

AS/NZS 1906.4:2010
(Incorporating Amendment No. 1)

AS/NZS 1906.4:2010

Australian/New Zealand Standard™

**Retroreflective materials and devices for
road traffic control purposes**

**Part 4: High-visibility materials for
safety garments**



AS/NZS 1906.4:2010

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 28 June 2010 and on behalf of the Council of Standards New Zealand on 23 July 2010.

This Standard was published on 20 September 2010.

The following are represented on Committee MS-049:

Australian Chamber of Commerce and Industry
Australian Industry Group
Austroads
AWTA Textile Testing
CSIRO Textile and Fibre Technology
Department of Transport, Energy and Infrastructure, SA
New Zealand Transport Agency
National Association of Testing Authorities
Public Transport Authority
Roadmarking Industry Association of Australia
Road Safety Manufacturers Association, New Zealand
Transit New Zealand
University of New South Wales
Victorian College of Optometry
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 Standards may also be withdrawn.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 or Standards New Zealand web site at 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.

AS/NZS 1906.4:2010
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Retroreflective materials and devices for road traffic control purposes

Part 4: High-visibility materials for safety garments

Originated in New Zealand as NZS 5839:1986.
Previous edition AS/NZS 1906.4:1997.
Second edition 2010.
Reissued incorporating Amendment No. 1 (May 2014).

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 0 7337 9661 6

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MS-049, Retroreflective Devices and supersedes AS/NZS 1906.4:1997, *Retroreflective materials and devices for road traffic control purposes*, Part 4: *High visibility materials for safety garments*.

This Standard incorporates Amendment No. 1 (April 2014). 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.

It is one of a series of four Standards as follows:

AS

- 1906 Retroreflective materials and devices for road traffic control purposes
- 1906.3 Part 3: Raised pavement markers (retroreflective and non-retroreflective)

AS/NZS

- 1906 Retroreflective materials and devices for road traffic control purposes
- 1906.1 Part 1: Retroreflective sheeting
- 1906.2 Part 2: Retroreflective devices (non-pavement application)
- 1906.4 Part 4: High visibility materials for safety garments (this Standard)

This Standard covers only high-visibility materials to be used in the manufacture of safety garments, rather than the garments themselves. Requirements for high-visibility garments are specified in AS/NZS 4602.1, *High visibility safety garments*, Part 1: *Garments for general use*.

The principal changes from the 1997 edition of this Standard are as follows:

- (a) The photometric performance required of Class RF combined performance retroreflective/fluorescent material has been raised to the same level as other retroreflective materials.
- (b) The testing of daylight colour and luminance factor of fluorescent materials has been refined and now makes provision for use of the double monochromator method where warranted.
- (c) The test for daylight colour retention in fluorescent materials when wet, has been made optional.
- (d) A clause relating to the acceptance of background material supplied from overseas has been deleted.

EN 471, *High-visibility warning clothing for professional use—Test methods and requirements*, was consulted in the preparation of this Standard.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

CONTENTS

	<i>Page</i>
FOREWORD.....	4
 SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 REFERENCED DOCUMENTS.....	5
1.3 DEFINITIONS.....	6
1.4 CLASSIFICATION OF MATERIALS	7
 SECTION 2 HIGH DAYTIME VISIBILITY MATERIALS CLASSES F, RF AND NF	
2.1 APPLICATION OF SECTION	8
2.2 GENERAL DESCRIPTION AND SUMMARY OF TEST REQUIREMENTS	8
2.3 FLUORESCENT COLOUR	8
2.4 NON-FLUORESCENT COLOUR.....	10
2.5 DURABILITY	11
2.6 WET WEATHER PERFORMANCE (OPTIONAL).....	11
 SECTION 3 RETROREFLECTIVE MATERIALS CLASSES R AND RF	
3.1 APPLICATION OF SECTION	12
3.2 GENERAL DESCRIPTION AND SUMMARY OF TEST REQUIREMENTS	12
3.3 MINIMUM PHOTOMETRIC PERFORMANCE FOR CLASS R AND CLASS RF SERIES MATERIALS.....	12
3.4 COLOUR.....	13
3.5 DURABILITY TESTS.....	13
3.6 RESISTANCE TO FLEXING	14
3.7 RESISTANCE TO COLD CRACKING	14
3.8 RAINFALL PERFORMANCE	14
 SECTION 4 MATERIAL CARE AND MARKING	
4.1 CARE LABELLING.....	15
4.2 MARKING	15
 APPENDICES	
A DAYLIGHT COLOUR AND LUMINANCE FACTOR TESTS—FLUORESCENT AND NON-FLUORESCENT MATERIALS	16
B ABRASION TEST FOR RETROREFLECTIVE MATERIAL	19
C RAISED TEMPERATURE TEST FOR RETROREFLECTIVE MATERIAL.....	21

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-