PAS 68:2013



BSI Standards Publication

Impact test specifications for vehicle security barrier systems

Licensed copy: Vocational Training Council, Voc

bsi.

...making excellence a habit."

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 81108 1

ICS 93.080.30

No copying without BSI permission except as permitted by copyright law.

Publication history First published, January 2007 Second edition, January 2010 Third (current) edition, August 2013

Amendments issued since publication

Date

Text affected



Licensed copy: Vocational Training Council, Voc

Contents

Foreword iii

Introduction 1

- Scope 1 1
- Normative references 1 2
- Terms and definitions 3
- Vehicle impact method classification code 3 4
- 5 Vehicle impact assessment 5
- Design method 19 6
- Documentation 21 7
- 8 Test preparation 21

Annexes

Annex A (normative) VSB system classification types 23 Annex B (informative) Proforma test report 25 Annex C (normative) Prototypes 26

Bibliography 27

List of figures

Figure 1 – Vehicle classifications – Illustrations 7

Figure 2 – Indicative camera locations (plan view) 10

Figure 3 – Pedestrian intruder test block 11

Figure 4 – Test vehicle impact condition 13

Figure 5 – Foundation movement criteria for VSB systems (excluding bollards) to be recorded 16

Figure 6 – Foundation movement and bollard criteria to be recorded 17

Figure 7 – VSB system datum line 18

List of tables

Table 1 – Performance classification – vehicle impact test 3

Table 2 – Vehicle impact test criteria 4

- Table 3 Vehicle impact method: Test vehicle specification 6
- Table 4 Performance classification Vehicle impact test 14
- Table 5 Design method: Performance classification 20
- Table 6 Design method: Impact energy values (kJ) 20
- Table A.5 Foundation classification 23
- Table A.6 VSB system activity 23
- Table A.7 VSB system operation (active VSB systems only) 23
- Table A.8 VSB system type 24
- Table C.1 Assessment of modified VSB systems 26

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 28, an inside back cover and a back cover.

© The British Standards Institution 2013 • i

PAS 68:2013



ii • © The British Standards Institution 2013

This page deliberately left blank

Licensed copy: Vocational Training Council, Vocational Training Council, Version correct as of 19/10/2017



This page deliberately left blank

British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards -based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

Buying standards

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

Revisions

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

Copyright

All the data, software and documentation set out in all British Standards and other BSI publications are the property of and copyrighted by BSI, or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use. Except as permitted under the Copyright, Designs and Patents Act 1988 no extract may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, photocopying, recording or otherwise – without prior written permission from BSI. Details and advice can be obtained from the Copyright & Licensing Department.

Useful Contacts:

Customer Services

Tel: +44 845 086 9001 Email (orders): orders@bsigroup.com

Subscriptions

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

PLUS is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email bsmusales@bsigroup.com.

BSI Group Headquarters

bsi.

389 Chiswick High Road London W4 4AL UK

Email (enquiries): cservices@bsigroup.com

Subscriptions

Tel: +44 845 086 9001 Email: subscriptions@bsigroup.com

Knowledge Centre Tel: +44 20 8996 7004 Email: knowledgecentre@bsigroup.com

Copyright & Licensing

Tel: +44 20 8996 7070 Email: copyright@bsigroup.com

...making excellence a habit."