



BSI Standards Publication

Glass in building — Determination of thermal transmittance (U value) — Heat flow meter method

National foreword

This British Standard is the UK implementation of EN 675:2011. It supersedes BS EN 675:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/520/4, Properties and glazing methods.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Glass in building - Determination of thermal transmittance (U value) - Heat flow meter method

Verre dans la construction - Détermination du coefficient de transmission thermique, U - Méthode du fluxmètre

Glas im Bauwesen - Bestimmung des Wärmedurchgangskoeffizienten (U-Wert) - Wärmestrommesser-Verfahren

This European Standard was approved by CEN on 12 May 2011.

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Foreword

This document (EN 675:2011) has been prepared by Technical Committee CEN/TC 129 “Glass in building”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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 675:1997.

The main change in this edition is that the internal and external heat transfer coefficients have been amended slightly to reflect changes to EN 673. Clarification is also given in the scope that the procedure specified in this European Standard should generally only be considered when the calculation method detailed in EN 673 is inappropriate or unsuitable.

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

Introduction

CEN/TC 129/WG 9 "Light and energy transmission, thermal insulation" prepared a working draft based on the document ISO/DIS 10293 "Glass in building - Determination of steady-state U values (thermal transmittance) of multiple glazing - Heat flow meter method", document that was prepared by ISO/TC 160, "Glass in building". This was published in 1997 as EN 675.

The document for the calculation of the overall U value of windows, doors and shutters (see [2]) gives normative reference to the U value evaluated for the glazing components according to this standard.

For the purposes of product comparison, a vertical position of the glazing is specified (see Clause 10).

U values evaluated according to the present standard are used for product comparison as well as for other purposes, in particular for predicting:

- heat loss through glazing;
- conduction heat gains in summer;
- condensation on glazing surfaces;
- the effects of the absorbed solar radiation in determining the solar factor (see [1]).

Reference should be made to [2], [3], [4] or other European Standards dealing with heat loss calculations for the application of glazing U values determined by this Standard.