



British Glass

Current standards – flat glass

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British standards – BSI

BS 476 – Fire tests on building materials and structures

Part 22: 1987 – Methods for determination of the fire resistance of non-loadbearing elements of construction

BS 857: 1967 (1990) – Specification for safety glass for land transport

BS 952: - Glass for glazing

Part 1: 1995 – Classification

Part 2: 1980 – Terminology for work on glass

BS 1748: Glass in building

Part 1-1: 2004 Special basic products. borosilicate glasses. definition and general physical and mechanical properties

Part 1-2: 2004 Borosilicate glasses. evaluation of conformity. product standard

Part 2-1: 2004 Special basic products. glass ceramics. definitions and general physical and mechanical properties

Part 2-2: 2004 Special basic products. glass ceramics. evaluation of conformity. product standard

BS 2975: – Glassmaking sands

Part 1: 2004 Methods for sampling and physical testing of glass-making sands

Part 2: 2008 Sampling and analysis of glass-making sands. Methods for chemical analysis

BS 3193: 2008 – Specification for thermally toughened glass panels for use in domestic appliances

BS 3447: 1962 (1997) – Glossary of terms used in the glass industry

BS 3463: 1975 – Specification for observation and gauge glasses for pressure vessels

BS 4031: 1966 (*obsolescent*) – Specification for X-ray protective lead glasses

BS 4783: 2016 - Aluminium alloy windows and doorsets. Specification.

BS 4875: 2001 Strength and stability of furniture

Part 5: Requirements for strength, durability and stability of tables and trolleys for domestic and contract use (replaces BS 4875 part 6)

Amendment 1 incorporated into an updated standard 2007.

SUPERSEDED BY BS EN 12521: 2015

BS 5051: - Bullet resistant glazing
current, obsolescent, partially replaced by BS EN 1063: 2000

BS 5286: Specification for aluminium framed sliding glass doors has been withdrawn (April 2005) without replacement

BS 5357: 2007 – Code of practice for installation of security glazing

BS 5395: Stairs, ladders and walkways

Part 1: 2010 – Code of practice for the design, construction and maintenance of straight stairs and winders

Part 2: 1984 - Stairs, ladders and walkways. Code of practice for the design of helical and spiral stairs

Part 3: 1985 - Stairs, ladders and walkways. Code of practice for the design of industrial type stairs, permanent ladders and walkways – WITHDRAWN, replaced by BS EN ISO 14122-1:2001+A1:2010

Safety of machinery. Permanent means of access to machinery. Choice of a fixed means of access between two levels

Part 4: 2011 - Code of practice for the design of stairs for limited access

BS 5516: 2004 – Code of practice for design and installation of sloping and vertical patent glazing

Part 1: Code of practice for design and installation of sloping and vertical patent glazing

Part 2: Code of practice for sloping glazing

BS 5544: 1978 (1994) - Specification for anti-bandit glazing (glazing resistant to manual attack)
– REPLACED by **BS EN 356: 2000**

BS 5588- Fire precautions in the design, construction and use of buildings

Part 0: 1990 – Guide to fire safety codes of practice for particular premises/applications

REPLACED

Part 1: 1990 – Code of practice for residential buildings

Part 6: 1991 – Code of practice for places of assembly

Part 7: 1997 – Code of practice for the incorporation of atria in buildings

Part 11: 1997 – Code of practice for shops, offices, industrial, storage and other similar buildings

All Parts of BS 5588 replaced by BS 9999:2017

BS 6100-0: 2010 – Building and civil engineering – vocabulary – introduction and index

BS 6100-1.4.1: 1999: Materials – Glazing

Superseded by BS 6100-6: 2008

BS 6100-6:2008 - Building and civil engineering. Vocabulary. Construction parts

BS 6206: 1981 (1994) – Specification for impact performance requirements for flat safety glass and safety plastics for use in buildings

Note: this standard only relates to plastics. **The section pertaining to glass is covered in BS EN 12600: 2002 Glass in building. Pendulum test. Impact test method and classification for flat glass.**

BS 6262: 2005 – Code of practice for glazing for buildings

Part 1: 2005 – General methodology for the selection of glazing

Part 2: 2005 – Code of practice for energy, light and sound

Part 3: 2005 – Code of practice for fire, security and wind loading

Part 4: 2005 – Safety related to human impact

Part 6: 2005 – Code of practice for special application

Part 7: 2005 - Code of practice for the provision of information

BS 6340: 1985 – Shower units

Part 3: 1985 – Specification for prefabricated shower enclosures and shower cabinets.

