Irish Standard
I.S. EN 442-1:2014

Radiators and convectors - Part 1: Technical specifications and requirements

I.S. EN 442-1:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

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English Version

Radiators and convectors - Part 1: Technical specifications and requirements

Radiateurs et convecteurs - Partie 1 : Spécifications et exigences techniques

Radiatoren und Konvektoren - Teil 1: Technische Spezifikationen und Anforderungen

This European Standard was approved by CEN on 11 October 2014.

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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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Foreword

This document (EN 442-1:2014) 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of an identical text or by endorsement, at the latest by June 2015, and conflicting national standards shall be withdrawn at the latest by September 2016.

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 442-1:1995 and EN 442-3:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports basic works requirements of EU Regulation No 305/2011, of the European Parliament and the Council of 8 March 2011.

For relationship with the EU Regulation, see informative Annex ZA, which is an integral part of this document.

This European Standard, *Radiators and convectors*, consists of the following parts:

— *Part 1: Technical specifications and requirements* [the present document];

— *Part 2: Test methods and rating*.

The most significant changes that have been made in this new edition of EN 442-1 are the following ones:

— the standard has been revised to be in line with EU Regulation N° 305/2011;

— tubular radiators, finned tube convectors and skirting convectors have been included;

— the declaration of the standard low temperature thermal output at ΔT 30 K has been added.

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, 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.

1 Scope

This European Standard defines the technical specifications and requirements of radiators and convectors to be installed in heating systems in buildings including assessment and verification of constancy of performance.

This European Standard deals with radiators and convectors installed in a permanent manner in construction works, fed with water or steam at temperatures below 120 °C, supplied by a remote energy source.

This European Standard does not apply to independent heating appliances.

This European Standard also defines the additional common data that the manufacturer shall provide with the product in order to ensure the correct application of the products.

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 442-2:2014, *Radiators and convectors — Part 2: Test methods and rating*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 10130, *Cold rolled low carbon steel flat products for cold forming — Technical delivery conditions*

EN 10131, *Cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming — Tolerances on dimensions and shape*

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

EN ISO 2409:2013, *Paints and varnishes — Cross-cut test (ISO 2409:2013)*

ISO 185, *Grey cast irons — Classification*

3 Terms and definitions

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

NOTE For symbols and units refer to EN 442–2.

3.1
heating appliance
device which has the purpose of transferring heat in order to provide specific temperature conditions inside buildings

3.2
independent heating appliance
self-contained heating appliance which does not need to be connected to a remote energy source (e.g. a boiler) as it contains its own energy source (e.g. gas fired appliances, electric appliances, air to air heat pump appliances)