

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

BS 8625:2019



BSI Standards Publication

Selection, placement and fixation of flexible postural support devices in seating – Specification

bsi.

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2019

Published by BSI Standards Limited 2019

ISBN 978 0 539 00734 3

ICS 13.180; 11.180.10

The following BSI references relate to the work on this document:

Committee reference CH/173/1

Draft for comment 19/30376647 DC

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

CONTENTS

	Page
Foreword	iii
Introduction	1
1 Scope	1
2 Normative references	2
3 Terms, definitions and abbreviations	2
4 Aims and principles of application of flexible PSDs	5
4.1 General	5
4.2 Restraint versus positioning	6
4.3 Safety	6
4.4 Paediatric needs	7
4.5 Materials	7
4.6 Transportation	9
5 Pelvic positioning	10
5.1 Anterior pelvic support	11
<i>Figure 1 — Positioning of pelvic postural support anterior to the greater trochanter</i>	11
<i>Figure 2 — Centre pull 2-point pelvic positioning support</i>	12
<i>Figure 3 — Dual pull 2-point pelvic positioning support</i>	12
<i>Figure 4 — Rear pull 2-point pelvic positioning support</i>	12
<i>Figure 5 — Centre pull 4-point pelvic positioning support</i>	13
5.2 Inferior pelvic support	14
5.3 Lateral pelvic support	14
5.4 Posterior pelvic support	14
<i>Figure 6 — Posterior pelvic support</i>	15
6 Trunk supports	15
6.1 Anterior trunk support	15
<i>Figure 7 — Rear-pull versus front-pull anterior trunk supports</i>	16
<i>Figure 8 — Anterior chest support</i>	17
<i>Figure 9 — Circumferential chest support</i>	18
<i>Figure 10 — Anterior shoulder support</i>	18
6.2 Lateral trunk support	19
6.3 Posterior trunk support	19
7 Flexible leg supports	20
7.1 Medial upper leg support	20
<i>Figure 11 — Medial upper leg support</i>	20
7.2 Posterior lower leg support	20
<i>Figure 12 — Posterior lower leg support</i>	20
8 Flexible foot supports	21
8.1 General	21
8.2 Circumferential ankle support	21
<i>Figure 13 — Circumferential ankle support</i>	21
8.3 Superior foot support	21
<i>Figure 14 — Superior foot support</i>	22
8.4 Attachment of flexible foot supports to equipment	22
9 Flexible head supports	22
9.1 Anterior head support	22
9.2 Attachment of anterior head supports to equipment	23
10 Flexible wrist support and circumferential wrist supports	23
11 Disclosure information	24

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

	<i>Figure 15 — Anterior trunk support label</i>	24
	<i>Figure 16 — Transportation label</i>	24
11.2	Fitting instructions	25
11.3	Instructions for use	25
Annex A	(normative) How to measure a person	26
	<i>Figure A.1 — Examples of linear measures of the body in the sagittal view</i>	26
	<i>Figure A.2 — Examples of linear measures of the body in the frontal view</i>	27
	<i>Figure A.3 — Examples of linear measures of the body in the transverse view</i>	27
	<i>Figure A.4 — Measurement for a pelvic positioning support</i>	28
	<i>Figure A.5 — Measurement for an anterior trunk support</i>	28
	<i>Figure A.6 — Measurement points for a circumferential chest support</i>	29
	<i>Figure A.7 — Measurement for a circumferential ankle support</i>	29
	<i>Figure A.8 — Measurement for a posterior lower leg support</i>	29
Annex B	(normative) How to measure a device	30
	<i>Figure B.1 — Linear measures of support surfaces in the sagittal view</i>	30
	<i>Figure B.2 — Linear measures of generic support surfaces in the frontal view</i>	31
	<i>Figure B.3 — Pelvic positioning support dimensions</i>	31
	<i>Table B.1 — Anterior trunk support size selection</i>	32
	<i>Table B.2 — Circumferential chest support size selection</i>	32
	<i>Table B.3 — Circumferential ankle support size selection</i>	33
Annex C	(informative) Difficulty relationship between the operability of PSD and cognitive and/or physical dexterity level of occupant	33
	<i>Table C.1 — Intended operability level of PSD (mechanical)</i>	33
	<i>Table C.2 — Intended operability level examples</i>	33
	<i>Table C.3 — Cognitive or physical dexterity level examples</i>	33
	<i>Table C.4 — Operability level examples</i>	34
Annex D	(informative) Mounting devices	34
	<i>Figure D.1 — Common examples of seating and wheelchair tubing</i>	34
	<i>Figure D.2 — Plastic clamp</i>	35
	<i>Figure D.3 — Frame clamp</i>	35
	<i>Figure D.4 — Band clamp</i>	35
	<i>Figure D.5 — Seat tube mounting bracket</i>	36
	<i>Figure D.6 — Support mounting extension arms</i>	36
	<i>Figure D.7 — T-slot fastener kit</i>	36
	<i>Figure D.8 — Triangular end-fitting and three-bar slide</i>	37
	<i>Figure D.9 — Webbing routing using a triangular fitting and three-bar slide</i>	37
	<i>Figure D.10 — Cam buckle and webbing routing</i>	38
	<i>Figure D.11 — Locking clamp end-fitting and webbing routing</i>	38
Annex E	(informative) Prevention of risk of asphyxiation	39
	Bibliography	40