Superseded, Withdrawn - Replaced By: BS EN 14428:2004 2015 – Incorporating corrigendum March 2017 Shower enclosures. Functional requirements and test methods.

BS 6510: 2010 Steel-framed windows and glazed doors

BS 6399: Loading for buildings

Part 1: 1996 Code of practice for dead and imposed loads

Replaced By: BS EN 1991-1-1:2002 and BS EN 1991-1-7:2006+A1:2014

Part 2: Code of practice for wind loads

Replaced By: BS EN 1991-1-4:2005+A1:2010

Part 3: 1988 Code of practice for imposed roof loads

Replaced By: BS EN 1991-1-4:2005+A1:2010

BS 6993: 1990 Thermal and radiometric properties of glazing

Part 1: 1989 (1995) – Method for calculation of the steady state U-value (thermal transmittance) **REPLACED BY BS EN 673:2011**

Part 2: 1990 (1995) – Method for direct measurement of U-value (thermal transmittance)

BS 7030: 1988 (1993) – Method for determination of the coefficient of mean linear thermal expansion of glass

BS 7034: Viscosity and viscometric fixed points of glass

Part 1: 1988 Recommendations for use in the determination of viscosity and viscometric fixed points

Part 2: 1988 Method for the determination of viscosity by rotation viscometers

Part 3: 1988 Method for the determination of viscosity by fibre elongation viscometer

Part 4: 1988 Method for the determination of viscosity by beam bending

Part 5: 1988 Method for the determination of working point by sinking bar viscometer

Part 6: 1988 Method for the determination of softening point

Part 7: 1988 Method for the determination of annealing point and strain point by beam bending

Part 8: 1988 Method for the determination of (dilatometric) transformation temperature

BS 7376: 1990 (1995) – REPLACED - Specification for inclusion of glass in the construction of tables or trolleys

SUPERSEDED BY BS EN 12521: 2015

BS 7449: 1991 (1997) WITHDRAWN – Specification for inclusion of glass in the construction of furniture, other than tables or trolleys, including cabinets, shelving systems and wall hung, or free-standing mirrors **REPLACED BY: BS EN 14749**

BS 8000: - Workmanship on building sites

Part 7: 1990 – Code of practice for glazing

British/European standards – BS EN

BS EN 356: 2000 –Glass in building – security glazing. testing and classification of resistance against manual attack

BS EN 357: 2004 – Glass in building. fire resistant glazed elements with transparent or translucent glass products. Classification of fire resistance

BS EN 410: 2011 – Glass in building. determination of luminous and solar characteristics of glazing

BS EN 572: - Glass in building. basic soda lime silicate glass products

BS EN 572-1: 2012 +A1: 2016 - Glass in building. Basic soda-lime silicate glass products. Definitions and general physical and mechanical properties

Part 2: 2012 – Float glass

Part 3: 2012 – Polished wired glass

Part 4: 2012 – Drawn sheet glass

Part 5: 2012 – Patterned glass

Part 6: 2012 – Wired patterned glass

Part 7: 2012 – Wired or unwired channel shaped glass

BS EN 572-8:2012+A1:2016. Glass in building. Basic soda-lime silicate glass products. Supplied and final cut sizes

Part 9: 2004 – Evaluation of conformity

BS EN 673: 2011 – Glass in Building. Determination of thermal transmittance (U value) calculation method

BS EN 674: 2011 – Glass in building. determination of thermal transmittance (U value). guarded hot plate method

BS EN 675: 2011 – Glass in Building. determination of thermal transmittance (U value). heat flow meter method

