

Australian Standard™

**Air filters for use in general ventilation
and airconditioning**

**Part 1: Application, performance and
construction**



This Australian Standard was prepared by Committee ME-080, Air Filters. It was approved on behalf of the Council of Standards Australia on 26 October 2001 and published on 12 December 2001.

The following interests are represented on Committee ME-080:

Air-Conditioning and Refrigeration Equipment Manufacturers Association of Australia
Australian Chamber of Manufacturers
Australian Contamination Control Society
Australian Institute of Hotel Engineering
Australian Institute of Refrigeration Air Conditioning and Heating
CSIRO—Division of Animal Health
CSIRO—Division of Atmospheric Research
Institute of Plant Engineers of Australasia
Metal Trades Industry Association of Australia
Property Council of Australia

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 Standards may also be withdrawn.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 website 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.

Australian Standard™

**Air filters for use in general ventilation
and airconditioning**

**Part 1: Application, performance and
construction**

Formulated as part of AS 1323—1973 and AS 1324—1973.
Previous edition AS 1324.1—1996.
Second edition 2001.

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 4193 2

PREFACE

This Standard was prepared by Standards Australia Committee ME-080, Air Filters, to supersede AS 1324.1—1996.

This Standard forms Part 1 of a two-part series of Standards, which addresses general air filters. Part 2 of the series covers the methods of test for such air filters.

The classification system given in this Standard has been generally adopted from EN 779, *Particulate air filters for general ventilation—Requirements, testing, marking*.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

CONTENTS

	Page
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	4
1.2 REFERENCED DOCUMENTS.....	4
1.3 DEFINITIONS.....	5
SECTION 2 CLASSIFICATION AND APPLICATION	
2.1 CLASSIFICATION	8
2.2 APPLICATION	8
SECTION 3 DESIGN AND CONSTRUCTION	
3.1 GENERAL.....	10
3.2 CLASS A FILTERS	10
3.3 CLASS B FILTERS.....	10
3.4 CLASS C FILTERS.....	10
3.5 CLASS D FILTERS	10
SECTION 4 PERFORMANCE REQUIREMENTS	
4.1 GENERAL.....	11
4.2 INITIAL RESISTANCE.....	11
4.3 CARRY OVER.....	11
4.4 EFFICIENCY	11
4.5 ARRESTANCE	11
4.6 FILTER PERFORMANCE RATING	11
4.7 DUST HOLDING CAPACITY.....	11
SECTION 5 GENERAL REQUIREMENTS	
5.1 MARKING	12
5.2 PUBLISHED DATA.....	12
5.3 FIRE PRECAUTIONS	12
5.4 TESTS	12
APPENDICE A MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD.....	
	13

STANDARDS AUSTRALIA

Australian Standard

Air filters for use in general ventilation and airconditioning

Part 1: Application, performance and construction

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements for the performance and construction of air filters for use in general ventilation and airconditioning systems. It classifies air filters on the basis of design, construction, performance and application, and establishes minimum criteria for acceptance of an air filter into a particular category.

NOTES:

- 1 HEPA filters are specified in AS 4260.
- 2 Alternative means for demonstrating compliance with this standard are given in Appendix A.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

1199	Sampling procedures and tables for inspection by attributes
1324	Air filters for use in general ventilation and airconditioning
1324.2	Part 2: Methods of test
1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
4260	High efficiency particulate air (HEPA) filters—Classification, construction and performance

AS/NZS

1668	Thermal environment of ventilation and airconditioning in buildings
1668.1	Part 1: Fire and smoke control

ISO 9001	Quality management systems—Requirements
----------	---

ISO 9004	Quality management systems—Guidelines for performance requirements
----------	--

SAI

HP 18	Guidelines for third-party certification and accreditation
HP 18.2	Guide 28—General rules for a model third-party certification scheme for products

EN

779	Particulate air filters for general ventilation—Requirements, testing, marking
-----	--

ANSI

ASHRAE 52	Gravimetric and dust-spot procedures for testing air-cleaning devices used in general ventilation for removing particulate matter
-----------	---