Summary of pages

This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 40, an inside back cover and a back cover.

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 October 2019. It was prepared by Subcommittee CH/173/1, *Wheelchairs* under the authority of Technical Committee CH/173, *Assistive products for persons with disability*. A list of organizations represented on this committee can be obtained on request to its secretary.

Information about this document

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

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.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

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.

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

This is a preview of "BS 8625:2019". [Click here to purchase the full version from the ANSI store.](#)

Introduction

Postural support devices, such as positioning supports, have a specific purpose, which is to support an individual, to help maintain and increase day-to-day functionality for the individual, and to protect against the development of skeletal deformities, or to correct them. These devices, with their postural support purposes, are not to be confused with belts and similar devices designed to act as vehicular occupant restraints.

The records of MHRA (Medicines and Healthcare Products Regulatory Agency) show that over the last 15 years there have been four reported deaths and 17 serious injuries in the UK involving, or attributed to, pelvic postural support devices or anterior trunk postural support devices. These deaths are thought to have occurred as a result of inappropriate placement, adjustment or failure of the supports. There appears to be confusion as to best practice, and the reasons why postural supports need to be placed and adjusted according to the occupant's needs.

The MHRA originally provided guidance in the UK on the placement of pelvic positioning supports, but the advice was in effect more appropriate for wheelchair tie down and occupant restraint systems, rather than positioning supports. This advice was updated in 2015 in MDA/2015/018 [1]. This new guidance places the onus on the manufacturer or equipment prescriber to decide what might be best for an individual; although with minimal guidance on how this is to be ensured. This introduced the risk of a variety of interpretations, which might not be consistent, and which could cause further confusion.

For this reason, this British Standard has been produced to specify the selection and placement of positioning supports when used in seating systems and chairs, including wheelchairs and bathroom equipment (such as shower chairs) and, where applicable, hoists. This standard has been created for use by clinicians, engineers, carers, manufacturers, retailers and repairers.

NOTE 1 In this document, nomenclature has been based on BS ISO 7176-26 and ISO 16840-1. Thus, a support described as a positioning support might have the name adapted to include a description of its function based on the part of the body to which it is applied: e.g. a pelvic positioning support helps to position the pelvis, but might not be applied directly to the pelvis. However, an anterior pelvic support would be applied anterior to the pelvis.

NOTE 2 Positioning support placement can differ based on clinical and risk assessment.

1 Scope

This British Standard specifies requirements for the selection, placement and fixation of flexible postural support devices within seating devices and systems, and to chairs, including wheelchairs and bathroom equipment. Seating devices can be involved in one or more situations, including static seating, wheelchair seating, shower chairs, etc. The devices enable the seated person (the occupant) to be positioned to maximize their functional activities and to do so in a safe environment. These requirements have a balance of maintenance of posture and of safety.

This British Standard covers flexible positioning supports (padded or otherwise) used for postural positioning and/or safety. It does not cover belts and harnesses used in transportation for restraint, nor postural support devices made from rigid materials such as metal, wood or hard plastics, nor postural support devices designed solely for use in sports-related seating.