BS EN 1036: Glass in building. mirrors from silver-coated float glass for internal use

Part 1: 2007 Mirrors from silver-coated float glass for internal use. Definitions, requirements and test methods

Part 2: 2008 Mirrors from silver-coated float glass for internal use – Conformity

BS EN 1051: Glass blocks and glass paver units - definition, requirements, test methods and inspections

Part 1: Definition and description 2003

Part 2: Evaluation of conformity/product standard 2007

BS EN 1063: 2000 – Glass in building. security glazing – testing and classification of resistance against bullet attack

BS EN 1093: 2012 Glass in building. Coated glass.
Part 3. Requirements and test methods for class C and D coatings

BS EN 1096: Glass in building. coated glass
Part 1 2012: Definitions and classification
Part 2 2012: Requirements and test methods for Class A, B, and S coatings
Part 3 2012: Requirements and test methods for Class C and D coatings
Part 4: 2004 - Glass in building – coated glass – part 4: evaluation of conformity/product standard (current 2017, work in hand)
BS 5:2016: Test method and classification for the self-cleaning performances of coated glass surfaces

BS EN 1630: 2011 +A1:2015: Pedestrian doorsets, windows, curtain walling, grilles and shutters – burglar resistance – test method for the determination of resistance

BS EN 1863: 2011 – Heat strengthened soda lime silicate glass
Part 2: Evaluation of conformity published (current 2017, work in hand)

BS EN 1153: 1996
Kitchen furniture: safety requirements and test methods for built-in and free-standing Kitchen Cabinets and worktops **WITHDRAWN**, replaced by **BS EN 14749:2005** Domestic and kitchen storage units and worktops. Safety requirements and test methods – which was also **WITHDRAWN**, and replaced by:
BS EN 14749:2016 -Furniture. Domestic and kitchen storage units and kitchen-worktops. Safety requirements and test methods

BS EN 1279: Glass in building – insulating glass units
Part 1: 2004: Generalities, dimensional tolerances and rules for the system description
Part 2: 2005: Long term test method and requirements for moisture penetration
Part 3: 2002: Long term test method and requirements for gas leakage rate and for gas concentration tolerances
Part 4: 2002: Methods of test for the physical attributes of edge seals
Part 5: 2005+A2:2010 - Glass in building. Insulating glass units. Evaluation of conformity
Part 6: 2002: factory production control and periodic tests

BS EN 1288: 2000 - Determination of bending strength of glass
Part 1: 2000 Fundamentals of testing glass
Part 2: 2000 Coaxial double ring test on flat specimens with large test surface areas
Part 3: 2000 Test with specimen supported at two points (four-point bending)
Part 4: Testing of channel shaped glass

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

BS EN 1730: 2012 - Domestic furniture - tables - test methods for determination of strength, durability and stability

BS EN 1748: 2004 - Glass in building

Part 1-2: 2004 – Special basic products – borosilicate glass – conformity

Part 2-2: 2004 – Special basic products – glass ceramic - conformity

BS EN 1863: – Glass in building – heat strengthened soda lime silicate glass

Part 1: 2011 – Definition and description (current 2017, work in hand)

Part 2: 2004 – Heat strengthened soda lime silicate glass – part 2: evaluation of conformity

BS EN 2155: - Specification for test methods for transparent materials for aircraft glazing

Part 2: 1993 – Determination of water absorption

Part 3: 1993 – Determination of refractive index

Part 5: 1989 – Determination of visible light transmission

Part 7: 1997 – Determination of optical deviation

Part 8: 1989 – Determination of optical distortion

Part 9: 1989 – Determination of haze

Part 12: 1997 – Determination of linear thermal expansion

Part 13: 1993 – Determination of temperature at deflection under load

Part 14: 1993 – Determination of the 1/10 Vicat softening temperature

Part 19: 1997 – Determination of craze resistance

Part 21: 1989 – Determination of resistance to crack propagation (K factor)

BS EN 3862:2013 - Aerospace series. Non-metallic materials. Glass transparencies. Material standard. Chemically tempered soda lime float glass

BS EN 15681: 2017 - Glass in building. Basic alumino silicate glass products.

