BS EN 1279-4:2018

BSI Standards Publication

Glass in Building – Insulating Glass Units

Part 4: Methods of test for the physical attributes of edge seal components and inserts

bsi.

National foreword

This British Standard is the UK implementation of EN 1279-4:2018. It supersedes BS EN 1279-4:2002, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/520, Glass and glazing in building.

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

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

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English Version

Glass in Building - Insulating Glass Units - Part 4: Methods of test for the physical attributes of edge seal components and inserts

Verre dans la construction - Vitrage isolant préfabriqué scellé - Partie 4 : Méthodes d'essai des propriétés physiques des composants et inserts

Glas im Bauwesen - Mehrscheiben-Isolierglas - Teil 4: Verfahren zur Prüfung der physikalischen Eigenschaften der Komponenten des Randverbundes und der Einbauten

This European Standard was approved by CEN on 9 March 2018.

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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.

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European foreword

This document (EN 1279-4:2018) 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of an identical text or by endorsement, at the latest by January 2019 and conflicting national standards shall be withdrawn at the latest by January 2019.

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.

This document supersedes EN 1279 4:2002.

The main changes compared to the previous edition are:

a) The standard has been fully technically and editorially revised;

b) The scope has been changed;

c) Terms and definitions have been transferred to EN 1279-1:2018;

d) For sealants physicochemical characterization have been added and requirements were changed;

e) For desiccants in bulk physicochemical characterization, test methods and requirements have been added;

f) For polymeric matrices incorporating desiccant and inserts requirements have been added;

g) Annexes have been renumbered;

h) Annex A has been technically revised

i) Annex C: Fogging test was transferred from EN 1279-6, Annex C and test temperature was modified;

j) Annex D: description of the method to determine GPR has been revised;

k) Annexes E, G, J are new;

l) Annex F: Karl-Fischer-Determination was transferred from EN 1279-2, Annex C;

m) Annex H: Volatile test was transferred from EN 1279-6, Annex G;

n) Former Annex B: Edge seal strength comparison was transferred to EN 1279-1:2018, Annex E;

o) Former Annex E: Informative tests were deleted.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

EN 1279, *Glass in Building - Insulating glass units* consists of the following parts:

— *Part 1: Generalities, system description, rules for substitution, tolerances and visual quality;*

— *Part 2: Long term test method and requirements for moisture penetration;*

— *Part 3: Long term test method and requirements for gas leakage rate and for gas concentration tolerances;*

— *Part 4: Methods of test for the physical attributes of edge seal components and inserts;*

— *Part 5: Product standard;*

— *Part 6: Factory production control and periodic tests.*

These parts are inextricably bound up with each other.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the requirements and describes the test methods for edge seal components and inserts. This includes the identification, the determination of physical attributes and the evaluation of characteristics for use in substitution rules in accordance with EN 1279-1:2018.

For the purpose to demonstrate that edge seal components will allow the insulating glass unit to conform to the requirements given in EN 1279-1:2018, Clause 6, EN 1279-2:2018 and EN 1279-3:2018 also apply.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 410, *Glass in building — Determination of luminous and solar characteristics of glazing*

EN 1279-1:2018, *Glass in building — Insulating glass units — Part 1: Generalities, system description, rules for substitution, tolerances and visual quality*

EN 1279-2:2018, *Glass in building — Insulating glass units — Part 2: Long term test method and requirements for moisture penetration*

EN 1279-3:2018, *Glass in building — Insulating glass units — Part 3: Long term test method and requirements for gas leakage rate and for gas concentration tolerances*

EN 1279-6:2018, *Glass in building — Insulating glass units — Part 6: Factory production control and periodic tests*

EN 13022-1, *Glass in building - Structural sealant glazing - Part 1: Glass products for structural sealant glazing systems for supported and unsupported monolithic and multiple glazing*

EN ISO 1183-1, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pyknometer method and titration method (ISO 1183-1)*

EN ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines - Calibration and verification of the force-measuring system (ISO 7500-1)*

EN ISO 10563, *Buildings and civil engineering works — Sealants — Determination of change in mass and volume (ISO 10563)*

EN ISO 11358-1:2014, *Plastics — Thermogravimetry (TG) of polymers — Part 1: General principles (ISO 11358-1:2014)*

ISO 5893, *Rubber and plastics test equipment — Tensile, flexural and compression types (constant rate of traverse) — Specification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1279-1:2018 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp