Irish Standard
I.S. EN 16883:2017

Conservation of cultural heritage - Guidelines for improving the energy performance of historic buildings

I.S. EN 16883:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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This document is based on:	*Published:*
EN 16883:2017	2017-05-17

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2017-06-04	91.120.10 97.195 NOTE: If blank see CEN/CENELEC cover page

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National Foreword

I.S. EN 16883:2017 is the adopted Irish version of the European Document EN 16883:2017, Conservation of cultural heritage - Guidelines for improving the energy performance of historic buildings

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16883

May 2017

ICS 91.120.10; 97.195

English Version

Conservation of cultural heritage - Guidelines for improving the energy performance of historic buildings

Conservation du patrimoine culturel - Principes directeurs pour l'amélioration de la performance énergétique des bâtiments d'intérêt patrimonial

Erhaltung des kulturellen Erbes - Leitlinien für die Verbesserung der energiebezogenen Leistung historischer Gebäude

This European Standard was approved by CEN on 20 February 2017.

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Ref. No. EN 16883:2017 E

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European foreword

This document (EN 16883:2017) has been prepared by Technical Committee CEN/TC 346 “Conservation of Cultural Heritage”, 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of an identical text or by endorsement, at the latest by November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Introduction

The European building stock represents an important cultural and material resource. Some buildings are of heritage significance due to their historical, architectural or cultural values; this standard refers to them as historic buildings. Due to climate change and associated political goals, the need to reduce greenhouse gas emissions (mainly CO_2) associated with energy use in buildings is evident. A challenge is to reduce energy demand and greenhouse gas emissions without unacceptable effects on the heritage significance of the existing built environment. This aspect distinguishes working with historic buildings from working with the building stock in general. Appropriate procedures are needed to improve energy performance in historic buildings. This European Standard provides guidelines for such a procedure. It complements existing standards on energy performance for the building stock in general by focusing on aspects particular to historic buildings and showing how existing standards can be applied appropriately.

Historic buildings are material manifestations of immovable tangible cultural heritage. They are of heritage significance to present and future generations. Heritage significance is a combination of all heritage values assigned to a building and its setting. Heritage values can be of an aesthetic, historic, scientific, cultural, social or spiritual nature, which can include architectural, artistic, economic, social, symbolic, technological and material aspects. Historic buildings in the sense of this standard do not necessarily have to be statutorily designated as cultural heritage.

This European Standard is designed to be used by building owners, authorities and professionals involved in the conservation and refurbishment of historic buildings. The standard aims at facilitating the sustainable management of these buildings by integrating measures for energy performance improvements and reduction of greenhouse gas emissions with the adequate conservation of the buildings. Generally, the guidelines will be applicable to a wide range of buildings where special considerations are needed in order to find a sustainable balance between the use of the building, its energy performance and its conservation.

This European Standard should assist users in applying existing standards in the field of energy efficiency to the special conditions of historic buildings. It presents a systematic approach, or procedure, to facilitate the best decision in each individual case. This standard does not presuppose that all historic buildings need energy performance improvements.

1 Scope

This European Standard provides guidelines for sustainably improving the energy performance of historic buildings, e.g. historically, architecturally or culturally valuable buildings, while respecting their heritage significance. The use of this standard is not limited to buildings with statutory heritage designation, it applies to historic buildings of all types and ages.

This European Standard presents a normative working procedure for selecting measures to improve energy performance, based on an investigation, analysis and documentation of the building including its heritage significance. The procedure assesses the impact of those measures in relation to preserving the character-defining elements of the building.

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 15603, *Energy performance of buildings - Overall energy use and definition of energy ratings*

EN 16096, *Conservation of cultural property - Condition survey and report of built cultural heritage*

EN 16247-2, *Energy audits - Part 2: Buildings*

3 Terms and definitions

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

3.1 Terms related to buildings

3.1.1
alteration
change in *condition*, beneficial or not, intentional or not

[SOURCE: EN 15898:2011, 3.2.4]

3.1.2
building
construction as a whole, including its *building envelope* and all *technical building systems*, for which energy is used to condition the indoor climate, to provide domestic hot water and illumination and other services related to the use of the *building*

Note 1 to entry: The term can refer to the building as a whole or to parts thereof that have been designed or altered to be used separately.

[SOURCE: CEN/TR 15615:2008]

3.1.3
building element
major functional part of a *building*

EXAMPLE Foundation, floor, roof, heating system.

[SOURCE: ISO 6707-1:2014, 5.5.4, modified – Deleted “services” and added “heating system” in example]