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BSI Standards Publication

Energy performance of buildings

Part 2: Accompanying TR prEN 15232-1:2015 — Modules M10-4,5,6,7,8,9,10

bsi.

National foreword

This British Standard is the UK implementation of CEN/TR 15232-2:2016.

The UK participation in its preparation was entrusted to Technical Committee RHE/16, Performance requirements for control systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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European foreword

This document (CEN/TR 15232-2:2015) has been prepared by Technical Committee CEN/TC 247 "Building Automation, Controls and Building Management", the secretariat of which is held by SNV.

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This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document is currently divided into the following parts:

— *Energy performance of buildings — Part 1: Impact of Building Automation, Controls and Building Management - Modules M10-4,5,6,7,8,9,10* [currently at Enquiry stage];

— *Energy performance of buildings — Part 2: Accompanying* prCEN/TR 15232-1:2015 *Modules M10-4,5,6,7,8,9,10* [the present Technical Report; currently at Voting stage].

Introduction

The CENSE project, the discussions between CEN and the Concerted action highlighted the high page count of the entire package due to a lot of “textbook” information. This resulted in flooding and confusing the normative text.

A huge amount of informative contents shall indeed be recorded and available for users to properly understand, apply and nationally adapt the EPB standards

The detailed technical rules in CEN/TS 16629, "Detailed Technical Rules" ask for a clear separation between normative and informative contents:

— to avoid flooding and confusing the actual normative part with informative content;

— to reduce the page count of the actual standard;

— to facilitate understanding of the package.

Therefore each EPB standard shall be accompanied by an informative technical report like this one, where all informative contents is collected.

Table 1 — Position of this standard within the EPB set of standards

	Over-arching	**Building (as such)**	**Technical Building System**									
Submodule	**Descriptions**	**Descriptions**	**Descriptions**	**Heating**	**Cooling**	**Ventilation**	**Humidification**	**Dehumidification**	**Domestic Hot waters**	**Lighting**	**Building automation and control**	**PV, wind, ..**
sub1	**M1**	**M2**		**M3**	**M4**	**M5**	**M6**	**M7**	**M8**	**M9**	**M10**	**M11**
1	General	General	General									
2	Common terms and definitions; symbols, units and subscripts	Building Energy Needs	Needs									
3	Application	(Free) Indoor Conditions without Systems	Maximum Load and Power									
4	Ways to Express Energy Performance	Ways to Express Energy Performance	Ways to Express Energy Performance								x	
5	Building Functions and Building Boundaries	Heat Transfer by Transmission	Emission and control								x	
6	Building Occupancy and Operating Conditions	Heat Transfer by Infiltration and Ventilation	Distribution and control								x	

	Over-arching	**Building (as such)**	**Technical Building System**									
Submodule	**Descriptions**	**Descriptions**	**Descriptions**	**Heating**	**Cooling**	**Ventilation**	**Humidification**	**Dehumidification**	**Domestic Hot waters**	**Lighting**	**Building automation and control**	**PV, wind, ..**
sub1	**M1**	**M2**		**M3**	**M4**	**M5**	**M6**	**M7**	**M8**	**M9**	**M10**	**M11**
7	Aggregation of Energy Services and Energy Carriers	Internal Heat Gains	Storage and control								x	
8	Building Partitioning	Solar Heat Gains	Generation and control								x	
9	Calculated Energy Performance	Building Dynamics (thermal mass)	Load dispatching and operating conditions								x	
10	Measured Energy Performance	Measured Energy Performance	Measured Energy Performance								x	
11	Inspection	Inspection	Inspection									
12	Ways to Express Indoor Comfort		BMS									
13	External Environment Conditions											
14	Economic Calculation											

1 Scope

This Technical Report refers to prEN 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*.

It contains information to support the correct understanding, use and national adaption of standard prEN 15232-1:2015.

This technical report does not contain any normative provision.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

prEN 12098-1:2015, *Controls for heating systems — Part 1: Control equipment for hot water heating systems - Modules M3-5,6,7,8*

prEN 12098-3:2015, *Controls for heating systems — Part 3: Control equipment for electrical heating systems - Modules M3-5,6,7,8*

prEN 12098-5:2015, *Controls for heating systems — Part 3: Control equipment for electrical heating systems — Modules M3-5,6,7,8*

EN 13779, *Ventilation for non-residential buildings - Performance requirements for ventilation and room-conditioning systems*

EN 15217, *Energy performance of buildings - Methods for expressing energy performance and for energy certification of buildings*

prEN 15232-1:2015, *Energy performance of buildings – Part 1: Impact of Building Automation, Controls and Building Management — Modules M10-4,5,6,7,8,9,10*

EN 15241:2007, *Ventilation for buildings - Calculation methods for energy losses due to ventilation and infiltration in commercial buildings*

EN 15242:2007, *Ventilation for buildings - Calculation methods for the determination of air flow rates in buildings including infiltration*

EN 15243:2007, *Ventilation for buildings - Calculation of room temperatures and of load and energy for buildings with room conditioning systems*

EN 15316-1:2007, *Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 1: General*

EN 15316-2-1:2007, *Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 2-1: Space heating emission systems*

EN 15316-2-3:2007, *Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 2-3: Space heating distribution systems*

EN 15316-3-2, *Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 3-2: Domestic hot water systems, distribution*