

Voľne visiace vykurovacie a chladiace povrchy s prietokom vody s teplotou do 120 °C. Časť 1: Prefabrikované stropné sálavé panely na vykurovanie. Technické špecifikácie a požiadavky.

STN EN 14037-1

06 1115

Free hanging heating and cooling surfaces for water with a temperature below 120C - Part 1: Pre-fabricated ceiling mounted radiant panels for space heating - Technical specifications and requirements

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/16

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## **English Version**

Free hanging heating and cooling surfaces for water with a temperature below 120°C - Part 1: Pre-fabricated ceiling mounted radiant panels for space heating - Technical specifications and requirements

Panneaux rayonnants de chauffage et de rafraîchissement alimentés avec une eau à une température inférieure à 120 °C - Partie 1 : Panneaux rayonnants de plafond préfabriqués destinés au chauffage des locaux - Spécifications techniques et exigences

An der Decke frei abgehängte Heiz- und Kühlflächen für Wasser mit einer Temperatur unter 120 °C - Teil 1: Vorgefertigte Deckenstrahlplatten zur Raumheizung - Technische Spezifikationen und Anforderungen

This European Standard was approved by CEN on 19 March 2016.

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

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# **European foreword**

This document (EN 14037-1:2016) 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 document supersedes EN 14037-1:2003.

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of an identical text or by endorsement, at the latest by March 2017, and conflicting national standards shall be withdrawn at the latest by June 2018.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports basic work requirements of Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

The main changes are:

- the title has been changed,
- the introduction has been changed,
- the scope has been changed,
- new definitions have been added.
- the Annex ZA has been adapted.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

This European Standard results from the recognition, that heated and chilled ceiling radiant panels falling into the field of application hereinafter stated are traded on the basis of their thermal output. For evaluating and comparing different heated and chilled ceiling surfaces it is therefore necessary to refer to a heating stipulated value.

As installations with ceiling mounted radiant panels can also be used in practice for space cooling, it is necessary to have a test method for evaluating the cooling capacity. Installations with different free hanging heating and cooling surfaces need, for the use of space heating a test method for evaluating the heating output. The test method differs from the method for ceiling mounted radiant panels.

The European Standard EN 14037, *Free hanging heating and cooling surfaces for water with a temperature below 120°C*, consists of the following parts:

- Part 1: Pre-fabricated ceiling mounted radiant panels for space heating Technical specifications and requirements;
- Part 2: Pre-fabricated ceiling mounted radiant panels for space heating Test method for thermal output;
- Part 3: Pre-fabricated ceiling mounted radiant panels for space heating Rating method and evaluation of radiant thermal output;
- Part 4: Pre-fabricated ceiling mounted radiant panels for space heating Test method for cooling capacity;
- Part 5: Open or closed heated ceiling surfaces Test method for thermal output.

# 1 Scope

This European Standard defines technical specifications and requirements of free hanging pre-fabricated ceiling mounted radiant panels with an air gap between construction and the emitter (not embedded) fed with water at temperatures below 120 °C connected with a centralized heating supply source intended to be installed in buildings.

The panels should be installed with an upper insulation.

The European Standard does not apply to independent heating devices.

The European Standard also defines the additional common data that the manufacturer has to provide to the trade in order to ensure the correct application of the products.

This European standard does not cover the performance of hanging accessories.

#### 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.

EN 13501-1, Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests

EN 14037-2:2016, Free hanging heating and cooling surfaces for water with a temperature below 120°C – Part 2: Pre-fabricated ceiling mounted radiant panels for space heating - Test method for thermal output

EN 14037-3:2016, Free hanging heating and cooling surfaces for water with a temperature below  $120^{\circ}\text{C}$  - Part 3: Pre-fabricated ceiling mounted radiant panels for space heating - Rating method and evaluation of radiant thermal output

EN ISO 2409, Paints and varnishes - Cross-cut test (ISO 2409)

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