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Heating systems in buildings - Installation and commissioning of water based heating and cooling systems

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14336:2025 sisaldab Euroopa standardi EN 14336:2025 ingliskeelset teksti.	This Estonian standard EVS-EN 14336:2025 consists of the English text of the European standard EN 14336:2025.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 04.06.2025.	Date of Availability of the European standard is 04.06.2025.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Heating systems in buildings - Installation and commissioning of water based heating and cooling systems

Systèmes de chauffage dans les bâtiments - Installation et commissionnement des systèmes de chauffage à eau

Heizungsanlagen in Gebäuden - Installation und Abnahme der Warmwasser-Heizungsanlagen

This European Standard was approved by CEN on 21 April 2025.

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European foreword

This document (EN 14336:2025) has been prepared by Technical Committee CEN/TC 228 “Heating systems and water-based cooling systems in buildings”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2025, and conflicting national standards shall be withdrawn at the latest by December 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14336:2004.

In comparison with the previous edition EN 14336:2004, the following technical modifications have been made:

— new technologies are covered;

— inclusion of new test procedures;

— editorial organization to facilitate the use of this document within a comprehensive commissioning process.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

The subjects covered by CEN/TC 228 are the following:

— design of water-based heating and cooling systems;

— installation of heating systems;

— commissioning of heating systems;

— instructions for operation, maintenance and use of heating systems;

— methods for calculation of the design heat loss and heat loads;

— methods for calculation of the energy performance of heating systems.

Heating systems also include the effect of attached systems such as hot water production systems.

All these standards are systems standards, i.e. they are based on requirements addressed to the system as a whole and not dealing with requirements to the products within the system.

Where possible, reference is made to other European or International Standards, such as product standards. However, use of products complying with relevant product standards is no guarantee of compliance with the system requirements.

The requirements are mainly expressed as functional requirements, i.e. requirements dealing with the function of the system and not specifying shape, material, dimensions or the like.

The guidelines describe ways to meet the requirements, but other ways to fulfil the functional requirements might be used if fulfilment can be proved.

Heating systems differ among the member countries due to climate, traditions and national regulations. In some cases, requirements are given as classes so national or individual needs may be accommodated.

In cases where the standards contradict with national regulations, the latter should be followed.

Figure 1 illustrates the basic sequence of the installation and commissioning process.

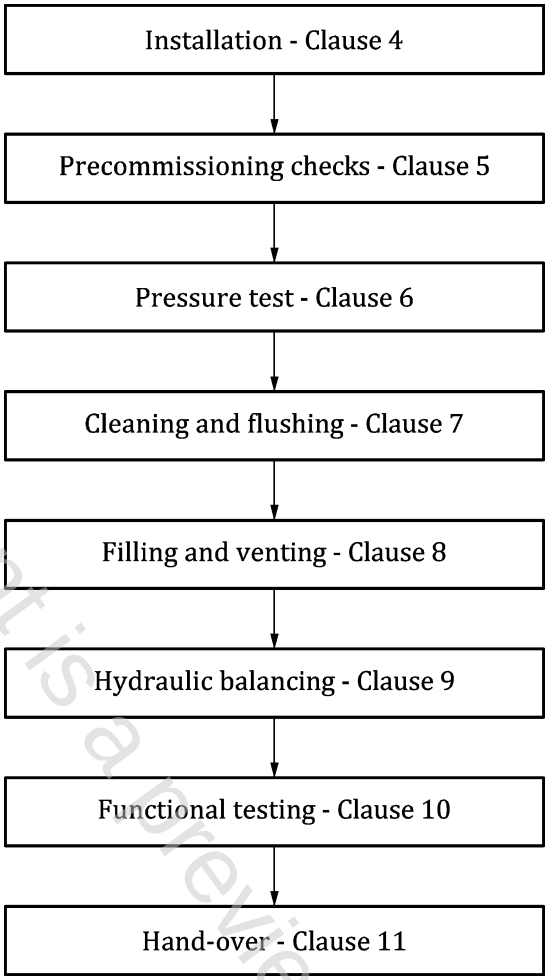

Figure 1 — Installation and commissioning process

1 Scope

This document specifies the requirements for the installation and commissioning of water-based heating, water-based cooling, and heating of domestic hot water (DHW) systems in buildings with a maximum operating temperature of 105 °C.

This document is applicable to the commissioning of systems as a whole, in cases of new systems, renovations and replacement of equipment.

This document does not apply to superheated water systems or steam systems and it does not apply to the specific commissioning requirements for individual components (e.g. how to set fuel/air ratio on a burner). Also, it does not apply to the installation or commissioning of attached systems (e.g. air conditioning, domestic hot water distribution, ventilation systems).

This document specifies only technical requirements but it does not specify any commercial or contractual arrangements between parties.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12170, *Heating systems in buildings — Procedure for the preparation of documents for operation, maintenance and use — Heating systems requiring a trained operator*

EN 12171, *Heating systems in buildings — Procedure for the preparation of documents for operation, maintenance and use — Heating systems not requiring a trained operator*

EN 61082-1, *Preparation of documents used in electrotechnology — Part 1: Rules (IEC 61082-1)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
installer
party performing the installation process

3.2
client
party for whom the installation process is performed

Note 1 to entry: In some contexts, the client may be represented by a professional during the installation and commissioning process.

3.3
commissioning
advancement of an installation from the stage when the mechanical and electrical installation work is complete to a confirmed operation-ready state according to specified requirements