Part 2: Product standard

BS EN 12150-1:2015 - Glass in building. Thermally toughened soda lime silicate safety glass.

Definition and description

Part 2: 2004 - Evaluation and conformity

BS EN 12337: 2000 – Glass in Building – Chemically strengthened soda lime silicate glass

Part 1: 2000 – Definition and description

Part 2: 2004 – Chemically strengthened soda-lime silicate glass – evaluation of conformity

BS EN 12412:2003 – Thermal performance of windows, doors and shutters

Part 2: 2003 – Determination of thermal transmittance by hot box method. Frames

Part 4: 2003 – Determination of thermal transmittance by hot box method. roller shutter Boxes

BS EN 12430: 2013 – Thermal insulating products for building applications – determination of behaviour under point load

BS EN 12488: 2016 - Glass in building. Glazing recommendations. Assembly principles for vertical and sloping glazing.

BS EN 12521: 2015 – Furniture – Strength, durability and safety – requirements for domestic tables (supersedes BS 4875:2009 and 7376: 2009)

BS EN 12600:2002 Glass in building – pendulum test – impact test method and classification for flat glass

BS EN 12603: 2002 – Glass in building. Procedures for goodness of fit and confidence intervals for Weibull distributed glass strength data

BS EN 12664: 2001 – Thermal performance of building materials and products. Determination of thermal resistance by means of guarded hot plate and heat flow meter methods. Dry and moist products of medium and low thermal resistance

BS EN 12758: 2011 – Glass in building. Blazing and airborne sound insulation. Product descriptions and determination of properties

BS ISO 12775: 1997 – Guidelines on types of glass of normal bulk-production composition and their test methods

BS EN 12898: 2001 – Glass in building. Determination of the emissivity

BS EN 12939: 2001 – Thermal performance of building materials and products. determination of thermal resistance by means of guarded hot plate and heat flow meter methods. thick products of high and medium thermal resistance

BS EN 13022: 2014 – Glass in building. structural sealant glazing
Part 1: Glass products for structural sealant glazing systems supported and unsupported monolithic and multiple glazing
Part 2: Assembly rules

BS EN 13024: 2011 – Glass in building – thermally toughened borosilicate safety glass
Part 1: Definition and description
Part 2: 2004 – Evaluation of conformity

BS EN 13049: 2003 - Windows – Soft and heavy body impact. test method, safety requirements and classification (current, under review)

BS EN 13363-1:2003+A1:2007 - Solar protection devices combined with glazing. Calculation of solar and light transmittance. Simplified method

BS EN 13363-2: 2005 Solar protection devices combined with glazing. Calculation of total solar energy transmittance and light transmittance.

BS EN 13496: 2013 – Thermal insulation products for building applications. determination of the mechanical properties of glass fibre meshes

BS EN 13541: 2012 – Glass in building. security glazing. Testing and classification of resistance against explosion pressure

BS EN 14072: 2003 – Glass in furniture – Test methods

BS EN 14178: 2004 – Glass in building – basic alkaline earth silicate glass products
Part 2: Evaluation of conformity

BS EN 14188-1: 2004 - Specification for hot applied sealants
Part 2: 2004 - Specification for cold applied sealants

BS EN 14179: 2016 – Heat soaked thermally toughened soda lime silicate safety glass
Part 1 2016 - Definition and description
Part 2:2005 - Evaluation of conformity – Product standard

BS EN 14321: 2005 – Glass in Building – Thermally Toughened Alkaline Earth Silicate Safety Glass
Part 1: 2005 - Definition and Description
Part 2: 2005 - Evaluation of Conformity/Product Standard

BS EN 14749: 2016 - Furniture. Domestic and kitchen storage units and kitchen-worktops. Safety requirements and test methods

BS EN 15372: 2016 Furniture - Strength, durability and Safety. Requirements for non-domestic tables.

