Glass in building - Glazing recommendations - Assembly principles for vertical and sloping glazing

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12488:2016 sisaldab Euroopa standardi EN 12488:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 12488:2016 consists of the English text of the European standard EN 12488:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.06.2016.	Date of Availability of the European standard is 29.06.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 81.040.20

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12488

June 2016

ICS 81.040.20

English Version

Glass in building - Glazing recommendations - Assembly principles for vertical and sloping glazing

Verre dans la construction - Recommandations pour la mise en oeuvre - Principes de pose pour vitrage vertical et incliné

Glas im Bauwesen - Empfehlungen für die Verglasung - Verglasungsgrundlagen für vertikale und abfallende Verglasung

This European Standard was approved by CEN on 8 April 2016.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 12488:2016 E

Contents

Page

European foreword

This document (EN 12488:2016) 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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

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

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard deals with the glazing system i.e. the glazing, the glazing blocks, the sealants, the gaskets and the components used to assemble the glazing into a frame, as well as the rebate.

It gives the basic principles to avoid damages due to the construction. The observance of these recommendations will ensure a reasonable working life of the glazing. Additional requirements and precisions are to be found in the national regulations and/or national codes of practice, in order to deal with regional particularities due to climate, professional habits, availability of materials, etc. Special requirements can also be specified by manufacturers of components of the glazing system, including glazing.

Mechanical, thermal, chemical and moisture conditions are essential to preserve the functionality and the operability of the glazing in the long term. Information with regards to the durability of a glass product is given in the applicable harmonized European Standard (hEN).

1 Scope

This European Standard defines principles of glazing as well as recommendations on the selection of components, e.g. frame sections, beads, drainage holes, etc., for fitting glazing into frames of any material.

This European Standard applies to all basic types of edge supported vertical and sloping glazing systems, in all types of fixed or opening frames used in buildings.

This European standard specifies also the functions, requirements and installation of glazing blocks within a frame during its manufacturing, transportation, installation and operational life. The standard applies to glazing blocks used for all types of flat or curved glass, as well as to derived processed types of glass.

For certain glass products, e.g. fire resistant glazing, security glass, other or additional requirements, rules or recommendations may apply.

The standard is applicable to European climate conditions.

This European Standard does not apply to the following:

— glass blocks and glass pavers (EN 1051-1);

— channel-shaped glass (EN 572-7);

— structural sealant glazing (see EN 13022-1 and EN 13022-2 and ETAG 002);

— adhesively bonded glazing in window;

— point fixed glazing;

— greenhouses (see EN 13031-1).

As this standard gives basic assembly principles only, national requirements, rules or recommendations may also apply.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1279-1, *Glass in Building — Insulating glass units — Part 1: Generalities, dimensional tolerances and rules for the system description*

EN 12365-1, *Building hardware — Gasket and weatherstripping for doors, windows, shutters and curtain walling — Part 1: Performance requirements and classification*

EN 13241-1, *Industrial, commercial and garage doors and gates — Product standard — Part 1: Products without fire resistance or smoke control characteristics*

EN 13830, *Curtain walling — Product standard*

EN 14351-1, *Windows and doors — Product standard, performance characteristics — Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics*

prEN 14351-2, *Windows and doors — Product standard, performance characteristics — Part 2: Internal pedestrian doorsets without resistance to fire and/or smoke leakage characteristics*

EN 16034, *Pedestrian doorsets, industrial, commercial, garage doors and openable windows — Product standard, performance characteristics — Fire resisting and/or smoke control characteristics*

EN 15651-2, *Sealants for non-structural use in joints in buildings and pedestrian walkways — Part 2: Sealants for glazing*

EN ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Whenever the word "frame" is used, it refers also to the sash and casement, according to EN 12519.

3.1
glazing
glass product that is monolithic, laminated, and/or insulating glass unit

Note 1 to entry: In French called "vitrage" and in German called "Glasaufbau".

3.2
vertical glazing
glazing which is not more than 15° from vertical, either inwards or outwards

3.3
sloping glazing
glazing which is sloping between 15° and 85° from the vertical

Note 1 to entry: Glazing between 85° and 90° may be subjected to water ponding that should be prevented by proper design

3.4
glazing system
materials and the conditions under which the glazing is installed into a frame

3.5
drained and pressure equalized glazing system
glazing system that enable any water and water vapour which has entered the rebate to be effectively removed

Note 1 to entry: Openings for ventilation and drainage in the frame are designed to achieve partial water vapour pressure equalization and evacuation of water from the glazing rebate to the outside of the building.

Note 2 to entry: Recommendations for drainage and ventilation are given in informative Annex A.

3.6
fully bedded glazing system
sealant that completely covers the perimeter of the glazing

Note 1 to entry: Fully bedded system is not recommended for insulating glass units and laminated glass.