

Australian Standard™

**Building elements—Testing and rating
for intruder resistance**

Part 1: Intruder-resistant panels

This Australian Standard was prepared by Committee MS-047, Intruder Resistance. It was approved on behalf of the Council of Standards Australia on 13 December 2002 and published on 14 February 2003.

The following are represented on Committee MS-047:

Australian Aluminium Council
Australian Bankers Association
Australian Glass and Glazing Association
Australian Industry Group
Australian Security Industry Association
Australian Shop and Office fitting Industry Association
Insurance Council of Australia
Institute of Security Executives
NSW Police Service
National Security Screen Association
Plastics and Chemicals Industries Association
Security Construction and Equipment Committee
University of Western Sydney
Victorian Automobile Chamber of Commerce
Western Australian Police

Keeping Standards up-to-date

Standards are living documents which 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 Standards may also be withdrawn.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 which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.com.au, or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 02152.

Australian Standard™

**Building elements—Testing and rating
for intruder resistance**

Part 1: Intruder-resistant panels

Originated as AS 3555—1988.
Revised and redesignated as AS 3555.1—2003.

COPYRIGHT

© Standards Australia International

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 International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5015 X

PREFACE

This Standard was prepared by the Standards Australia Committee MS-047, Intruder Resistance Building Panels, following a request from the Department of Housing and Construction on behalf of the interdepartmental Security Hardware and Construction Working Committee, to supersede AS 3555—1988, *Building elements—Testing and rating for intruder resistance*.

The objective of this Standard is to provide a method for testing and rating the resistance of an element of a building to forcible attack.

The method described is a destructive test using personnel and equipment to simulate an actual attack. It relies heavily on the competence and experience of the personnel in performing such an attack. The ratings determined may not necessarily be reproducible and should, therefore, be considered as comparative rather than as an absolute indication of the minimum time to breach the building element.

The selection of tools to be used for the simulated attack are based on an attack that can be carried out without regard to noise, smoke, vibration, etc., generated during the attack.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 APPLICATION.....	4
1.3 REFERENCED DOCUMENTS	4
1.4 DEFINITIONS	4
SECTION 2 TESTING AND RATING OF BUILDING ELEMENTS	
2.1 LEVELS OF ATTACK	5
2.2 RATING OF BUILDING ELEMENTS.....	5
APPENDICES	
A SIMULATED FORCIBLE ATTACK TEST	6

STANDARDS AUSTRALIA

Australian Standard

Building elements—Testing and rating for intruder resistance

Part 1: Intruder-resistant panels

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out a method for assessing the resistance of a building element to forcible attack.

The resistance to attack is assessed by categorizing the type of attack and rating the time taken to breach the building element.

NOTE: Resistance to attack by firearms is specified in AS 2343.

1.2 APPLICATION

This Standard is intended for use in the determination of the level of resistance to forcible attack afforded by various elements of construction used in domestic dwellings, commercial premises, public buildings, institutions, and other types of buildings that may be at risk of forcible attack.

1.3 REFERENCED DOCUMENTS

The following document is referred to in this Standard:

AS

2343 Bullet-resistant panels and elements

1.4 DEFINITIONS

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

1.4.1 Building element

An area of the walls, floors, ceilings or roof of a building, which may include doors, windows, skylights, vents or other features.

1.4.2 Common hand tools

Chisels, punches, wedges, screwdrivers, pliers, bolt cutters, hammers, axes, sledges, pry bars and ripping tools, none of which exceeds 1.5 m in length, nor 3.6 kg in mass.

1.4.3 Power tools

Portable impact hammers and hammer drills not exceeding 25 mm (nominal) chuck size, portable power saws and abrasive disc tools not exceeding 200 mm (nominal) diameter, and chainsaws and sabre saws.

1.4.4 Hydraulic tools

Portable hydraulic jacks, wedges and similar pressure-applying tools not exceeding 2.5 tonnes of applied force.

1.4.5 Cutting torch

Oxygen-gas cutting equipment.