

AS 3856.2:2021



STANDARDS
Australia



Hoists and ramps for people with disabilities — Vehicle fitted

Part 2: Fitting requirements



currently in preview, click buy full version

AS 3856.2:2021

This Australian Standard™ was prepared by ME-067, Assistive Technology. It was approved on behalf of the Council of Standards Australia on 15 April 2021.

This Standard was published on 30 April 2021.

The following are represented on Committee ME-067:

- Assistive Technology Suppliers Australasia
- Australian Nursing and Midwifery Federation
- Australian Rehabilitation & Assistive Technology Association
- Heavy Vehicle Industry Australia
- Independent Living Centres Australia
- Medical Aids Subsidy Scheme, Australia
- National Disability Insurance Agency, Australia
- Novita Children's Services, Australia
- Occupational Therapy Australia

This Standard was issued in draft form for comment as DR AS 3856.2:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76113 297 1

Hoists and ramps for people with disabilities — Vehicle fitted

Part 2: Fitting requirements

Originated as AS 3856.2—1991.
Jointly revised and redesignated as AS/NZS 3856.2:1998.
Revised and redesignated as AS 3856.2:2021.

© 2021 — All rights reserved
© Standards Australia Limited 2021

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, unless otherwise permitted under the Copyright Act 1968(Cth).

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-067, Assistive Technology for Persons with a Disability, to supersede AS/NZS 3856.2:1998, *Hoists and ramps for people with disabilities — Vehicle mounted, Part 2: Installation requirements*.

The objective of this document is to provide persons concerned with the manufacture of hoists and ramps and their fitting to motor vehicles, community transport organizers, regulatory authorities and users, with minimum specifications for the fitting of hoists and ramps in motor vehicles.

This document is intended to be used in conjunction with AS 3856.1.

In this edition, for appliances which are not deployed and stored manually, a requirement for a safety interlock to prevent movement of the vehicle if the appliance is not stored, has been included. Other changes have been made to clarify existing test procedures and requirements.

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	1
2 Normative references	1
3 Terms and definitions	1
4 General	2
5 Types of appliances	2
6 Product requirements	2
7 Weight	2
8 Protrusion	2
9 Padding and protective covering	2
10 Protection against entrapment	3
11 Electrical systems	3
11.1 General	3
11.2 Wiring	3
11.3 Switches	3
11.4 Connectors	3
11.5 Fuses	3
11.6 Circuits	4
12 Warning system	4
13 Securement of ramps	4
13.1 Attachment to the vehicle	4
13.2 Storage in the vehicle	4
14 Vehicle access	4
15 Steps or stairs	4
16 Performance requirements	4
16.1 General	4
16.1.1 Operation of the appliance when the vehicle is on level ground, on a gradient and at an angle	4
16.1.2 Clearance between moving parts and the vehicle	5
16.2 Type A and Type B appliances	5
16.2.1 Resistance to self-damage	5
16.2.2 Interface of a platform with the vehicle	5
16.3 Type C and Type D appliances	5
Appendix A (normative) Test for self-damage	6
Appendix B (normative) Platform-vehicle interface test	7
Appendix C (normative) Vehicle detachment testing for Type E ramps	9
Appendix D (normative) Electrical safety	12
Bibliography	15

NOTES

Currently in preview, click buy full version

Australian Standard®

Hoists and ramps for people with disabilities — Vehicle fitted

Part 2: Fitting requirements

1 Scope

This document specifies requirements for the fitting to motor vehicles of hoists and ramps of the types specified in AS 3856.1. This Standard does not include the fitting of appliances for hoisting unoccupied wheelchairs into or onto a vehicle.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1428.2, *Design for access and mobility, Part 2: Enhanced and additional requirements — Buildings and facilities*

AS 3856.1, *Hoists and ramps for people with disabilities — Vehicle fitted, Part 1: Product requirements*

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

AS/NZS 10542.1:2015, *Technical systems and aids for people with disability — Wheelchair tiedown and occupant-restraint systems, Part 1: Requirements and test methods for all systems (ISO 10542-1:2012, MOD)*

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1

appliance

hoist or ramp

3.2

bridge plate

cover over the gap between the threshold of the vehicle entry and the edge of the boarding platform

Note 1 to entry: The bridge plate may also be used as an inner roll stop.

3.3

deploy

move the appliance from a stored position on the vehicle to an operating position

3.4

platform

load-bearing surface which is constructed in the one plane

3.5

ramp

inclined platform which is either permanently or temporarily attached to the vehicle

Note 1 to entry: The word may mean one ramp or more than one ramp used together.

3.6

shall

indicates that a statement is mandatory