

**Water based surface embedded heating and cooling systems - Part 1: Definitions and symbols**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1264-1:2011 sisaldab Euroopa standardi EN 1264-1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 29.06.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1264-1:2011 consists of the English text of the European standard EN 1264-1:2011.

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The standard is available from Estonian standardisation organisation.

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English Version

## Water based surface embedded heating and cooling systems - Part 1: Definitions and symbols

Systèmes de surfaces chauffantes et rafraîchissantes  
hydrauliques encastrées - Partie 1: Définitions et symboles

Raumflächenintegrierte Heiz- und Kühlsysteme mit  
Wasserdurchströmung - Teil 1: Definitionen und Symbole

This European Standard was approved by CEN on 3 June 2011.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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## Foreword

This document (EN 1264-1:2011) has been prepared by Technical Committee CEN/TC 130 "Space heating appliances without integral heat sources", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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

This document supersedes EN 1264-1:1997.

The series of European Standards EN 1264 "*Water based surface embedded heating and cooling systems*" consists of the following parts:

- Part 1: Definitions and symbols;
- Part 2: Floor heating: Prove methods for the determination of the thermal output using calculation and test methods;
- Part 3: Dimensioning;
- Part 4: Installation;
- Part 5: Heating and cooling surfaces embedded in floors, ceilings and walls — Determination of the thermal output.

The main change with respect to EN 1264-1:1997 consists in the expansion of the scope over floor heating, now additionally includes ceiling and wall heating as well as cooling surfaces in floors, ceilings and walls.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard is applicable to water based surface embedded heating and cooling systems in residential, office and other buildings, the use of which corresponds to or is similar to that of residential buildings.

This European Standard applies to heating and cooling systems embedded into the enclosure surfaces of the room to be heated or to be cooled.

It also applies as appropriate to the use of other heating media instead of water.

## 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.

EN 1264-3:2009, *Water based surface embedded heating and cooling systems — Part 3: Dimensioning*

## 3 Terms and Definitions

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

### 3.1 Surface embedded heating and cooling system

#### 3.1.1

##### **surface embedded heating and cooling system**

heating or cooling installation embedded into the enclosure surfaces of the room consisting of circuits of pipes, circuit distributors, and control equipment

#### 3.1.2

##### **floor, wall, ceiling heating and cooling system**

system where pipes carrying water with or without additives as a heating or cooling medium are laid in the floor, wall or ceiling

#### 3.1.3

##### **circuit**

section of pipes connected to circuit distributor which can be independently switched and controlled

#### 3.1.4

##### **circuit distributor**

common connection point for several circuits

#### 3.1.5

##### **system components**

- insulating layer for thermal and footstep noise insulation,
- protection layer (to protect the insulating layer),
- heating/cooling pipes or plane sections,
- floor covering,
- heat diffusion devices, peripheral strips, attachment items etc.,