

Play equipment intended for permanent installation outdoors —

Part 1: Methods of test

UDC [685.64 + 688.77]:712.256

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the General Mechanical Engineering Standards Committee (GME/-) to Technical Committee GME/26, upon which the following bodies were represented:

- Association for Childrens Play and Recreation Ltd.
- Association of County Councils
- Association of District Councils
- Association of Metropolitan Authorities
- Association of Play Industries
- British Paediatric Association
- Consumer Standards Advisory Committee of BSI
- Consumers' Association
- Department of Education and Science
- Department of the Environment (Property Services Agency)
- Design Council
- Greater London Council
- Health and Safety Executive
- Independent Engineering Insurers Committee
- Institute of Leisure and Amenity Management
- Institution of Civil Engineers
- Landscape Institute
- National Playing Fields Association
- Physical Education Association of Great Britain and Northern Ireland
- Royal Society for the Prevention of Accidents
- Timber Research and Development Association
- Coopted members

This British Standard, having been prepared under the direction of the general Mechanical Engineering Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 December 1986

© BSI 12-1998

The following BSI references relate to the work on this standard:
Committee reference GME/26
Draft for comment 84/73864 DC

ISBN 0 580 15481 5

Amendments issued since publication

Amd. No.	Date of issue	Comments
5589	January 1987	
5699	December 1987	
6429	March 1990	Indicated by a sideline in the margin

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Form of tests	1
3 Load test	1
4 Test for finger, hand, limb and head traps	2
5 Test for clearance between swing seats	5
6 Swing seat impact test	6
7 Dynamic load test for swinging equipment	8
8 <i>Deleted</i>	8
9 Test reports	8
Figure 1 — Test probes	3
Figure 2 — Chart showing openings which pass or fail tests	4
Figure 3 — Typical swing seats	5
Figure 4 — Deviation of a typical swing seat in a lateral direction	6
Figure 5 — Typical apparatus for the swing seat impact test	7
Figure 6 — Typical brace for flexible seats	8
Figure 7 — <i>Deleted</i>	8
Table 1 — Static test loads	1

Foreword

This Part of BS 5696, which has been prepared under the direction of the General Mechanical Engineering Standards Committee, provides methods for the testing of playground equipment intended for permanent installation outdoors.

Other Parts of BS 5696 are as follows:

- *Part 2: Specification for construction and performance;*
- *Part 3: Code of practice for installation and maintenance.*

Attention is drawn particularly to BS 5696-2 which has been revised and republished with the above title. The new edition of Part 2 supersedes the 1979 version which is withdrawn.

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 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

This part of BS 5696 describes methods of test for children's play equipment intended for permanent installation outdoors and for use by the public.

2 Form of tests

The tests shall be carried out on a prototype or production model or on individual components or assemblies truly representative of the production model.

If the equipment is supplied in a range of sizes, each size shall be tested; alternatively one size only shall be tested where it can be shown that this is representative of the whole range or will provide the most adverse results of the range.

For the tests described in clauses 3 to 9, the equipment shall be supported or installed in a manner identical to that intended for its permanent installation.

3 Load test

3.1 Principle

Load testing assesses whether the strength of the equipment is capable of withstanding the load levels expected in normal use and the occasional heavier loading that can arise due to misuse by adults.

3.2 Procedure

Apply progressively to the equipment the test loads given in Table 1. A maximum of 15 loads shall be applied at any one time.

Maintain the final loading for a period of 15 min.

NOTE For safety reasons, weights should be hung on the equipment wherever possible rather than placed on it where they may become dislodged.

Remove the loads and inspect the equipment visually for signs of damage.

3.3 Interpretation of results

The equipment shall be considered to have passed the test provided it shows no cracks, permanent deformation or damage and no connection is loosened.

Table 1 — Static test loads

Equipment	Static test load $\pm 3\%$	Positions at which test load is to be applied
Swings	kg	
	230 100	On each swing seat To act horizontally at 90° to the crossbar centrally above each seating position
See-saws, rocking horses or other equipment with seats in line	230 100	At one seating position each end At any other seating position
Trapeze, parallel bar, climbing frames or similar agility equipment	100 ^a	At intervals of polar length of 0.6 ± 0.05 m
Rotating equipment	100	To each 0.4 m^2 area or part thereof
Vertical or sloping ladders or steps	100 ^a	To alternative treads or rungs
Ramps	100	To each 0.8 m^2 area or part thereof to a positional tolerance of $\pm 5\%$
Guardrails and handrails	100 ^a 100 ^a	At intervals of 0.6 m or part thereof At intervals of 0.6 m or part thereof to act horizontally to the rail
Platforms	100	To each 0.4 m^2 area or part thereof

^a Each load to bear on the member being tested over a length of 50 ± 5 mm.