

Australian Standard[®]

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

Part 2: Methods of test

This Australian Standard was prepared by Committee ME/80, Air Filters. It was approved on behalf of the Council of Standards Australia on 16 February 1996 and published on 5 June 1996.

The following interests are represented on Committee ME/80:

Air-conditioning and Refrigeration Equipment Manufacturers Association of Australia
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Contamination Control Society
Australian Institute of Hotel Engineering
Australian Institute of Refrigeration Air Conditioning and Heating
Building Owners and Managers Association of Australia
CSIRO—Division of Animal Health
CSIRO—Division of Atmospheric Research
Council of the City of Sydney
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PREFACE

This Standard was prepared by Standards Australia Committee ME/80, Air Filters. The objective of this Standard is to establish uniform comparative testing procedures meaningful to users and manufacturers for evaluating performance of all air cleaning devices used in airconditioning and general ventilation to remove particulate matter. The Standard further establishes uniform specifications for equipment used to conduct such tests and a uniform method for reporting the performance obtained from the specified procedure.

This Standard supersedes (in part) AS 1132—1973 Parts one to eight, under the generic title of *Methods of test for air filters for use in general air conditioning and general ventilation*, and (in part) AS 1323—1973, *Glossary of terms for air filters for use in air conditioning and general ventilation*.

Dynamic arrestance tests have been deleted and Test Dust Nos. 2 and 3 tests have been separated and designated as special tests for assessing particular filter applications. Testing methodology and apparatus have been generally revised to improve the reproducibility of test results and to bring the test methods more into line with current European and American practices. This policy has been adopted in anticipation of an ISO International Standard being developed and adopted as a national Standard in Australia.

This Standard forms Part 2 of a two-part series of Standards to address general air filters. Part 1 of the series covers the application, performance and construction requirements for such filters.

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.

This Standard has undergone a considerable number of changes and revisions. Details of the publishing history can be obtained from Standards Australia's Information Centre.

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Originated in part as AS 1132.1— 1973, AS 1132.2—1973,
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 AS 1132.6—1973, AS 1132.7—1973, AS 1132.8— 1973, and part of
 AS 1323 —1973.
 Revised, amalgamated and redesignated AS 1324.2— 1996.

STANDARDS AUSTRALIA

Australian Standard

Air filters for use in general ventilation and airconditioning

Part 2: Methods of test

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE The test methods described are intended for laboratory or bench testing of air filters used in general ventilation and airconditioning systems. In this Standard, general information is given on procedures, test dusts, test rig and apparatus.

This Standard does not include information relating particular test methods to filter applications as these details are given in AS 1324.1.

NOTES:

- 1 Requirements of performance and construction of air filters for use in general ventilation and airconditioning are specified in AS 1324.1.
- 2 Methods of on-site testing High Efficiency Particulate Air filters (HEPA filters) are specified in AS 1807. Performance, construction and methods of test for HEPA filters are specified in AS 4260.1 and AS 4260.2.

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1289	Methods of testing soils for engineering purposes
1289.3.6.3	Method 3.6.3: Soil classification tests—Determination of the particle size distribution of a soil—Standard method of fine analysis using a hydrometer
1324	Air filters for use in general ventilation and airconditioning
1324.1	Part 1: Application, performance and construction
1349	Bourdon tube pressure and vacuum gauges
1807	Cleanrooms, workstations and safety cabinets—Methods of test
2360	Measurement of fluid flow in closed conduits
2360.1.1	Part 1.1: Pressure differential methods—Measurement using orifice plates, nozzles or Venturi tubes—Conduits with diameters from 50 mm to 1200 mm
4260*	High efficiency particulate air (HEPA) filters
4260.1	Part 1: Performance and construction
4260.2	Part 2: Methods of test

ANSI

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