BS EN 15434: 2006+A1 2010 – Glass in Building
Product Standard for Structural and/or Ultraviolet Resistant Sealant (for use with structural sealant glazing and/or insulating glass units with exposed seals)

BS EN 15681-1: 2016 - Glass in building. Basic alumino silicate glass products. Definitions and general physical and mechanical properties
Part 2: 2017 - Glass in building. Basic alumino silicate glass products. Product standard

BS EN 15682-1:2013

Glass in building. Heat soaked thermally toughened alkaline earth silicate safety glass.

Definition and description

Part 2: Evaluation of conformity/Product standard

BS EN 15683-1:2013

Glass in building. Thermally toughened soda lime silicate channel shaped safety glass.

Definition and description

Part 2: 2013 -Evaluation of conformity. Product standard

BS EN 15998 – 2010 - Glass in building. Safety in Case of Fire, Fire Resistance. Glass testing methodology for the purpose of classification

BS EN 16382: 2016 - Thermal insulation products for building applications. Determination of the pull-through resistance of plate anchors through thermal insulation products

BS EN 16477: 2016 - Glass in building - painted glass for internal use

Part 1: Requirements

BS EN 61006: 2004 – Methods of test for determination of the glass transition temperature of electrical insulating materials

BS EN 188000: 1994 – Generic specification for optical fibres **WITHDRAWN**, replaced by: BS EN 60793-1-30:2002, BS EN 60793-1-31:2002, BS EN 60793-1-32:2003, BS EN 60793-1-22:2002, BS EN 60793-1-20:2002, BS EN 60793-1-52:2002, BS EN 60793-1-41:2002, BS EN 60793-1-43:2002, IEC 60793-1-43:2001, BS EN 60793-1-44:2002, BS EN 60793-1-45:2003, BS EN 60793-1-46:2002, BS EN 60793-2-10:2002, BS EN 60793-2-30:2002, BS EN 60793-2-50:2002, BS EN 60793-1-40:2003, BS EN 60793-1-42:2002, BS EN 60793-1-47:2002

BS EN 12150-1:2015+A1:2019. Glass in building. Thermally toughened soda lime silicate safety glass. Definition and description

BS EN 1096-4:2018. - Glass in building. Coated glass. Product standard

BS EN 1279-6:2018. - Glass in building. Insulating glass units. Factory production control and periodic tests

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

BS EN 12150-1:2015+A1:2019. -Glass in building. Thermally toughened soda lime silicate safety glass. Definition and description.

BS EN 1279-4:2018. - Glass in Building. Insulating Glass Units. Methods of test for the physical attributes of edge seal components and inserts.

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

BS EN 1279-5:2018. - Glass in building. Insulating glass units. Product standard

BS EN 1279-2:2018. - Glass in building. Insulating glass units. Long term test method and requirements for moisture penetration.

British/European/International standards – BS EN ISO

BS EN ISO 3009: 2003 – Fire resistance tests – elements of building construction. glazed elements

BS EN ISO 10077:2006 – Thermal performance of windows, doors and shutters.

Part 1: 2006 - Calculation of thermal transmittance.

Part 2: 2012 – Numerical method for frames

BS EN ISO 11431: 2002 – Building construction. jointing products. determination of adhesion/cohesion properties of sealants after exposure to heat, water and artificial light through glass

BS EN ISO 11600:2003+A1:2011 – Building construction – jointing products – classification and requirements for sealants.

BS EN ISO 12543: - Glass in building. Laminated glass and laminated safety glass

Part 1: 2011 – Definitions and description of component parts

Part 2: 2011 – Laminated safety glass

Part 3: 2011 – Laminated glass

Part 4: 2011 – Test methods for durability

Part 5: 2011 – Dimensions and edge finishing

Part 6: 2011 – Appearance

BS EN ISO 13035-2: 2008 – Machines and plants for the manufacture, treatment and processing of flat glass. safety requirements.

