

BS 8603:2013



BSI Standards Publication

Code of practice for wheelchair passport schemes

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

Publishing and copyright information

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

© The British Standards Institution 2013

Published by BSI Standards Limited 2013

ISBN 978 0 580 82030 4

ICS 11.180.10; 11.180.99

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

Committee reference CH/173/1

Draft for comment 13/30265897 DC

Publication history

First published July 2013

Amendments issued since publication

DateText affected

Contents

Foreword *ii*

Introduction *1*

- 1** Scope *1*
- 2** Terms and definitions *1*
- 3** Operational framework *4*
- 4** Information for the wheelchair passport *8*
- 5** Passport design *11*
- 6** Marking *13*

Annexes

Annex A (informative) Example of a transport risk assessment process and template *14*

Annex B (informative) Passport example *22*

Annex C (normative) Risk considerations and awareness *24*

Bibliography *26*

List of tables

Table A.1 – Part 1: Passenger/service user identification *15*

Table A.2 – Part 2: Passenger mobility *16*

Table A.3 – Part 3: Passenger medical information *17*

Table A.4 – Part 4: Passenger behaviour *19*

Table A.5 – Part 5: Passenger communication *20*

Table A.6 – Part 6: Risk assessment summary *21*

Table B.1 – Passport example *22*

Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 26, an inside back cover and a back cover.

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 July 2013. It was prepared by Technical Committee CH/173/1, *Wheelchairs*. A list of organizations represented on this committee can be obtained on request to its secretary.

Relationship with other publications

This British Standard is a conversion of PAS 900, which is withdrawn.

Information about this document

This British Standard is intended for transport operations where risk assessment of individual passenger needs has taken place as part of an overall risk management process. It is intended to be used in harmony with other risk assessment processes that might already be in place.

The term “passport” has been adopted, and it has been noted that the term has connotations of cross-boundary freedom of movement. Whilst the intention of this standard is to provide guidelines for passport schemes operated on a local basis, extensive adoption of the scheme across the UK will facilitate easier and safer travel.

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

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 recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

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

Living with a disability can provide many challenges to individuals, their families and carers throughout their everyday lives. In some circumstances a wheelchair might be beneficial to assist with mobility. The design and function of a wheelchair and seating system, however, can vary widely depending on the age, needs and physical characteristics of the user and carers.

Greater freedom of mobility and access to safe transport lies at the heart of many day-to-day activities for all members of society. Similarly, safe transport for wheelchair users is a key element in an individual's ability to access medical facilities as well as participate in education, work and leisure. A seat in a motor vehicle is an additional consideration to be addressed by wheelchair manufacturers and equipment prescribers when taking into account the users' many differing rewards.

Presenting essential information for wheelchair securement, occupant restraint and other needs of the wheelchair user to transport providers in a clear manner with a common method of operation can not only reduce risks associated with travel, but enable greater confidence for the passenger, their carers and families in the achievement of social inclusion.

1 Scope

This British Standard gives recommendations for the provision and operation of systems to present essential information required by wheelchair users, their carers, vehicle drivers and their assistants, for the safer transport of wheelchair seated passengers in a road vehicle.

This British Standard also gives clarification on the roles and responsibilities of all parties engaged in the provision of wheelchairs, seating systems and wheelchair accessible transport services. This includes equipment prescribers, transport managers and transport commissioners, and outlines a risk oriented approach to maximizing passenger safety.

NOTE 1 These recommendations are intended to operate in conjunction with transport providers operating risk assessment procedures as part of a risk management process.

NOTE 2 While the information provided by a scheme might be relevant, it would not provide a wheelchair user additional right to travel on public transport.

NOTE 3 Wheelchair users and their care providers have a responsibility in providing information pertinent to their safe transport (3.2.1).

2 Terms and definitions

For the purposes of this standard, the following terms and definitions apply.

2.1 add-on components

hardware that is attached to the wheelchair frame subsequent to sale by the wheelchair manufacturer, in order to enhance design and/or performance of the wheelchair

NOTE Tools might be required to fit or remove add-on components, for example, seat back extensions, trays, spoke guards, head supports and oxygen cylinder carriers.

