

# Glass in building — Determination of the bending strength of glass —

## Part 5: Coaxial double ring test on flat specimens with small test surface areas

The European Standard EN 1288-5:2000 has the status of a  
British Standard

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# National foreword

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The UK participation in its preparation was entrusted by Technical Committee B/520, Glass and glazing in building, to Subcommittee B/520/4, Properties and glazing methods, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible 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.

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## Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 15 and a back cover.

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English version

Glass in building - Determination of the bending strength of  
glass - Part 5: Coaxial double ring test on flat specimens with  
small test surface areas

Verre dans la construction - Détermination de la résistance  
du verre à la flexion - Partie 5: Essais avec doubles  
anneaux concentriques sur éprouvettes planes, avec de  
petites surfaces de sollicitation

Glas im Bauwesen - Bestimmung der Biegefestigkeit von  
Glas - Teil 5: Doppelring-Biegeversuch an plattenförmigen  
Proben mit kleinen Prüfflächen

This European Standard was approved by CEN on 5 September 1999.

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 Central Secretariat 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 Central Secretariat 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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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| <b>Contents</b>                                    | <b>Page</b> |
|----------------------------------------------------|-------------|
| <b>Foreword</b> .....                              | <b>3</b>    |
| <b>1 Scope</b> .....                               | <b>4</b>    |
| <b>2 Normative references</b> .....                | <b>4</b>    |
| <b>3 Definitions</b> .....                         | <b>4</b>    |
| <b>4 Symbols</b> .....                             | <b>4</b>    |
| <b>5 Principle of test method</b> .....            | <b>5</b>    |
| <b>6 Apparatus</b> .....                           | <b>7</b>    |
| 6.1 Testing machine .....                          | 7           |
| 6.2 Loading device .....                           | 7           |
| 6.3 Measuring instruments .....                    | 9           |
| <b>7 Sample</b> .....                              | <b>9</b>    |
| 7.1 Shape and dimensions of specimens .....        | 9           |
| 7.2 Sampling and preparation of specimens .....    | 10          |
| 7.3 Number of specimens .....                      | 11          |
| <b>8 Procedure</b> .....                           | <b>11</b>   |
| 8.1 Temperature .....                              | 11          |
| 8.2 Humidity .....                                 | 11          |
| 8.3 Thickness measurement .....                    | 11          |
| 8.4 Base plate .....                               | 11          |
| 8.5 Positioning of specimen and loading ring ..... | 12          |
| 8.6 Load application .....                         | 12          |
| 8.7 Location of the origin .....                   | 12          |
| 8.8 Assessment of residual stresses .....          | 12          |
| <b>9 Evaluation</b> .....                          | <b>13</b>   |
| 9.1 Limitation of the evaluation .....             | 13          |
| 9.2 Calculation of bending strength .....          | 13          |
| <b>10 Test report</b> .....                        | <b>13</b>   |
| <b>Annex A (informative) Bibliography</b> .....    | <b>15</b>   |

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 129, Glass in building, the Secretariat of which is held by IBN.

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 2000, and conflicting national standards shall be withdrawn at the latest by December 2000.

CEN/TC 129/WG8, Mechanical Strength, prepared the draft, Glass in building - Determination of the bending strength of glass - Part 5: Coaxial double ring test on flat specimens with small test surface areas.

There are four other parts to this standard:

- Part 1: Fundamentals of testing glass;
- Part 2: Coaxial double ring test on flat specimens with large test surface areas;
- Part 3: Test with specimen supported at two points (four point bending);
- Part 4: Testing of channel shaped glass.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a method for determining the comparative bending strength of glass for use in buildings, excluding the effects of the edges.

NOTE: See 5.1.4 in EN 1288-1 for an explanation as to why this test method should only be used for comparing the strength of types of glass, and not for assessing strength for design purposes.

The limitations of this standard are described in EN 1288-1.

EN 1288-1 should be read in conjunction with this standard.

This test is not suitable for patterned glass.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- EN 1288-1 Glass in building - Determination of the bending strength of glass - Part 1: Fundamentals of testing glass.
- EN 572-1 Glass in building - Basic soda lime silicate glass products - Part 1: Definitions and general physical and mechanical properties.
- ISO 48 Rubber, vulcanised or thermoplastic - Determination of hardness (hardness between 10 IRHD and 100 IRHD).

## 3 Definitions

For the purposes of this standard, the following definition applies.

**3.1 bending stress:** the tensile bending stress induced in the surface of a specimen

NOTE: For testing purposes, the bending stress should be uniform over a specified part of the surface.

## 4 Symbols

$F$  Load

$F_{\max}$  Load at breakage, "breaking load"