Part 2. Storage, handling and transportation equipment outside the factory

BS EN ISO 14438: 2002 – Glass in building. Determination of energy balance value.
calculation method

BS EN ISO 14449 2005– Glass in building – Laminated glass and laminated safety glass –
evolution of conformity

BS EN ISO 21078: 2008 - Determination of boron (III) oxide in refractory products.
Determination of total boron (iii) oxide in oxidic materials for ceramics, glass

BS EN ISO 22975: 2016 Solar energy. collector components and materials. Evacuated tubes.
Part 1: Durability and performance
Part 2: Heat pipes for solar thermal application

BS EN ISO 10545-2:2018-Ceramic tiles. Determination of dimensions and surface quality

British automotive standards – BS AU

BS AU 178a: 1992 (1998) – Specification for road vehicle safety glass

This 1992 version has been produced to align the standard with ECE (United Nations Economic Commission for Europe) Regulation 43.

BS AU 242a: 1998 – Automotive windscreen repair. Code of practice

BS AU 251: 1994 – Specification for performance of automotive laminated windscreen repair systems.

British standards – marine series – BS MA

BS MA 25: 1973 – Specification for ships' windows

BS MA 88:1980 – Ships and marine technology. Heated glass panes for ships' rectangular windows

Replaced by BS ISO 3434:2012

International standards – ISO

ISO 3536: 2016 – Road vehicles – safety glazing materials – vocabulary

ISO 9050: 2003 – Glass in buildings – Determination of light transmittance, solar direct transmittance, total solar energy transmittance and ultraviolet transmittance

ISO 10545: 2016 Glass in building. basic soda lime silicate glass products. patterned glass

ISO 12123: 2010 Ed 2. Optics and photonics. Specification of raw optical glass.

ISO 13837: 2008 Road vehicles. safety glazing materials. Method for the determination of solar transmittance

ISO 16293 Ed 1: 2008 Glass in building. Basic soda lime silicate glass products. Part 1. Definitions and general physical and mechanical properties.

ISO 16293 – 4: 2016 Glass in building. Basic soda lime silicate glass products. Part 4: Wired patterned glass

ISO 16293-5: 2016 - Glass in building. Basic soda lime silicate glass products. Part 5: Patterned glass

ISO 16936: 2005 – Glass in building. Forced-entry security glazing
Ed 1:2005 (RO9) - Test and classification by repetitive ball drop
Ed 2: 2005 (RO9) - Test and classification by repetitive impact of a hammer and axe at room temperature
Ed 3: 2005 (RO9) -Test and classification by manual attack
Part 4: 2005 - Test and classification by pendulum impact under thermally and fire stressed conditions

ISO 20492 2010 – Ed 1 – Part 3: Glass in buildings. Insulating glass. Gas concentration and gas leakage.
Part 4: Glass in buildings. Insulating glass. Methods of test for the physical attributes of edge seals.

ISO 20492: 2010 Glass in Building – ISO 20492-1:2008 Ed 1. Glass in buildings. Insulating glass. Durability of edge seals by climate tests
ISO 20492-2:2008 Ed 1. Glass in buildings. Insulating glass. Chemical fogging tests
ISO 20492-3:2010 Ed 1. Glass in buildings. Insulating glass. Gas concentration and gas leakage
ISO 20492-4:2010 Ed 1. Glass in buildings. Insulating glass. Methods of test for the physical attributes of edge seals

British/International standards – BS ISO

BS ISO 3009: 2003 - Fire resistance tests. Elements of building construction. Glazed elements

BS ISO 3537: 2015 - Road vehicles. Safety glazing materials. Mechanical tests

BS ISO 3917: 2016 - Road vehicles. Safety glazing materials. Test methods for resistance to radiation, high temperature, humidity, fire and simulated weathering

BS ISO 17449: 2015 - Road vehicles. Safety glazing materials. Test methods for properties of electrically heated glazing

BS ISO 21005: 2012 – Ships and marine technology. Thermally toughened safety glass panes for windows and side scuttles (Current, work in hand)

BS ISO 21690: 2006 Ed 1 – Glass in building – Glass blocks. Specification

BS ISO 23013: 2016 – Road vehicles. Determination of resistance to forced entry of security glass constructions used in vehicle glazing. Test of glazing systems.

BS ISO 25597: 2013 Stationary source emissions - Test method for determining PM 2, 5, and PM 10 mass in stack gases using cyclone samplers and sample dilution.

