This is a free page sample. Access the full version online.



Irish Standard I.S. EN 1602:2013

# Thermal insulating products for building applications - Determination of the apparent density

© CEN 2013

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/corrigenda/National Annexes issued since publication:

## The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> EN 1602:1996				
<i>This document is based on</i> EN 1602:2013 EN 1602:1996	<i>: Published:</i> 5 April, 2013 8 August, 1997			
This document was publis under the authority of the and comes into effect on: 5 April, 2013			<u>ICS number:</u> 91.100.60	
<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W <b>NSAI.ie</b>	<b>Sales:</b> T +353 1 857 6730 F +353 1 857 6729 W standards.ie		
Údarás um Chaighdeáin Náisiúnta na hÉireann				

# EUROPEAN STANDARD

### EN 1602

# NORME EUROPÉENNE

EUROPÄISCHE NORM

ICS 91.100.60

March 2013

Supersedes EN 1602:1996

**English Version** 

#### Thermal insulating products for building applications -Determination of the apparent density

Produits isolants thermiques destinés aux applications du bâtiment - Détermination de la masse volumique apparente

Wärmedämmstoffe für das Bauwesen - Bestimmung der Rohdichte

This European Standard was approved by CEN on 15 December 2012.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

#### Contents

Forewo	ord	.3
1	Scope	.5
2	Normative references	5
3	Terms and definitions	5
4	Principle	5
5	Apparatus	5
6	Test specimens	5
7	Procedure	6
8	Calculation and expression of results	.7
9	Accuracy of measurement	.7
10	Test report	.7

#### Foreword

This document (EN 1602:2013) has been prepared by Technical Committee CEN/TC 88 "Thermal insulating materials and products", the secretariat of which is held by DIN.

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 September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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 1602:1996.

The revision of this standard contains no major changes, only minor corrections and clarifications of an editorial nature.

This European Standard is one of a series of standards which specify test methods for determining dimensions and properties of thermal insulating materials and products. It supports a series of product standards for thermal insulating materials and products which derive from the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (Directive 89/106/EEC) through the consideration of the essential requirements.

This European Standard has been drafted for applications in building, but it may also be used in other areas where it is relevant.

This European test standard is one of the following group of interrelated standards on test methods for determining dimensions and properties of thermal insulation materials and products, all of which fall within the scope of CEN/TC 88:

- EN 822, Thermal insulating products for building applications Determination of length and width
- EN 823, Thermal insulating products for building applications Determination of thickness
- EN 824, Thermal insulating products for building applications Determination of squareness
- EN 825, Thermal insulating products for building applications Determination of flatness
- EN 826, Thermal insulating products for building applications Determination of compression behaviour
- EN 1602, Thermal insulating products for building applications Determination of the apparent density
- EN 1603, Thermal insulating products for building applications Determination of dimensional stability under constant normal laboratory conditions (23 °C/50 % relative humidity)
- EN 1604, Thermal insulating products for building applications Determination of dimensional stability under specified temperature and humidity conditions
- EN 1605, Thermal insulating products for building applications Determination of deformation under specified compressive load and temperature conditions
- EN 1606, Thermal insulating products for building applications Determination of compressive creep

- EN 1607, Thermal insulating products for building applications Determination of tensile strength perpendicular to faces
- EN 1608, Thermal insulating products for building applications Determination of tensile strength parallel to faces
- EN 1609, Thermal insulating products for building applications Determination of short-term water absorption by partial immersion
- EN 12085, Thermal insulating products for building applications Determination of linear dimensions of test specimens
- EN 12086, Thermal insulating products for building applications Determination of water vapour transmission properties
- EN 12087, Thermal insulating products for building applications Determination of long-term water absorption by immersion
- EN 12088, Thermal insulating products for building applications Determination of long-term water absorption by diffusion
- EN 12089, Thermal insulating products for building applications Determination of bending behaviour
- EN 12090, Thermal insulating products for building applications Determination of shear behaviour
- EN 12091, Thermal insulating products for building applications Determination of freeze-thaw resistance
- EN 12429, Thermal insulating products for building applications Conditioning to moisture equilibrium under specified temperature and humidity conditions
- EN 12430, Thermal insulating products for building applications Determination of behaviour under point load
- EN 12431, Thermal insulating products for building applications Determination of thickness for floating floor insulating products
- EN 13793, Thermal insulating products for building applications Determination of behaviour under cyclic loading
- EN 13820, Thermal insulating materials for building applications Determination of organic content

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



This is a free preview. Purchase the entire publication at the link below:

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation