

Australian Standard[®]

**Methods of test—Security screen doors
and window grilles**



This Australian Standard® was prepared by Committee CS-023, Security Screen Doors and Window Grilles. It was approved on behalf of the Council of Standards Australia on 28 March 2003.

This Standard was published on 5 June 2003.

The following are represented on Committee CS-023:

- Architectural Aluminium Fabricators Association
 - Australian Aluminium Council
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Window Association
 - Bureau of Steel Manufacturers of Australia
 - Certification Bodies (Australia)
 - Curtin University of Technology
 - Department of Housing New South Wales
 - Housing Industry Association
 - Insurance Council of Australia
 - Master Builders Australia
 - Master Locksmiths Association of Australasia
 - Monash University
 - NSW Police Service
 - National Security Screen Association
 - Queensland Police Service
 - Security Agents Institute of WA
 - Steel Security Manufacturers Association Queensland
 - University of Western Sydney
 - Victoria Police
 - Victorian Employers Chamber of Commerce and Industry
 - Western Australia Police
-

This Standard was issued in draft form for comment as DR 02285.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 5041—2003

Methods of test—Security screen doors and window grilles

RECONFIRMATION NOTICE

Major stakeholders of this publication have been consulted and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 1 November 2016.

NOTES

Australian Standard[®]

Methods of test—Security screen doors and window grilles

Originated as part of AS 2803—1985, AS/NZS 2803.2:1985,
AS/NZS 4483.1:1999, and AS/NZS 4483.2:1999
Previous editions AS/NZS 2803.1:1994, AS/NZS 2803.2:1995,
AS/NZS 4483.1:1999 and AS/NZS 4483.2:1999
AS/NZS 2803.1:1994, AS/NZS 2803.2:1995,
AS/NZS 4483.1:1999, and AS/NZS 4483.2:1999 revised
amalgamated and redesignated in part as AS 5041—2003.
Reissued incorporating Amendment No. 1 (December 2007).

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia
ISBN 0 7337 5214 4

PREFACE

This Standard was prepared by the Standards Australia Committee CS-023, Security Screen Doors and Window Grilles to supersede AS/NZS 2803.1:1994, AS/NZS 2803.2:1995, AS/NZS 4483.1:1999, and AS/NZS 4483.2:1999.

This Standard incorporates Amendment No. 1 (December 2007). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide a set of methods for testing the compliance of security screen doors and window grilles used in residential structures.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard. All other notes are for information and guidance only.

A significant new development of this Standard is the amalgamation of testing requirements from AS/NZS 2803.1: *Doors-security screen-hinged*, AS/NZS 2803.2: *Doors-security screen-sliding*, AS/NZS 4483.1: *Security screen doors and security window grilles—Methods of test—Dynamic impact test*; and AS/NZS 4483.2: *Security screen doors and security window grilles—Methods of test—Knife shear test*

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	5
1.2 REFERENCED DOCUMENTS	5
1.3 ALTERNATIVE METHODS	5
1.4 DEFINITIONS	5
1.5 LIST OF METHODS	5
SECTION 2 TEST SPECIMEN AND PREPARATION FOR TESTING	
2.1 SCOPE	6
2.2 GENERAL	6
2.3 PRINCIPLE	6
2.4 TEST SPECIMEN	6
2.5 PREPARATION FOR TESTING	8
2.6 TEST APPLICATION	9
SECTION 3 DYNAMIC IMPACT TEST	
3.1 SCOPE	10
3.2 PRINCIPLE	10
3.3 DEFINITIONS	10
3.4 APPARATUS	10
3.5 IMPACT ENERGY	11
3.6 TEST PROCEDURE	11
3.7 TEST REPORT	12
SECTION 4 JEMMY TEST	
4.1 SCOPE	16
4.2 PRINCIPLE	16
4.3 APPARATUS	16
4.4 TEST PROCEDURE	19
4.5 ATTACK ON SECURITY WINDOW GRILLES	23
4.6 TEST REPORT	24
SECTION 5 PULL TEST	
5.1 SCOPE	25
5.2 PRINCIPLE	25
5.3 APPARATUS	25
5.4 TEST PROCEDURE	27
5.5 PULL TEST	34
5.6 TEST REPORT	37
SECTION 6 PROBE TEST	
6.1 SCOPE	38
6.2 PRINCIPLE	38
6.3 APPARATUS	38
6.4 TEST PROCEDURE	38
6.5 TEST REPORT	39

SECTION 7 SHEAR TEST

7.1 SCOPE 40
7.2 PRINCIPLE 40
7.3 APPARATUS 40
7.4 TEST PROCEDURE 40
7.5 TEST REPORT 40

SECTION 8 KNIFE SHEAR TEST

8.1 SCOPE 44
8.2 PRINCIPLE 44
8.3 TEST SPECIMEN 44
8.4 APPARATUS 44
8.5 TEST PROCEDURE 44
8.6 TEST REPORT 45

STANDARDS AUSTRALIA

Australian Standard

Methods of test—Security screen doors and window grilles

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out methods for testing security screen doors and window grilles used in residential structures in accordance with AS 5039.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1599 Pressure-sensitive adhesive packaging tapes
- 5039 Security screen doors and window grilles
- 5040 Installation of security screendoors and window grilles

1.3 ALTERNATIVE METHODS

Any alternative testing materials, designs, methods of assembly, procedures, that do not comply with specific requirements of this Standard, but which give equivalent results to those specified are not necessarily precluded; however, equivalent performance will need to be demonstrated.

1.4 DEFINITIONS

For the purpose of this Standard the definitions used in AS 5039 apply.

1.5 LIST OF METHODS

The following is the list of methods set out in this Standard:

- (a) Dynamic impact testSection 3.
- (b) Jemmy testSection 4.
- (c) Pull testSection 5.
- (d) Probe testSection 6.
- (e) Shear testSection 7.
- (f) Knife shear testSection 8.