BS ISO 29584: 2015 – Glass in Building - Pendulum impact testing and classification of safety glass for use in buildings

BS ISO 23013:2016 – Road vehicles. Determination of resistance to forced entry of security glass constructions used in vehicle glazing. Test of glazing systems

BS ISO 19916-1:2018- Glass in building. Vacuum insulating glass. Basic specification of products and evaluation methods for thermal and sound insulating performance

German standards – DIN

DIN EN 1036: 2008 – Glass in building mirrors from silver-coated float glass for internal use

Part 1: 2008 – Definition, requirements and test methods

Part 2: 2008 – Evaluation of conformity

DIN EN 1096: 2015 – Glass in building - Coated glass

Part 1: 2012 - Definitions and classifications

Part 2: 2012 - Requirements and test methods for class A, B and S coatings

Part 2: 2012 - 3 Requirements and test methods for class C and D coatings; German version EN 1096-3:2012

Part 4: Evaluation of conformity / Product standard; German and English version

DIN 1249: 2011 Glass in building; glass edges; concept; characteristic of edge type and finishes

Part 11: 2017 - Glass edges - Terms and definitions, characteristics of edge types and finishes

(not published until May 2017)

DIN EN 1279: 2015 - Glass in building - Insulating glass units

Part 1: 2015 - Generalities, system description, rules for substitution, tolerances and visual quality;

Part 2: 2015 (draft). Long term test method and requirements for moisture penetration

Part 3: 2015 (draft)- Long term test method and requirements for gas leakage rate and for gas concentration tolerances

Part 4: 2002 - Methods of test for the physical attributes of edge seals

Part 5: 2015 (draft) - Evaluation of conformity; German and English version

Part 6: 2015 (draft) - Factory production control and periodic tests; German and English version

DIN EN 12150 – Glass in Building - Thermally toughened soda lime silicate safety glass

Part 1: 2015 - Definition and description

Part 2: 2015 – Evaluation of conformity/Product standard

DIN 15681:2016 – Glass in building - basic alumina-silicate glass products

Part 1: 2016 - Definitions and general physical and mechanical properties

Part 2: 2016 (draft) - Evaluation of conformity/product standard

DIN 18008 Glass in Building – Design and construction rules

Part 1: 2010 - Terms and general bases

Part 2: 2010 - Linearly supported glazing, Corrigendum to DIN 18008-2:2010-12

DIN 18008-3: 2013 Glass in Building - Design and construction rules - Part 3: Point fixed glazing

DIN 18008-4: 2013 Glass in Building - Design and construction rules - Part 4: Additional requirements for barrier glazing

DIN 18008-5: 2013 Glass in Building - Design and construction rules - Part 5: Additional requirements for walk-on glazing

DIN 18516: 1990 - Back-ventilated, Non-loadbearing, external enclosures of buildings made from tempered safety glass panels
Part 1: Requirements and testing

DIN 12354: 2016 - Building acoustics - Estimation of acoustic performance of buildings from the performance of elements

Part 1: 2000 - Airborne sound insulation between rooms

Part 2: 2000 - Impact sound insulation between rooms

Part 3: 2000 - Airborne sound insulation against outdoor sound

Part 4: 2001 - Transmission of indoor sound to the outside

DIN 52338: 2016 - Test methods for flat glass in building - Ball drop test for laminated glass

DIN ISO 614: 2015- Ships and marine technology - Toughened safety glass panes for rectangular windows and side scuttles - Punch method of non-destructive strength testing (ISO 614:2012)

American standards – ASTM

ASTM C 158 2012 Strength of glass by flexur (determination of modulus of rupture) test methods

ASTM C 162 – 05 (2015) Standard terminology of glass and glass products

ASTM C 169 2016 Chemical analysis of soda-lime and borosilicate glass, test methods

ASTM C 336 2015 Annealing point and strain point of glass by fibre elongation, test method

ASTM C 338 2013 Softening point of glass, test method

ASTM C 372 (94)– 2016 Standard test method for linear thermal expansion of porcelain enamel and glaze frits and fired ceramic whiteware products by the dilatometer method.

