



Wheelchairs

# Part 2: Requirements and test methods for electrically powered wheelchairs (including mobility scooters)

This Australian Standard is the adoption of EN 12184:2014 with national modifications as set out in the Appendix ZZ to take account of Australian conditions with the permission of the European Committee for Standardization -GEN, Avenue Marnix 17, B-1000 Brussels, Belgium.



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This Australian Standard® was prepared by Committee ME-067, Assistive Technology Products for Persons with Disability. It was approved on behalf of the Council of Standards Australia on 27 February 2019. This Standard was published on 7 May 2019.

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- Assistive Technology Suppliers Australasia
- Australian Rehabilitation and Assistive Technology Association
- Department for Communities and Social Inclusion (SA) •
- Heavy Vehicle Industry Australia •
- Independent Living Centres Australia •
- Medical Aids Subsidy Scheme (MASS) (Qld)
- National Disability Insurance Agency (Australian Government)
- Novita (SA)
- Occupational Therapy Australia
- Physical Disability Australia
- **Royal Perth Hospital**
- Technical Aid to the Disables (TAD) Australia

This Standard was issued in draft form for comment as DR AS/NZS 3695.2:2018.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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## Part 2: Requirements and test methods for electrically powered wheelchairs (including mobility scooters)

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ii

### PREFACE

This Standard was prepared by the Standards Australia Committee ME-067, Assistive Technology Products for Persons with Disabilities, to supersede, in part, AS/NZS 3695.2:2013, Wheelchairs, Part 2: Requirements and test methods for electrically powered wheelchairs (including mobility scooters).

The objective of this Standard is to specify test requirements and minimum performance, safety and durability requirements for electrically powered wheelchairs, scooters and their battery chargers.

This Standard is an adoption with national modifications and has been reproduced from EN 12184:2014, *Electrically powered wheelchairs, scooters and their chargers* — *Requirements and test methods*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added to the end of the source text.

The braking requirements of this Standard differ from the braking requirements of EN 12184 primarily when the wheelchair is in 'freewheel mode'. This Standard requires a warning in the user manual where no braking exists when a wheelchair is in freewheel mode while EN 12184 does not.

Where this Standard does not apply to particular wheelchairs, contracting parties should consider if relevant parts of this Standard can be used.

Manufacturers may also wish to consider if relevant parts of this Standard can be used to assess the performance of their products against the relevant requirements for medical devices in the *Therapeutic Goods Act 1989* (Cth).

In revising this Standard, the committee continues to incorporate developments from the ISO series of test methods for wheelchairs (ISO 7176) and seating (ISO 16840).

This Standard is part of a series as follows:

AS/NZS 3695.1, Wheelchairs, Part 1: Requirements and test methods for manual wheelchairs.

AS 3695.2, Wheelchairs, Part 2: Requirements for electrically powered wheelchairs (this Standard).

SA TS 3695.3, Wheelchairs, Part 3: Requirements for designation of powered wheelchairs and mobility scooters for public transport and/or road-related area use.

Appendix ZZ lists the variations to EN 12184:2014 for the application of this Standard in Australia which clarify jurisdictional variations and other additional Australian requirements outlined in this Standard. These include the following:

- (a) The definition of a custom-made wheelchair [see Clause 3.101 (new)].
- (b) Where the manufacturer specifies that the seat can be used in a motor vehicle, the wheelchair is required to conform with AS/NZS 3696.19:2009 (see Clause 8.3).
- (c) A more rigorous test for ignitability of upholstery is required. The Standard for testing ignitability of upholstery has been updated from ISO 8191-2:1988 to AS/NZS ISO 7176.16:2013 (see Clause 9.5).
- (d) Variations to the electrical requirements in accordance with jurisdictional requirements (see Clauses 12.1 and 12.3).
- (e) The wheelchair is to be equipped with a charge level indicator [see Clause 12.101 (new)].
- (f) All batteries that are part of the wheelchair power and control system are required to be non-spillable batteries. Lead-acid chemistries are required to be in accordance with AS/NZS ISO 7176.25:2014 [see Clause 12.102 (new)].

- (g) A variation to the assistant reach space to include an area of 100 mm behind the wheelchair (see Figure 3).
- (h) Variations to Annex C in accordance with jurisdictional variations previously agreed to by transport regulators.

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