



NSAI
Standards

Irish Standard
I.S. EN 16855-1:2017

Walk-in cold rooms - Definition, thermal insulation performance and test methods - Part 1: Prefabricated cold room kits

I.S. EN 16855-1:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

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EUROPEAN STANDARD

EN 16855-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Walk-in cold rooms - Definition, thermal insulation performance and test methods - Part 1: Prefabricated cold room kits

Chambres froides - Définition, performances
d'isolation thermique et méthodes d'essai - Partie 1 :
Kits de chambres froides préfabriquées

Begehbare Kühlräume - Begriffe, Wärmedämmleistung
und Prüfverfahren - Teil 1: Fertigbauteile für
Kühlräume

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EN 16855-1:2017 (E)

European foreword

This document (EN 16855-1:2017) has been prepared by Technical Committee CEN/TC 44 “Commercial and Professional Refrigerating Appliances and Systems”, 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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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Introduction

The drafting of this European Standard was driven by the necessity to compare the systems placed on the market on the base of the minimum thermal insulation requirements and to establish the average level of energy consumption for a future minimum energy performance standard definition, with reference to the EU policy on increasing energy efficiency of energy related products (Directive 2009/125/EC) in the frame of the EU “20-20-20” targets. It also aims to identify the reference standards for calculation, measurement of insulation properties, to identify the best practice rules for elimination of thermal bridges, assembly techniques and provisions to be taken in order to ensure the best level of insulation and power consumption.

EN 16855-1:2017 (E)

1 Scope

This European Standard applies to prefabricated walk-in cold room kits and components. It provides test or calculation methods to assess thermal insulation performances under normal end-use conditions.

Performance characteristics of walk-in cold rooms are to be assessed in terms of thermal insulating properties, in order to give a basis on which assessing energy consumption related properties of walk-in cold rooms, and of their components.

Performance characteristics are to be assessed for every single component of the walk-in cold room, and for the assembled walk-in cold room as a whole.

The normal end-use conditions of a walk-in cold room are considered to be:

- installation inside an existing building;
- not exposed to external weather conditions.

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 12667:2001, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Products of high and medium thermal resistance*

EN 12939, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Thick products of high and medium thermal resistance*

EN 13162, *Thermal insulation products for buildings - Factory made mineral wool (MW) products - Specification*

EN 13163, *Thermal insulation products for buildings - Factory made expanded polystyrene (EPS) products - Specification*

EN 13164, *Thermal insulation products for buildings - Factory made extruded polystyrene foam (XPS) products - Specification*

EN 13165, *Thermal insulation products for buildings - Factory made rigid polyurethane foam (PU) products - Specification*

EN 13166, *Thermal insulation products for buildings - Factory made phenolic foam (PF) products - Specification*

EN 13167, *Thermal insulation products for buildings - Factory made cellular glass (CG) products - Specification*

EN 14509:2013, *Self-supporting double skin metal faced insulating panels - Factory made products - Specifications*

EN ISO 6946, *Building components and building elements - Thermal resistance and thermal transmittance - Calculation method (ISO 6946)*

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