2.2 anchorage

assembly of components and fittings by which loads are transferred directly from the wheelchair tie-down to the vehicle, or from the occupant restraint to the vehicle, wheelchair, wheelchair tie-down, or vehicle interior component

- 2.3 boarding aid**
device intended to facilitate wheelchair access to vehicles
- 2.4 driver**
individual who drives the passenger vehicle
- NOTE The driver has overall responsibility for all matters regarding the safety of passengers.*
- 2.5 forward facing**
orientation in which the wheelchair-seated passenger faces the front of the vehicle with the wheelchair reference plane within ten degrees of the longitudinal axis of the vehicle
- 2.6 four-point tie-down**
wheelchair tie-down system that attaches to the wheelchair frame at four separate securement points and also attaches to the vehicle at four separate anchorages
- NOTE Some manufacturer instructions for use might require additional tie-downs.*
- 2.7 harm**
physical injury or damage to the health of people, or damage to property or the environment
- 2.8 hazard**
potential source of harm
- 2.9 head support**
device attached to a wheelchair or seating system, used to position or accommodate the user's head
- NOTE A head support is not the same as a head restraint, which is a device whose purpose is to limit the rearward displacement of an adult user's head in relation to his torso in order to reduce the danger of injury to the cervical vertebrae in the event of an accident.*
- 2.10 nominated representative**
person within a local authority licenced vehicle transport operation who is named as responsible for the day-to-day running of the business
- NOTE 2.26 gives examples of other transport operators.*
- 2.11 occupant restraint**
assembly of webbing and hardware intended to restrain a wheelchair user during normal vehicle movement or an impact in order to prevent ejection, and prevent or minimize contact with the vehicle interior components and other occupants
- 2.12 passenger assistant**
person or persons who assist the driver with the safety of vehicle passengers
- 2.13 passport**
document attached to a wheelchair, containing key instructions and information regarding provisions for the needs of an individual and their wheelchair in transport
- 2.14 passenger lift**
vehicle boarding aid consisting of a platform that can be mechanically raised or lowered, connecting different levels between ground and vehicle

- 2.15 postural support device**
component used to support a person in a desired seated position, but is not intended to provide occupant restraint in a vehicle impact
- 2.16 prescriber**
professional who gives directions for the allocation of a suitable wheelchair, or wheelchair and seating system combination, to suit the needs of a person with disability
- 2.17 ramp**
vehicle boarding aid consisting of an inclined surface connecting different levels between ground and vehicle
- 2.18 rearward facing**
orientation in which the wheelchair seated passenger faces the rear of the vehicle with the wheelchair reference plane within ten degrees of the longitudinal axis of the vehicle
- 2.19 recline**
change of back support angle from an upright sitting position towards a supine position without moving the seat
- 2.20 risk assessment coordinator**
person who is responsible for gathering and collating all the information from relevant sources to produce the passport
- 2.21 securement point**
point on the wheelchair to which wheelchair tie-downs are connected
- 2.22 shoulder-belt restraint/upper torso restraint**
assembly of webbing and hardware intended to limit movement of the head and chest during a crash by application of restraint forces to either or both clavicles
- 2.23 three-point restraint**
occupant restraint assembly with three anchorages comprised of both a pelvic-belt restraint and a diagonal shoulder-belt restraint that connect together near the hip of the occupant
- 2.24 transfer**
action where a wheelchair user moves from their wheelchair to a vehicle seat
- 2.25 transport commissioner**
person or organization with the authority to request or procure the provision of transport services
- NOTE A commissioner might be a local authority, transport provider, private organization or the individual wheelchair user.*
- 2.26 transport manager**
person or persons responsible for the continuous and effective control of the management of transport operations of a transport provider working with a standard operating licence, or under permit regulations

2.27 transport operator

individual or group of individuals who provide accessible transport services for the carriage of passengers

NOTE Operations might function on a profit or not-for-profit basis.

2.28 tilt

type of wheelchair design that enables the complete seat structure to rotate so that the seated occupant can be placed in a range of positions from upright to recumbent

NOTE While a recumbent position might be required for clinical reasons, a typical angle change is usually in the order of 30°.

2.29 wheelchair footprint

space outlined on the horizontal wheelchair ground plane by projecting vertically down from the outermost edges of the structural members that comprise the mobile base and seat of the wheelchair

2.30 wheelchair user

individual seated in a wheelchair

2.31 wheelchair tie-down/wheelchair securement

device or system designed to secure a wheelchair in place in a motor vehicle

2.32 wheelchair tie-down and occupant restraint system (WTORS)

complete restraint system for wheelchair seated passengers comprised of equipment for wheelchair tie-down and a belt-type occupant restraint

3 Operational framework

COMMENTARY ON CLAUSE 3

A wheelchair passport gives key information to transport providers, drivers and passenger assistants. It relates to the provision of safe transport of individual wheelchair seated passengers travelling in road vehicles and presents the information in a consistent way so as to be easily accessible.

The passport is intended to be attached to a wheelchair, clearly visible to the vehicle operator and designed to hold pertinent details, presented in a clear, safe, reliable and durable format. The extent of information supplied depends on the complexity of the individual's disability.

Implementation of the scheme is intended to provide enhanced risk control for all wheelchair seated passengers. However, the advantages in the delivery of clear information and instruction to drivers and their assistants will be at a maximum where the complexity of needs of a passenger is higher. It is therefore envisaged that the roll-out of the scheme would initially be most beneficial for passengers with more complex needs before the eventual introduction for all wheelchair seated passengers.

