### Bibliographie

IEC 60675, Appareils électrodomestiques de chauffage des locaux à action directe – Méthodes de mesure de l'aptitude à la fonction

RÈGLEMENT (UE) 2015/1188 DE LA COMMISSION du 28 avril 2015 portant application de la directive 2009/125/CE du Parlement européen et du Conseil en ce qui concerne les exigences d'écoconception applicables aux dispositifs de chauffage décentralisés

ASHRAE Standard 55 - 2017, *Thermal Environmental Conditions for Human Occupancy* (disponible en anglais seulement)





Edition 1.1 2021-10 CONSOLIDATED VERSION

## **FINAL VERSION**

## **VERSION FINALE**

Electric room heating – Underfloor heating – Performance characteristics – Definitions, method of testing, sizing and formula symbols

Chauffage électrique de locaux – Chauffage par le sol – Caractéristiques de performance – Définitions, méthode d'essai, calibrage et symboles de formule



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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

# ELECTRIC ROOM HEATING – UNDERFLOOR HEATING – PERFORMANCE CHARACTERISTICS – DEFINITIONS, METHOD OF TESTING, SIZING AND FORMULA SYMBOLS

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This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

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The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under <a href="webstore.iec.ch">webstore.iec.ch</a> in the data related to the specific publication. At this date, the publication will be

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- amended.

# ELECTRIC ROOM HEATING – UNDERFLOOR HEATING – PERFORMANCE CHARACTERISTICS – DEFINITIONS, METHOD OF TESTING, SIZING AND FORMULA SYMBOLS

#### 1 Scope

This International Standard applies to electrical underfloor heating of dwellings and all other buildings whose use corresponds to dwellings or is at least similar, having a maximum load bearing in use of  $4 \text{ kN/m}^2$ .

This Standard defines the main characteristics of electrical underfloor heating and establishes the method of testing of these characteristics as information for the user.

This Standard does not deal with:

installation and safety requirements.

Annexes D and E are added for information purposes about performance testing according to the European Commission Regulation (EU) 2015/1188.

#### 2 Normative references

IEC 60335-2-96, Household and similar electrical appliances – Safety – Part 2-96: Particular requirements for flexible sheet heating elements for room heating

#### 3 Terms and definitions

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

#### 3.1

#### electrical underfloor heating system

electrical underfloor heating, switching, control and regulation appliances and electrical installation

#### 3.1.1

#### underfloor heating

in situ flooring constructed as an electrical underfloor heating system

Note 1 to entry: It is generally laid on a dry, level, load-bearing substructure.

#### 3.1.2

#### underfloor direct heating

underfloor direct heating, by which the heat generated from electrical energy is transferred with the least possible time lag to the room to be heated mainly via the surface of the floor

Note 1 to entry: There is no restriction on the amount of time electrical energy can be converted into heat.

#### 3.1.3

#### underfloor warming

underfloor warming increases comfort by means of pleasant warmth on the feet

Note 1 to entry: It is not necessary to calculate the heat load of the room, and the insulating layers as the underfloor warming are not considered when calculating the heat load of the room.

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