

BS 3193:2008



BSI Standards Publication

Specification for thermally toughened glass panels for use in domestic appliances

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Foreword

Publishing information

This British Standard is published by BSI and came into effect on 30 November 2008. It was prepared by Technical Committee CW/33, *Glass doors and panels for domestic appliances*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 3193:1993, which is withdrawn.

Information about this document

This edition of BS 3193 reflects the experience that the fragmentation test in Annex A can only be performed on panels at least 76 mm × 76 mm in area. It also incorporates a more realistic impact test in which the impactor is a loaded vessel as opposed to a steel ball.

WARNING. This British Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. It refers only to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Contractual and legal considerations

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

Compliance with a British Standard cannot confer immunity from legal obligations.

Introduction

The purpose of this standard is to provide manufacturers and users with an assurance that glass panels fitted in domestic appliances will provide a reasonable level of safe performance.

Glass is thermally toughened to increase the thermal and mechanical strength. In the event of breakage thermally toughened safety glass fractures into numerous small fragments, the edges of which are generally blunt.

Particular attention needs to be paid to the design of the surrounds and fittings for glass panels. The method used to fit glass panels into domestic appliances can adversely affect their performance.

This standard does not cover the abrasion or chemical resistance of glass panels. The performance of glass can deteriorate if it is subjected to excessive or careless treatment with harsh abrasive cleaning materials.

1 Scope

This British Standard specifies requirements for thermally toughened glass panels for use in domestic appliances where such panels can be exposed to thermal and/or physical shock.

Methods of test for fragmentation and for resistance to thermal shock and impact are given in Annexes A, B and C respectively. Recommendations for manufacturers of domestic appliances on the use of glass panels are given in Annex D. Guidance on handling glass is given in Annex E.

This British Standard does not specify performance requirements for glass panels in respect of abrasion or chemical resistance.

2 Terms and definitions

For the purposes of this British Standard the following terms and definitions apply.

2.1 thermally toughened glass

glass, the surface of which has been rapidly cooled from near the softening point so that a residual compressive stress remains in the surface after complete cooling

NOTE Also known as “tempered” or “heat-treated” glass.

2.2 glass panel

panel of glass, with no sharp edges or sharp corners, that is made from toughened glass and is ready for installation, having undergone all finishing processes

2.3 asymmetric glass panel

glass panel processed in such a way, e.g. by printing on one side, that its two surfaces give significantly different test results when subjected to the specified tests