Australian Standard®

High efficiency particulate air (HEPA) filters—Classification, construction and performance

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The following interests are represented on Committee ME/80:

Air-conditioning and Refrigeration Equipment Manufacturers Association of Australia

Australian Chamber of Manufactures

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

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High efficiency particulate air (HEPA) filters—Classification, construction and performance

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PREFACE

This Standard was prepared by the Standards Australia Committee ME/80 on Air Filters. This Standard supersedes AS 4260.1(Int)—1994, *High efficiency particulate air (HEPA) filters*, Part 1: *Performance and construction* and AS 4260.2(Int)—1994, *High efficiency particulate air (HEPA) filters*, Part 2: *Methods of test*.

The objective of this Standard is to provide designers, manufacturers and installers of air filtration equipment with requirements for the classification, construction and performance testing of HEPA filters.

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

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STANDARDS AUSTRALIA

Australian Standard

High efficiency particulate air (HEPA) filters—Classification, construction and performance

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE This Standard specifies requirements for the classification, construction and performance testing of fully disposable high efficiency particulate air (HEPA) filters. It includes those filters known as ultra low penetration air (ULPA) filters but excludes medium efficiency particulate air filters (MEPA).

NOTES:

1 Requirements for air filters for use in general ventilation and airconditioning are given in AS 1324.1 and AS 1324.2. Although MEPA filters are not within the scope of this Standard it is recognized that there are similarities of construction, and relevant parts of this Standard may be applied to MEPA filters by buyer/seller agreement.

2 The filters covered by this Standard achieve very low sub-micrometre particulate levels for the protection of people, products, and processes from potential contamination. Common applications are cleanrooms for control and protection of pharmaceutical and electronic processes, operating theatres, clean workstations, nuclear containment facilities, and biological containment facilities including safety cabinets.

3 Purchasing guidelines are provided in Appendix A. Handling and shipment guidelines are provided in Appendix B.

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

AS	
1324	Air filters for use in general ventilation and airconditioning
1324.1	Part 1: Application, performance and construction
1324.2	Part 2: Methods of test
1449	Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip
1530	Methods for fire tests on building materials, components and structures
1530.1	Part 1: Combustibility test for materials
1530.3	Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release
1734	Aluminium and aluminium alloys—Flat sheet, coiled sheet and plate
1807	Cleanrooms, workstations and safety cabinets—Methods of test
1807.6	Part 6: Determination of integrity of terminally mounted HEPA filter installations
1807.7	Part 7: Determination of integrity of HEPA filter installations not terminally mounted
2272	Marine plywood
2852	Packaging—Pictorial marking for the handling of packages
AS/NZS	
1859	Reconstituted wood-based panels
1859.1	Particleboard

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