

Building environment design - Design , dimensioning, installation and control of embedded radiant heating and cooling systems - Part 5: Installation (ISO 11855-5:2012)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11855-5:2015 sisaldab Euroopa standardi EN ISO 11855-5:2015 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11855-5:2015 consists of the English text of the European standard EN ISO 11855-5:2015.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.08.2015.	Date of Availability of the European standard is 05.08.2015.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 91.140.10, 91.140.30

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English Version

**Building environment design - Design , dimensioning, installation
and control of embedded radiant heating and cooling systems -
Part 5: Installation (ISO 11855-5:2012)**

Conception de l'environnement des bâtiments - Conception,
construction et fonctionnement des systèmes de chauffage
et de refroidissement par rayonnement - Partie 5:
Installation (ISO 11855-5:2012)

Umweltgerechte Gebäudeplanung - Planung, Auslegung,
Installation und Steuerung flächenintegrierter
Strahlheizungs- und -kühlsysteme - Teil 5: Installation (ISO
11855-5:2012)

This European Standard was approved by CEN on 30 July 2015.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

The text of ISO 11855-5:2012 has been prepared by Technical Committee ISO/TC 205 "Building environment design" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11855-5:2015 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 February 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

This standard is applicable for design, construction and operation of radiant heating and cooling systems. The methods defined in part 2 are intended to determine the design heating or cooling capacity used for the design and evaluation of the performance of the system.

For identifying product characteristics by testing and proving the thermal output of heating and cooling surfaces embedded in floors, ceilings and walls the standard series EN 1264 can be used.

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Endorsement notice

The text of ISO 11855-5:2012 has been approved by CEN as EN ISO 11855-5:2015 without any modification.

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Part 5: Installation

1 Scope

This part of ISO 11855 establishes guidelines on the installation of embedded radiant heating and cooling systems. It specifies uniform requirements for the design and construction of heating and cooling floors, ceiling and wall structures to ensure that the heating/cooling systems are suited to the particular application. The requirements specified by this part of ISO 11855 are applicable only to the components of the heating/cooling systems and the elements which are part of the heating/cooling surface and which are installed due to the heating/cooling systems.

This part of ISO 11855 is applicable to water-based embedded surface heating and cooling systems in residential, commercial and industrial buildings. The methods apply to systems integrated into the wall, floor or ceiling construction without any open-air gaps, but are not applicable to panel systems with open-air gaps which are not integrated into the building structure.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 10508:2006, *Plastics piping systems for hot and cold water installations — Guidance for classification and design*

ISO 11855-1, *Building environment design — Design, dimensioning, installation and control of embedded radiant heating and cooling systems — Part 1: Definition, symbols, and comfort criteria*

ISO 15874 (all parts), *Plastics piping systems for hot and cold water installations — Polypropylene (PP)*

ISO 15875 (all parts), *Plastics piping systems for hot and cold water installations — Crosslinked polyethylene (PEX)*

ISO 15876 (all parts), *Plastics piping systems for hot and cold water installations — Polybutylene (PB)*

ISO 15877 (all parts), *Plastics piping systems for hot and cold water installations — Chlorinated poly(vinyl chloride) (PVC-C)*

ISO 21003-1 (all parts), *Multilayer piping systems for hot and cold water installations inside buildings*

ISO 22391 (all parts), *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT)*

EN 1057, *Copper and copper alloys — Seamless, round copper tubes for water and gas in sanitary and heating applications*

EN 1254 (all parts), *Copper and copper alloys — Plumbing fittings*

DIN 4724, *Kunststoff-Rohrleitungssysteme für Warmwasserheizung und Heizkörperanbindung — Vernetztes Polyethylen mittlerer Dichte (PE-MDX)*