

Spectacle frames —

Part 1: Specification for general requirements

UDC 681.73.072.4:617.7-76

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Ophthalmic Equipment Standards Committee (OES/-) to Technical Committee OES/78, upon which the following bodies were represented:

- Association of Contact Lens Manufacturers
- Association of Dispensing Opticians
- British College of Ophthalmic Opticians (Optometrists)
- British Contact Lens Association
- British Medical Association
- British Surgical Trades Association Incorporated
- Department of Health and Social Security
- Department of Trade and Industry (National Physical Laboratory)
- Faculty of Ophthalmologists
- Federation of Manufacturing Opticians
- Flat Glass Manufacturers' Association
- Guild of British Dispensing Opticians
- Opticians' Prescription Organization

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Spectacle Frame Makers' Association
- Faculty of Dispensing Opticians
- Fasteners and Turned Parts Institute

This British Standard, having been prepared under the direction of the Ophthalmic Equipment Standards Committee, was published under the authority of the Board of BSI and comes into effect on 28 February 1985

© BSI 03-1999

The following BSI references relate to the work on this standard:
Committee reference HCC/78 (formerly OES/78)
Draft for comment 84/63563 DC

ISBN 0 580 14481 X

Amendments issued since publication

Amd. No.	Date of issue	Comments
6577	January 1991	
7052	February 1992	Indicated by a sideline in the margin

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Performance characteristics	1
4 Screw threads	1
5 Measurement system	2
6 Dimensional tolerances	2
7 Information to be provided by the supplier	2
8 Marking	2
Appendix A Conditioning of test specimens	3
Appendix B Endurance test	3
Appendix C Corrosion tests	6
Appendix D Impact test	6
Appendix E Flammability test	8
Appendix F Recommendations on the design of frames and supply of information	8
Figure 1 — Typical apparatus for endurance test	4
Figure 2 — Diagram showing the general endurance test arrangement and directions in which deflections are applied	5
Figure 3 — Typical apparatus for impact test	7
Table 1 — <i>deleted</i>	
Table 2 — Summary of phased movements in each cycle of test	3
Publications referred to	Inside back cover

Foreword

This Part of BS 6625 has been prepared under the direction of the Ophthalmic Equipment Standards Committee at the request of the Department of Health and Social Security for use in legislation governing the quality and safety of optical appliances. It is a combination and revision of BS 3352:1962 and BS 3462:1962 which are withdrawn.

The requirements for performance characteristics have been modified in this revision.

Two grades of frame are now specified. Grade B has been introduced to cover metal frames for younger children where the anticipated period of use will not exceed one year and all other frames have now been designated grade A.

The standard deals with frames that are intended for use with lenses for which tolerances are specified in BS 2738-1.

Part 2 of BS 6625 specifies the markings to be applied to spectacle frames.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

1.1 This Part of BS 6625 specifies requirements for unglazed spectacle frames made from all types of materials and intended for use with corrective lenses.

It establishes two grades based on performance:

Grade A: all spectacle frames except those specified as grade B.

Grade B: metal spectacle frames for younger children where it is anticipated that the period of use will not exceed one year.

The requirements apply to frames at the point of supply to the retailer.

1.2 This standard does not apply to:

- a) products used for eye protection against industrial hazards (e.g. those covered by BS 2092);
- b) frames for non-prescription sunglasses;
- c) rimless mounts and semi-rimless mounts.

NOTE 1 Appendix F contains recommendations on the design of frames and further information. It does not form part of the requirements of this standard.

NOTE 2 The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this Part of BS 6625 the definitions given in BS 3521-1 and BS 3521-2 apply together with the following.

2.1

rolled gold

(except for screws, washers, bushings, nuts of screw assemblies, pivot pins, plastics pads, plastics coverings, plastics inner winding and cores of curl sides.) Made of a base metal to which an even covering of carat gold has been bonded by welding or brazing, before the bonded material was formed into wire, sheet or tube

NOTE The proportion of gold may be designated either:

- a) as the number of parts by mass of fine gold per 1 000 parts of the rolled gold material, e.g. "50/1 000"; or
- b) as the proportion by mass of a specified purity of gold, e.g. "1/10 12 ct".

2.2

gold-plated

(except for screws, washers, bushings, nuts of screw assemblies, pivot pins, plastics pads, plastics coverings, plastics inner windings and cores of curl sides.) Made of base metal and coated with gold or gold alloy (minimum purity 18 ct) with a thickness not less than 1.0 μm

3 Performance characteristics

3.1 Test sequence

Test specimens for grade A and grade B frames shall be conditioned in accordance with Appendix A and then subjected to the four tests in the following sequence:

- 1) endurance test (see 3.3 and Appendix B);
- 2) grade A: corrosion/perspiration test (see 3.4 and C.1);
grade B: corrosion/neutral salt spray test (see 3.4 and C.2);
- 3) impact test (see 3.5 and Appendix D);
- 4) flammability test (see 3.6 and Appendix E).

3.2 Compliance

Five specimens shall be tested.

If all five pass, the product shall be deemed to comply with this standard.

If one fails, a second set of five specimens shall be tested. If all five pass, the product shall be deemed to comply with this standard. If one or more fails, the product shall be deemed not to comply with this standard.

If two or more of the first set of five specimens fail, the product shall be deemed not to comply with this standard.

3.3 Endurance test

When frames are tested as described in Appendix B they shall remain intact.

3.4 Corrosion test

When grade A frames are tested as described in C.1 or grade B frames are tested as described in C.2 there shall be no visible corrosion or change of colour of the sidearms and/or rims when viewed with normal corrected vision. Any corrosion of hinges or hinge screws shall not render the sidearm(s) inoperable. Any corrosion or discoloration of the nose pads shall be disregarded.

3.5 Impact test

When frames are tested as described in Appendix D they shall remain intact.

3.6 Flammability test

When frames are tested as described in Appendix E there shall be no continuation of combustion of the frame after removal of the test flame.

4 Screw threads

Screw threads used in the frame shall comply with BS 3172.