ASTM C 429 2016 Sieve analysis of raw materials for glass manufacturer. Test method

ASTM C 539 2016 Standard test method for linear thermal expansion of porcelain enamel and glaze frits and ceramic whiteware materials by interferometric method.

ASTM C 598 2013 Annealing point and strain point of glass by beam bending, Test method

ASTM C 623 2015 Standard test method for young's modulus, shear modulus, and Poisson's ratio for glass and glass-ceramics by resonance

ASTM C 657 2013 Standard test method for D-C volume resistivity of glass

ASTM C 693 2013 Density of glass by buoyancy. Test method

ASTM C 724 - 2015 Standard test method for acid resistance of ceramic decorations on architectural-type glass

ASTM C 730 2013 Knoop indentation hardness of glass, Test method

ASTM C 770 2013 Measurement of glass stress – optical coefficient. Test method

ASTM C 813 2014 Hydrophobic contamination on glass by contact angle measurement. Test method

ASTM C 829 2015 Measurement of liquidus temperature of glass by the gradient furnace method. Practice

ASTM C 912 2013 Density of glass by the sink-float comparator. Test method

ASTM C 965 2012 Measuring viscosity of glass above the softening point. Practice

ASTM C987 – 2015 Standard test method for vapor attack on refractories for furnace. Superstructures

ASTM C 1036 2016 Flat glass, Specification

ASTM C 1048 2012 e1 Heat strengthened and fully tempered flat glass

ASTM C 1086 2016 Standard specification for glass fiber mechanically bonded felt thermal insulation.

ASTM C 1172 2014 Laminated architectural flat glass. Specification

ASTM C 1256 2013 Standard practice for interpreting glass fracture surface features

ASTM C 1279 2013 Non-destructive photo-elastic measurement of edge and surface stresses in annealed, heat-strengthened, and fully tempered flat glass

ASTM C 1349 2010 Standard specification for architectural flat glass clad polycarbonate

ASTM C 1350M 2013

Standard test method for measurement of viscosity of glass between softening point and annealing range (Approximately Pa•s to Approximately 10¹³ Pa•s) by beam bending (metric)

ASTM C 1376 2015 Pyrolytic and vacuum deposition coatings on flat glass

ASTM C 1422M 2015 Chemically strengthened flat glass

ASTM C 1464 2016 Bent glass

ASTM C 1503 2013 Standard specification for silvered flat glass mirror

ASTM C 1678 2015 Standard practice for fractographic analysis of fracture mirror sizes in ceramics and glasses

ASTM D 3891 2014

Standard practice for preparation of glass panels for testing paint, varnish, lacquer, and related products

ASTM E 2358 2010 Standard specification for the performance of glass in permanent glass railing systems, guards, and balustrades.

ASTM F 2813 2012 Glass used as a horizontal surface in desks and tables

ASTM C1651 - 11(2018). Standard Test Method for Measurement of Roll Wave Optical Distortion in Heat-Treated Flat Glass.

ASTM C1509 - 02(2018). -Standard Specification for Beaded Process Glass Pipe and Fittings.

ASTM E2098/E2098M - 13(2018). -Standard Test Method for Determining Tensile Breaking Strength of Glass Fibre Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to a Sodium Hydroxide Solution.

Other guidance/publications

CWCT (Centre for Window and Cladding Technology) Technical note No 68 – Overhead glazing 2010

See CWCT Publications List: www.cwct.co.uk/publications/notes.htm

[Regulation] ECE R 43 – Laminated windscreens (European)

This regulation can be downloaded from:

www.unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/R043r3e.pdf

ANSI – 97.1: 2015 – Safety glazing materials used in buildings

ANSI (USA) Standards can be purchased from: www.ansiz97.com/standard/

ANSI – 138.1: 2012 – Green Squared – North American national standard specifications for sustainable ceramic tiles, glass tiles, and tile installation.

Please visit: <http://webstore.ansi.org/RecordDetail.aspx?sku=ANSI+A138.1%3A2012>

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