VEEPÕHISED PIIRDESISESED KÜTTE- JA JAHUTUSSÜSTEEMID. OSA 4: PAIGALDAMINE

Water based surface embedded heating and cooling systems - Part 4: Installation

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 1264-4:2009 sisaldab Euroopa standardi EN 1264-4:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 1264-4:2009 consists of the English text of the European standard EN 1264-4:2009.
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 02.09.2009.	Date of Availability of the European standard is 02.09.2009.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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

ICS 91.140.10

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1264-4

September 2009

ICS 91.140.10

Supersedes EN 1264-4:2001, EN 15377-2:2008

English Version

Water based surface embedded heating and cooling systems - Part 4: Installation

Systèmes de surfaces chauffantes et rafraîchissantes hydrauliques intégrées - Partie 4: Installation

Raumflächenintegrierte Heiz- und Kühlsysteme mit Wasserdurchströmung - Teil 4: Installation

This European Standard was approved by CEN on 1 August 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, 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 United Kingdom.

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

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Ref. No. EN 1264-4:2009: E

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Foreword

This document (EN 1264-4:2009) has been prepared by Technical Committee CEN/TC 130 “Space heating appliances without 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 March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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 1264-4:2001. Together with EN 1264-3:2009, this document also supersedes EN 15377-2:2008.

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 of floor heating systems 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 two main changes with respect to EN 1264-4:2001 are listed below:

a) The scope is expanded over floor heating, now additionally includes ceiling and wall heating as well as cooling surfaces in floors, ceilings and walls;

b) The content generally is attuned to the state of the technology.

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

This document specifies uniform requirements for the design and the construction of heating and cooling floor, ceiling and wall structures to ensure that the heating/cooling systems are suited to the particular application.

The requirements specified by this Standard apply only to the components of the heating/cooling systems which are part of the heating/cooling system. This document excludes all other elements which are not part of the heating/cooling system.

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 1057:2006, *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*

EN 1264-1:1997, *Water based surface embedded heating and cooling systems - Part 1: Definitions and symbols*

EN 1264-2, *Water based surface embedded heating and cooling systems - Part 2: Floor heating: Prove methods for the determination of the thermal output using calculation and test methods*

EN ISO 15874-1, *Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 1: General (ISO 15874-1:2003)*

EN ISO 15874-2, *Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 2: Pipes (ISO 15874-2:2003)*

EN ISO 15874-3, *Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 3: Fittings (ISO 15874-3:2003)*

EN ISO 15874-5, *Plastics piping systems for hot and cold water installations - Polypropylene (PP) - Part 5: Fitness for purpose of the system (ISO 15874-5:2003)*

EN ISO 15875-1, *Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 1: General (ISO 15875-1:2003)*

EN ISO 15875-2, Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 2: Pipes (ISO 15875-2:2003)

EN ISO 15875-3*, Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 3: Fittings (ISO 15875-3:2003)*

EN ISO 15875-5, *Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 5: Fitness for purpose of the system (ISO 15875-5:2003)*

EN ISO 15876-1, *Plastics piping systems for hot and cold water installations - Polybutylene (PB) - Part 1: General (ISO 15876-1:2003)*

EN ISO 15876-2, *Plastics piping systems for hot and cold water installations - Polybutylene (PB) - Part 2: Pipes (ISO 15876-2:2003)*

EN ISO 15876-3, *Plastics piping systems for hot and cold water installations - Polybutylene (PB) - Part 3: Fittings (ISO 15876-3:2003)*

EN ISO 15876-5, *Plastics piping systems for hot and cold water installations - Polybutylene (PB) - Part 5: Fitness for purpose of the system (ISO 15876-5:2003)*

EN ISO 15877-1, *Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 1: General (ISO 15877-1:2003)*

EN ISO 15877-2, *Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 2: Pipes (ISO 15877-2:2003)*

EN ISO 15877-3, *Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 3: Fittings (ISO 15877-3:2003)*

EN ISO 15877-5, *Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 5: Fitness for purpose of the system (ISO 15877-5:2003)*

EN ISO 21003-1, *Multilayer piping systems for hot and cold water installations inside buildings - Part 1: General (ISO 21003-1:2008)*

EN ISO 21003-2, *Multilayer piping systems for hot and cold water installations inside buildings - Part 2: Pipes (ISO 21003-2:2008)*

EN ISO 21003-3, *Multilayer piping systems for hot and cold water installations inside buildings - Part 3: Fittings (ISO 21003-3:2008)*

EN ISO 21003-5, *Multilayer piping systems for hot and cold water installations inside buildings - Part 5: Fitness for purpose of the system (ISO 21003-5:2008)*

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

ISO 22391-1, *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) — Part 1: General*

ISO 22391-2, *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) — Part 2: Pipes*

ISO 22391-3, *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) — Part 3: Fittings*

ISO 22391-5, *Plastics piping systems for hot and cold water installations — Polyethylene of raised temperature resistance (PE-RT) — Part 5: Fitness for purpose of the system*

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

3 Terms, definitions and symbols

For the purposes of this document, the terms, definitions, and symbols given in EN 1264-1:1997 apply.