

AS 3856.1:2021



Hoists and ramps for people with disabilities — Vehicle mounted

Part 1: Product requirements



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- Heavy Vehicle Industry Australia
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- Medical Aids Subsidy Scheme (Australia)
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- Novita Children's Services (Australia)
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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-067, Assistive Technology, to supersede AS/NZS 3856.1:1998, *Hoists and ramps for people with disabilities — Vehicle mounted, Part 1: Product requirements*.

The objective of this document is to provide persons concerned with the manufacture of hoists and ramps and their fitting onto vehicles, community transport organizers, regulatory authorities and operators with minimum design and performance specifications for hoists and ramps intended to be fitted on vehicles.

This document requires products to be tested in their fully assembled condition, both before and after fitment to a vehicle.

The document covers ramps as well as hoists because some hoisting appliances deploy a platform which forms a ramp or a set of ramps during the operating cycle.

The document covers only those appliances which are necessarily attached to a vehicle during their use. The types of appliances which are placed next to a vehicle for hoisting a person into the vehicle are covered in AS/NZS ISO 10535:2011.

While it is recognized that operators of vehicle fitted hoists and ramps may or may not be in the company of an attendant, the requirements in the document do not cover all requirements for the sole operation of an appliance by an operator, self-operated appliances usually being tailored to their specific needs.

The term 'normative' is used in Standards to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

Contents

Preface	ii
1 Scope and general	1
1.1 Scope	1
1.2 Normative references	1
1.3 Terms and definitions	1
2 Types of appliances	2
3 General requirements	3
4 Type A, Type B, Type C and Type D ramps and hoists	4
4.1 Material, design and construction requirements	4
4.2 Enclosure integrity	4
4.3 Hydraulic equipment	4
4.4 Manually operated folding mechanisms	4
4.5 Control systems	4
5 Type A and B appliances	6
5.1 Design and construction requirements	6
5.2 Performance requirements	7
5.2.1 Uncontrolled descent under gravity	7
5.2.2 Deflection	7
5.2.3 Static strength	7
5.2.4 Speed	7
5.2.5 Acceleration	7
5.2.6 Durability	7
6 Type C appliances	8
6.1 Design and construction requirements	8
6.2 Performance requirements	8
6.2.1 Static Strength	8
6.2.2 Durability	8
7 Type D and E appliances	8
7.1 General	8
7.2 Performance requirements	9
7.2.1 Type D appliances	9
7.2.2 Type E appliances	9
8 Information disclosure requirements	9
8.1 General	9
8.2 Labelling	10
8.3 Pre-sale information	10
8.4 Operator information	10
Appendix A (normative) Test for performance of a platform under simulated failure of operating power or equipment	11
Appendix B (normative) Test for platform deflection	14
Appendix C (normative) Platform strength test	16
Appendix D (normative) Tests for dynamic durability, and measurement of speed and acceleration	18
Appendix E (normative) Ramp strength test	20
Appendix F (normative) Temperature cycling test	22
Appendix G (normative) Electrical safety tests	26
Bibliography	31

NOTES

Australian Standard®

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1 Scope and general

1.1 Scope

This document specifies requirements for the design, performance and installation of hoists and ramps for use by people with disabilities in accessing ADR compliant motor vehicles.

This document does not apply to devices for hoisting unoccupied mobility devices into or onto a vehicle.

Specific elements of the document are relevant to portable hoists or ramps not permanently fitted to the vehicle.

1.2 Normative references

For the purposes of this document, the following terms and definitions apply.

AS 3696.13, *Wheelchairs, Part 13: Determination of coefficient of friction of test surfaces*

AS 3856.2 *Hoists and ramps for people with disabilities — Vehicle mounted Part 2: Installation requirements*

AS ISO 14971, *Medical devices — Application of risk management to medical devices*

AS/NZS ISO 7176.14, *Wheelchairs, Part 14: Power and control systems for electrically powered wheelchairs and scooters — Requirements and test methods*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 62262, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*

UN R10. *United Nations Regulation No. 10: Uniform provisions concerning the approval of vehicles with regard to electromagnetic compatibility*

1.3 Terms and definitions

For the purpose of this Standard, the definitions below apply.

1.3.1

appliance

hoist, ramp or platform

1.3.2

braking

action of force being applied to slow or stop a moving mechanism

1.3.3

deploy

move an appliance from a stored position to an operating position

1.3.4

edge barrier

barrier attached to the side edges of a platform or ramp extending above the surface of the platform or ramp