

Industrial type flooring, walkways and stair treads —

Part 4: Specification for glass reinforced plastics open bar gratings

UDC 725.4:[692.623.3 + 692.535.6 + 692.635.1]:624.073.5-036:678.5/.7

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee B/208, Stairs and walkways upon which the following bodies were represented:

British Precast Concrete Federation Ltd.
British Woodworking Federation
Consumer Policy Committee of BSI
Department of the Environment for Northern Ireland
District Surveyors' Association
Galvanizers' Association
Engineering Equipment and Materials Users' Association
Health and Safety Executive
Institution of Structural Engineers
London Fire and Emergency Planning Authority
Royal Institute of British Architects
Royal Society for the Prevention of Accidents
Scottish Office (Construction and Building)
Spiral Stair Manufacturers' Association
Storage Equipment Manufacturers' Association
Coopted members

This British Standard, having been prepared under the direction of the Technical Sector Board for Building and Civil Engineering, was published under the authority of the Standards Board and comes into effect on 15 December 1992

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Amendments issued since publication

Amd. No.	Date	Comments
14251	26 March 2003	See national foreword

The following BSI references relate to the work on this standard:
Committee reference B/208
Draft for Comment 91 15423 DC

ISBN 0 580 21353 6

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Foreword

This Part of BS 4592 has been prepared under the direction of the Technical Sector Board for Building and Civil Engineering. BS 4592 is published in four Parts as follows:

- *Part 1: Specification for open bar gratings;*
- *Part 2: Specification for expanded metal grating panels;*
- *Part 3: Specification for cold formed planks;*
- *Part 4: Specification for glass reinforced plastics open bar gratings.*

The start and finish of text introduced or altered by Amendment No. 1 is indicated in the text by tags **A1** **A1**.

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

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

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1 Scope

This Part of BS 4592 specifies requirements for glass reinforced plastics open bar gratings intended for use in flooring, walkways and stair treads ^[A1] that are not addressed by BS EN ISO 14122 Part 1, Part 2 and Part 3, which cover the following:

BS EN ISO 14122, *Safety of machinery — Permanent means of access to machinery*:

- *Part 1: Choice of a fixed means of access between two levels*;
- *Part 2: Working platforms and walkways*;
- *Part 3: Stairs, stepladders and guard-rails.* ^[A1]

NOTE 1 This standard does not cover agricultural uses (see BS 5502).

NOTE 2 The method of test for strength and deflection is given in Annex A, information to be supplied at the time of enquiry or order is given in Annex B and recommendations for the installation of gratings is given in Annex C.

2 References

2.1 Normative references

This part of BS 4592 incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on the inside back cover. Subsequent amendments to, or revisions of, any of these publications apply to this part of BS 4592 only when incorporated in it by updating or revision.

2.2 Informative references

This part of BS 4592 refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover, but reference should be made to the latest editions.

3 Definitions

For the purposes of this part of BS 4592 the definitions given in BS 5395-1:1977, BS 5395-3:1985 and BS 6100-1 apply, together with the following.

NOTE Definitions of some common terms are illustrated in Figure 1.

3.1 types of bar

3.1.1

loadbearing bar

longitudinal loadbearing member spanning between supports with a bonded abrasive grit anti-slip top surface

3.1.2

transverse bar

member fixed at right angles to loadbearing bars to provide lateral restraint

3.1.3

binding bar

channel section fixed to the edge of a grating, flush with the top of the loadbearing bar [See Figure 1 and Figure 2e).]

3.2

nosing

single or composite section with grit bonded top surface and with a minimum width of 24 mm

3.3

tread support

angle section bolted to a stringer with the tread securely clipped to the horizontal leg

3.4

support

member supporting grating or stair tread