implementation and dissemination of information on the set of EPB standards at national and regional level.
- While providing this support we also aim to assist with formulating needs in order to further develop and improve this set of EPB standards.

Expected Benefits of the use of the of EPB standards:



- Both policy makers and the construction industry are confronted with a range of challenges and opportunities when it comes to reducing energy consumption and increasing the use of renewables.
- The construction sector has great potential to reduce the greenhouse gas emissions, in line with the climate targets as set out in the Paris climate conference (COP21) in December 2015. Clear and consistent policy targets play an important role in driving innovation in the construction sector.



The set of EPB standards “holistic” “systemic” approach

- The set of EPB standards takes into account the impact of thermal insulation, air tightness, passive and active solar energy and daylighting, heating, ventilation, cooling, hot water and lighting systems.
- Additionally the set of EPB standards includes the effect of control and automation equipment and the dynamic climatic conditions and user patterns.
- Now is the time to further implement the set on national and regional level and we are here to provide support.

We aim to provide support for a vast variety of stakeholders, including:

- Construction project managers, technical and financial services providers, contractors and subcontractor;
- Material and equipment suppliers, designers, consultants, clients and end users;
- National and local governments, public utilities;
- Energy agencies, energy service providers and inspection organizations;
- Technical research institutes and industry associations.



Expected services

- Dissemination of the modular framework of EPB standards their spreadsheets, also development of new spreadsheets and/or other tools that help making standards operational, for all professional target groups
- Creating and sustaining a network of practitioners
- FAQ, Show cases , Examples, Demonstration of use of the set of EPB standards, databases, Software tools
- Help to use the Annex A/B procedure: Answering questions on apparent conflicts between national building regulations and the EPB standard implementation
- Collecting feedback on the use of standard's to feed in the CEN and ISO TC work.
- Etc..



Public Information on several EPB standards see: www.rehva.eu and the www.EPB.center

