AS 5040—2003
(Incorporating Amendment No. 1)
Reconfirmed 2016

AS 5040—2003

Australian Standard®

Installation of security screen doors and window grilles

STANDARDS
Australia

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 2 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
- Victorian Employers' Chamber of Commerce and Industry
- University of Western Sydney
- Victoria Police
- Western Australia Police

This Standard was issued in draft form for comment as DR 02284.

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Standards may also be withdrawn.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 5040—2003

Installation of 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

AS 5040—2003
(Incorporating Amendment No. 1)

Australian Standard®

Installation of security screen doors and window grilles

Originated as AS 2804—1985, AS/NZS 2804.2:1996 and AS/NZS 4605:1999.
Previous editions AS/NZS 2804.1:1995, AS/NZS 2804.2:1996 and AS/NZS 4605:1999.
AS/NZS 2804.1:1995, AS/NZS 2804.2:1996 and AS/NZS 4605:1999 revised amalgamated and redesignated as AS 5040—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 5212 8

PREFACE

This Standard was prepared by the Standards Australia Committee CS-023, Security Screen Doors and Window Grilles to supersede, in part, AS/NZS 2804.1:1985, *Installation of security screen doors* Part 1: *Hinged*, AS/NZS 2804.2:1996, *Installation of security screen doors*, Part 2: *Sliding* and AS/NZS 4605:1999, *Installation of security window grills*.

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 users of security screen doors or window grilles with specifications covering the general requirements for installation of security screen doors or window grilles used primarily in residential situations.

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.

Significant new developments in this Standard includes the following:

(a) An amalgamation of installation requirements from AS/NZS 2804.1, AS/NZS 2804.2 and AS/NZS 4605.

(b) Door clearances have been altered to accommodate steel doors and steel frames.

(c) Upgrade of the measuring requirements.

CONTENTS

Page

FOREWORD 4
1 SCOPE 5
2 NEW DESIGNS AND INNOVATIONS 5
3 REFERENCED DOCUMENTS 5
4 DEFINITIONS 5
5 SUITABILITY OF EXISTING DOOR OR WINDOW FRAME 6
6 MEASUREMENTS 7
7 DOOR DIMENSIONS AND CLEARANCES 10
8 FITTING OF ADAPTOR FRAME 10
9 FITTING OF METAL JAMBS AND HEADS 10
10 FITTING OF HINGES 11
11 FITTING THE LOCK AND STRIKER PLATE(S) 11
12 FACE FITTING OF SECURITY SCREEN DOORS 12
13 FACE FITTING OF SECURITY WINDOW GRILLES 12
14 INTERLOCK AND ACCEPTABLE FASTENERS 12
15 STRENGTH OF FINISHED INSTALLATION 13

FOREWORD

Door and window flyscreens are a common feature of construction in most parts of Australia, allowing for free circulation of air in hot weather and, often, excluding insects from the premises; however, flyscreens offer little security and are easily broken through. The development of the concept of security screen doors and windows grilles, being strong enough to withstand most attempts at forced entry while retaining the advantages of a screen has led to a rapid rise in the number of such products being sold and installed. In setting performance requirements for security screen doors and window grilles, this Standard acknowledges that such products are not 'intruder proof'.

Security screen doors or window grilles are intended primarily to provide a degree of security for residents of occupied premises, and the effectiveness of these products must be considered with regard to their intended use.

Requirements for the design, construction and performance of security screen doors and window grilles are set out in AS 5039, *Security screen doors and security window grilles*.

The use of unsuitable fastenings or installation into a weak frame can seriously undermine the ability of a security screen door or window grille to resist the intentions of an intruder.

Security screen doors and window grilles are currently sold mainly as separate products and are generally not supplied as part of a window or door set. Hence, they are fitted to existing exterior door or window frames either as they stand or with the use of proprietary fittings. Accordingly, the installer has an obligation to assess the strength and suitability of the existing frame in addition to correctly installing the security screen doors or window grille.

On fitting a security screen door or window grille, attention should be given to the relevant local government requirements, which require ease of egress from certain types of dwellings for the purposes of fire safety and other emergency purposes. In some situations the fitting of deadlocks may not be permissible.

Particular attention should be paid to the installation of security screen doors or window grilles to doors or windows that have not been designed to accept security grilles. The security depends on the strength and adequacy of the following:

(a) The security screen door or window grille.

(b) The adaptor frame and the method of fixing it.

(c) The structure and strength of the frame.

It is highly recommended that—

(i) security window grilles be selected and installed with due regard to occupant safety in the event of a fire, where the window may become the only emergency egress;

(ii) at least one window in each bedroom allows keyless emergency egress and the opening mechanism be easily accessible to the occupants, i.e., a maximum height of 100 mm above the bottom; and

(iii) some form of fire detection be installed in the premises.

Attention should be given also to local government regulations.

The person or organization installing security grilles should ensure that their products or services comply with individual State or Territory regulations.

STANDARDS AUSTRALIA

Australian Standard
Installation of security screen doors and window grilles

1 SCOPE

This Standard specifies requirements for the installation of hinged and sliding security screen doors and hinged, sliding and fixed security window grilles as specified in AS 5039. It specifies the minimum acceptable standards for the installation of security screen doors and window grilles primarily used in residential situations to resist forced entry.

NOTE: Residential situations would generally include, but not be limited to, Classes 1, 2, 3 and 10a as defined in the Building Code of Australia.

2 NEW DESIGNS AND INNOVATIONS

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

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1909	Installation of timber doorsets
2047	Windows in buildings—Selection and installation
5039	Security screen doors and security window grilles
5041	Methods of test—Security screen doors and window grilles

4 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

4.1 Adaptor frame (also known as build-out frame)

A section that can be fastened into the body of a door/window frame or door/window opening, providing a frame for a security window grille to be installed clear of any window furniture, which would otherwise prevent a security window grille being fitted.

4.2 Closing jamb

The vertical side member on the locking side of the door.

4.3 Door frame

A frame, surrounding and supporting a door suite, not necessarily the thickness of the wall, which consists primarily of two jambs, a head and a threshold or sill.

4.4 Face fitting

The fitting of a security screen door or window grille to the edge of a frame or the face of an architrave, with or without a rebate, formed by a planted stop on the edge or face.

4.5 Framing section

A structural member that forms the perimeter of the security screen door or window grille and supports the infill panel.

 © Standards Australia