

## Australian/New Zealand Standard™

# Visibility accessories for non-professional use—Test methods and requirements

*AS/NZS EN 13356:2015, Visibility accessories for non-professional use—Test methods and requirements, is an identical adoption of EN 13356:2001, Visibility accessories for non-professional use—Test methods and requirements, and is reproduced with the permission of CEN, Avenue Marnix 17, B-1000 Brussels, Belgium. All exploitation rights of the European Standards in any form and by any means are reserved world-wide to CEN and its National Members, and no reproduction may be undertaken without express permission in writing by CEN through Standards Australia Limited and/or Standards New Zealand.*



## **AS/NZS EN 13356:2015**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee MS-049, Retroreflective Devices. It was approved on behalf of the Council of Standards Australia on 11 June 2015 and on behalf of the Council of Standards New Zealand on 15 June 2015.

This Standard was published on 24 July 2015.

---

The following are represented on Committee MS-049:

Australian Chamber of Commerce and Industry  
Australian Industry Group  
Austroads  
AWTA Textile Testing  
CIE Australia  
Council of Textile and Fashion Industries of Australia  
Department of Planning, Transport and Infrastructure, SA  
National Association of Testing Authorities Australia  
New Zealand Road Safety Manufacturers Association  
New Zealand Sign and Display Association  
New Zealand Transport Agency  
Public Transport Authority  
Roadmarking Industry Association of Australia  
University of New South Wales  
VicRoads

---

### **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 Standards may also be withdrawn.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 joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at [www.saiglobal.com.au](http://www.saiglobal.com.au) or Standards New Zealand web site at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

---

*This Standard was issued in draft form for comment as DR AS/NZS EN 13356:2015.*

---

Australian/New Zealand Standard™

**Visibility accessories for non-  
professional use—Test methods and  
requirements**

First published as AS/NZS EN 13356:2015.

**COPYRIGHT**

© Standards Australia Limited/Standards New Zealand

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, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 1 76035 165 6

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS-049, Retroreflective Devices.

The objective of this Standard is to specify requirements for accessories meeting known criteria of high visibility at night.

This Standard is identical with, and has been reproduced from EN 13356:2001, *Visibility accessories for non-professional use—Test methods and requirements*.

As this Standard is reproduced from a European Standard, the following applies:

- (a) In the source text ‘this European Standard’ should read ‘this Australian/New Zealand Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
EN ISO	AS
6330 Textiles—Domestic washing and drying procedures for textile testing	2001 Methods of test for textiles 2001.5.4 Method 5.4: Dimensional change— Domestic washing and drying procedures for textile testing (ISO 6330:2000, MOD)

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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

## CONTENTS

<b>0</b>	<b>Introduction .....</b>	<b>4</b>
<b>1</b>	<b>Scope .....</b>	<b>4</b>
<b>2</b>	<b>Normative references .....</b>	<b>4</b>
<b>3</b>	<b>Terms and definitions.....</b>	<b>5</b>
<b>4</b>	<b>Requirements for accessories.....</b>	<b>5</b>
<b>4.1</b>	<b>General requirements.....</b>	<b>5</b>
<b>4.2</b>	<b>Specific requirements for different types of accessories.....</b>	<b>6</b>
<b>5</b>	<b>Testing .....</b>	<b>7</b>
<b>5.1</b>	<b>General.....</b>	<b>7</b>
<b>5.2</b>	<b>Photometric testing .....</b>	<b>8</b>
<b>5.3</b>	<b>Abrasion test (brushing) .....</b>	<b>8</b>
<b>5.4</b>	<b>Washing and dry cleaning test .....</b>	<b>9</b>
<b>5.5</b>	<b>Low temperature test.....</b>	<b>9</b>
<b>5.6</b>	<b>High temperature test.....</b>	<b>9</b>
<b>5.7</b>	<b>Exposure to water .....</b>	<b>9</b>
<b>6</b>	<b>Marking .....</b>	<b>10</b>
<b>7</b>	<b>Manufacture information for use.....</b>	<b>10</b>
<b>Annex A</b>	<b>(normative) Test method for brushing according to 5.3 .....</b>	<b>11</b>
<b>A.1</b>	<b>Apparatus.....</b>	<b>11</b>
<b>Annex ZA</b>	<b>(informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives .....</b>	<b>12</b>

## AUSTRALIAN/NEW ZEALAND STANDARD

**Visibility accessories for non-professional use—Test methods and requirements****0 Introduction**

This European Standard relates to products primarily intended to be worn or carried by individuals to make them more conspicuous to other road users under low light levels. The products rely upon retro-reflection for their performance. The products can be regarded as aids to conspicuity that perform best in circumstances of very low ambient lighting. On lit urban roads, products conforming to EN 471 : 1994 or EN 1150 are necessary to provide conspicuity. In any circumstance in which the failure of a vehicle driver to become aware of another road user could result in the serious injury or death of that road user, only high conspicuity garments can be recommended for use. Products conforming to this European Standard have a utility when their movement and retro-reflection attract observers' attention.

**1 Scope**

This standard specifies the optical performance requirements for accessories which are to be worn, attached to or carried by people and designed for non-professional use. Visibility accessories complying with this standard are intended to signal the user's presence visually when illuminated by vehicle headlight on dark roads. This standard is not applicable to garments.

**2 Normative references**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 471 : 1994

High-visibility warning clothing

EN 1150

Protective clothing - Visibility clothing for non-professional use - Test methods and requirements

EN ISO 3175 : 1995

Textiles - Evaluation of stability to machine dry-cleaning (ISO 3175:1995)

EN ISO 6330 : 2000

Textiles - Domestic washing and drying procedures for textile testing (ISO 6330:2000)

CIE 17.4 :1987

International lighting vocabulary – Chapter 845: Lighting

CIE 18.2 : 1983

The basis of physical photometry

CIE 54 :1982

Retroreflection: Definition and measurement

IEC 60068-2-32

Basic environmental testing procedures – Part 2: Tests – Test Ed: Free fall

ISO 4675

Rubber- or plastics-coated fabrics - Low-temperature bend test