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Curtain walling - Determination of the strength of shear connections - Test method and requirements

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/21

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English Version

Curtain walling - Determination of the strength of shear connections - Test method and requirements

Façades rideaux - Détermination de la résistance des assemblages - Méthode d'essai et exigences

Vorhangfassaden - Bestimmung der Beanspruchbarkeit von auf Abscheren beanspruchten Verbindungen - Prüfverfahren und Anforderungen

This European Standard was approved by CEN on 12 April 2021.

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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 COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 16758:2021) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

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 16758:2016.

The main changes compared to the previous edition, EN 16758:2016, are listed below:

- new specifications were added in “5.1 General” when using an infill panel to apply the forces,
- new sample restraints “S” were added in figures where missing and the direction of application of “S” was modified in order to have the equilibrium of forces applied to samples represented in figures,
- new figures for cruciform/half cruciform glass support, showing the application of dead load and the position of DT, were added,
- the dimensions of the samples were modified, as described in 5.2,
- the deformation speed for vertical and horizontal loading was modified, as specified in 5.3,
- new specifications for horizontal loading were added (see 5.3.3.1),
- new subclause (5.3.4) was added, regarding the interpretation of the loading records with reference to Annex A and Annex B,
- more detailed information was added in the test report,
- in Annex A and Annex B, new reference to ISO 16269-6 and introduction of the variable $\tau_{\alpha\beta}$ as a function of the number of test pieces, in order to determine the design load of the connection.

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

EN 16758:2021 (E)**1 Scope**

This document specifies test methods for the determination of bearing capacity (ultimate limit state and serviceability limit state), of connections between curtain walling framing members which cannot be calculated in accordance with current codes or conventional calculations based upon the strength of the materials.

Mechanical performances of the curtain walling connections are already assessed in accordance with the provisions described in EN 13830. Additional information with respect to mechanical performance of the connections and direct applications can be determined with this document (see Annex C).

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 13119, *Curtain walling — Terminology*

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