3.1 Wheelchair passport creation

3.1.1 General

The transport commissioner, working in conjunction with the transport manager or nominated representative within the organization of the transport provider, should ensure that a wheelchair passport is created for each identified service user, with information gathered from relevant stakeholders (3.3.1).

3.1.2 Information from the wheelchair user

The following information should be obtained from the wheelchair user, or an individual acting on their behalf:

- a) general requirements relating to their comfort and interaction with others during transport;
- b) any specific requirements to maintain their posture or position during transport;
- c) an exemption certificate that has been issued by their GP, in circumstances where a user is unable to use an occupant restraint due to their condition;

NOTE 1 User requirements do not automatically override manufacturers' recommended use.

- d) specific requirements for the need of medical equipment, e.g. oxygen etc.; and
- e) any specific action to take in the event of a medical emergency (4.2.2).

NOTE 2 Where an exemption certificate has been issued, additional risk control measures might be necessary to ensure the safety of the user and other passengers travelling in the vehicle. The need for such consideration is highlighted in the transport risk assessment template given in Annex A.

3.1.3 Information from the wheelchair and seating prescriber

The transport commissioner, working in conjunction with the transport manager or nominated representative within the organization of the transport provider, should ensure that systems are in place that enable the risk assessment coordinator to create a wheelchair passport for each identified user with information gathered from relevant stakeholders (3.3.1).

The following should be obtained from the wheelchair and/or seating prescriber:

- a) details of the current prescription and any other recommendations;
- b) confirmation that the user has been provided with a wheelchair that addresses their clinical, functional and lifestyle requirements;
- c) confirmation that the user or the user's carer has been provided with operational instructions for use and warnings about limitations where required;

NOTE 1 This is especially important when a piece of equipment or combination of pieces of equipment departs from manufacturers' instructions for use.

- d) confirmation that the prescription has been issued in consultation with a qualified clinical wheelchair prescriber (e.g. physiotherapist, occupational therapist or private retailer organizations) as required;
- e) confirmation that the following have been taken into account during the prescription process:

- 1) manufacturer statements of suitability for use in transport;
- 2) limitations of use;
- 3) warnings that apply whilst used in transport;
- 4) wheelchair and seating system stability when occupied;
- 5) the use of postural support devices;

NOTE 2 Postural support devices might include belts, thoracic pads, trays, knee blocks, pommels or foot straps.

- 6) the use of communication devices;

- 7) requirement for special tie-down equipment;
- 8) the need for add-on components; and

NOTE 3 Add-on components might include oxygen cylinders, ventilators or feeding systems.

- 9) which components should be removed from the wheelchair during transport, e.g. knee blocks and oxygen cylinders, and secured separately within the vehicle.
- f) where a departure from the manufacturers' instructions for use is required due to a user's specific clinical need, demonstration that a risk management process has been implemented to reduce risks to an acceptable level, with consideration given to the benefits of travel.

3.1.4 Information from the wheelchair and seating manufacturer

NOTE Attention is drawn to the Medical Devices Regulations 2002 [4] and to the requirements for manufacturer information given in BS EN 12183 and BS EN 12184.

The following should be obtained from the wheelchair and seating manufacturer:

- a) instructions for use, which include:
 - 1) the seating orientation of the wheelchair;
 - 2) the maximum weight of the wheelchair, including add-ons components;
 - 3) what types of add-on components are compatible;
 - 4) the generic type of tie-down that should be used, including the rated capacity of the tie-downs used; and
 - 5) images of securement point locations on the wheelchair.
- b) information on the use and attachment of postural support devices such as a head support, thoracic or pelvic supports, knee blocks and foot straps;
- c) labelling of securement point locations; and
- d) confirmation that the interface mechanism between the seating unit and the host wheelchair is capable of sustaining loads created by a crash event.

3.2 Roles, responsibilities and skills

3.2.1 Wheelchair users, parents and care providers

Information relating to the essential requirements of the wheelchair user when in transport (3.1.4) should be made available to personnel conducting risk assessment by the wheelchair user or a person acting on their behalf.

NOTE The wheelchair user, or a responsible person acting on their behalf, is responsible for ensuring that their wheelchair receives regular maintenance, including but not limited to, tyre inflation, component attachment, frame integrity and brake functionality.

3.2.2 Wheelchair and seating equipment prescribers

3.2.2.1 Wheelchair and seating prescribers providing information for the creation of the wheelchair passport should demonstrate awareness of all aspects of the risks involved with the prescription and provision of equipment.

3.2.2.2 Wheelchair and seating prescribers should ensure that hardware and components are suitable for use in transport.