Thermal performance of windows, doors and shutters— Determination of thermal transmittance by hot box method—

Part 4: Roller shutter boxes

The European Standard EN 12412-4:2003 has the status of a British Standard

ICS 91.060.50



National foreword

This British Standard is the official English language version of EN 12412-4:2003.

The UK participation in its preparation was entrusted by Technical Committee B/540, Energy performance of materials, components and buildings, to Subcommittee B/540/1, European Standards for thermal insulation, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

This British Standard, was published under the authority of the Standards Policy and Strategy Committee on 19 August 2003

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 37 and a back cover.

The BSI copyright notice displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No. Date Comments

ISBN 0 580 42480 4

 \odot BSI 19 August 2003

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 12412-4

July 2003

ICS 91.060.50

English version

Thermal performance of windows, doors and shutters Determination of thermal transmittance by hot box method - Part 4: Roller shutter boxes

Performance thermique des fenêtres, portes et fermetures -Détermination du coefficient de transmission thermique par la méthode de la boîte chaude - Partie 4: Coffres de volets roulants Wärmetechnisches Verhalten von Fenstern, Türen und Abschlüssen - Bestimmung des Wärmedurchgangskoeffizienten mittels des Heizkastenverfahrens - Teil 4: Rolladenkästen

This European Standard was approved by CEN on 2 May 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2003 CEN

All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 12412-4:2003 E

This is a preview. Click here to purchase the full publication.

Contents

rorewo	ora	3
Introdu	uction	4
1	Scope	4
2	Normative references	4
3	Terms, definitions, symbols, units and subscripts	5
4	Principle	
5 5.1 5.2 5.3 5.4 5.5 5.6	Requirements for test specimen and apparatus General Surround panels Specimen requirements and location Calibration panels Temperature measurement and baffle position Air flow measurements	6 6 6
6 6.1 6.2 6.2.1 6.2.2 6.2.3 6.2.4 6.3	Test procedure General Calibration measurements General Total surface resistance Surface resistance and surface coefficients of heat transfer Surround panel and edge corrections Measurement procedure for test specimens	9 9 10
7	Test report	16
Annex A.1 A.2 A.3 A.4	A (normative) Determination of the environmental temperature General Environmental temperature Mean radiant temperature Convective surface heat transfer coefficient	17 18 18
Annex	B (normative) Linear thermal transmittance of the edge zone	21
Annex C.1 C.2	C (informative) Example of calibration test and measurement of the shutter box specimen	27