

Topical session: Status of the revision of EN ventilation standards supporting the EPBD recast

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Synopsis

This session will discuss the major changes of the ventilation standards supporting the implementation of the Energy Performance of Buildings Directive recast. It is foreseen that some of these standards will serve as basis of future ISO standards as well.

Context

The Energy Performance of Buildings Directive, first published in 2002 (2002/91/EC), required all EU countries to take measures to improve the energy performance of new and renovated buildings, in particular through energy regulations and energy certification schemes for buildings, as well as inspections of boilers and air-conditioners. To help member states achieve this while allowing fair comparisons of best practices and use of construction products, the European Commission issued a mandate to European standardisation bodies which resulted in the publication of a first EPBD package standards in 2007-2008.

In parallel, the European Concerted Action as well as European projects of the Intelligent Energy Europe such as IEE-CENSE and Harmonac provided feedback on the first EPBD calling for a second mandate to revise the standards to support the EPBD directive recast (2010/31/EU).

According to mandate M480, "the improved set of EPBD standards shall become a systematic, clear and comprehensive package for the benefit of professionals, Member States and relations with third countries." This new mandate work was divided into two phases:

- Phase 1 (2011-2012): This phase included:
 - Preparation of basic principles and rules, together with the member states, and based on the overall requirements & expectations on the standards
 - Development of a modularly structured overarching standard
 - Preparation of technical rules for drafting all standards. To ease the understanding and application of the standards, templates have been developed for the standard texts as well as for checking the consistency of the equations and results provided by the standards.
- Phase 2 (2012-2015): This phase deals with the actual revision of the standards in separate working groups.

With regard to ventilation, there are 7 EPBD standards under revision within CEN Technical Committee 156 (Ventilation for Buildings).

	Input parameters for energy calculations	Calculation	Inspection
Standard(s) under revision and	EN 15251 – Indoor environmental input parameters	EN 15241, EN 15242, EN 15243 These 3 standards have been	EN 15239, EN 15240 Guidelines for inspection of ventilation and air conditioning

scope	EN 13779 — Performance requirements for ventilation, air conditioning and room-conditioning systems (non-residential buildings)	re-arranged into a set of 5 standards dealing with calculation methods for energy requirements of ventilation and air-conditioning systems (generation, distribution and emission).	systems These 2 standards have been merged into a single standard dealing with ventilation and air conditioning systems, while the two aspects were divided between EN 15239 and EN 15240.
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The texts are progressively submitted to TC 156 approval and progression to public enquiry. The enquiry phase should last until spring 2015 and, after addressing comments, the new standards should be published by the end of 2015.

Session programme

The session will start with an introduction giving the overall context of the revision of the EPBD standards. Then, session will be structured around 3 presentations that will outline the major changes in the versions submitted for public enquiry.

- The second generation CEN-EPBD standards, Jaap Hogeling, Chair of CEN TC 371 "Project Committee - Energy Performance of Buildings"
- Indoor environmental parameters: revision of EN 15251, Bjarne Olesen, Convenor of CEN TC 156 / WG 19 "Joint Working Group between CEN/TC 156 and CEN/TC 371 - Revision of EN 15251;2007"
- Calculations methods: revision of EN 15241-15242-15243, Gerhard Zweifel, Convenor of TC 156 / WG 21 "Revision of calculation standards EN 15241, 15242 and 15243"
- Inspection of ventilation systems and air conditioning systems, François Rémi Carrié, Convenor of TC 156 / WG 23 "Guidelines for inspection of ventilation systems and air conditioning systems"