



Transport

Wheelchair Accessible Taxi Measurement Protocol

3 March 2011

**This protocol applies to all vehicles being used as a
Wheelchair Accessible Taxi for the first time from 1
October 2011**

Table of Contents

- 1 Purpose 3
- 2 Design Specification Requirements..... 3
 - 2.1 Where Boarding Devices Must be Provided 3
 - 2.2 General Requirements for Boarding Devices 3
 - 2.3 Boarding Ramps..... 4
 - 2.3.1 Ramp Details 4
 - 2.5 Allocated Space Dimensions and Clear Space Around Wheelchair 4
 - 2.7 Signage 6
 - 2.8 Engineering Certificate 6
 - 2.8.1 Engineering Certificate – Standard Paragraph..... 6

1 Purpose

The purpose of this protocol is to provide persons undertaking vehicle modifications, persons registered with the Roads and Traffic Authority as engineering signatories and taxi builders with the measurement requirements for vehicles being used as a Wheelchair Accessible Taxi for the first time from 1 October 2011.

This document incorporates the relevant requirements of the following Australian Standards:

- **AS.2942-1994** *Wheelchair Occupant Restraint Assemblies for Motor Vehicles.*
- **AS.3696.13** *Wheelchairs – Determination of co-efficient of friction of test surfaces.*
- **AS.3856.1** *Hoists and Ramps for People with Disabilities – Vehicle-Mounted.*

2 Design Specification Requirements

2.1 Where Boarding Devices Must be Provided

- 2.1.1 A manual or power assisted boarding device must be available at any accessible entrance to a taxi that has a vertical rise exceeding 12 mm or a horizontal gap exceeding 40 mm.

Note: A Boarding Device can be either a ramp or the platform of a wheelchair hoist or lift mechanism.

2.2 General Requirements for Boarding Devices

Each boarding device shall:

- 2.2.1 be able to support a total passenger and mobility device weight of 300kg. (Note the static test load is 450 kg).
- 2.2.2 be clearly labelled with the Working Load Limit (WLL), both on the boarding device and next to the accessible entrance on the outside of the vehicle.
- 2.2.3 have a slip resistant finish complying with AS.3696.13.
- 2.2.4 be at least 800mm wide.

- 2.2.5 if a platform, have edge barriers and front and rear roll stops which are at least 75mm high.
- 2.2.6 If a wheelchair hoist (or wheelchair lift mechanism), providing a vertical lift exceeding 400mm, have edge barriers.

2.3 Boarding Ramps

2.3.1 Ramp Details

- 2.3.1.1 A ramp shall have no protrusions extending for more than 6mm above the surface except for cleats intended to assist an attendant using the ramp.
- 2.3.1.2 If two or more ramps are used they are to be attached securely to one another.
- 2.3.1.3 When the ramp is set up for use there shall be no horizontal opening or gap greater than 40mm in width.
- 2.3.1.4 For unassisted use, the maximum slope of a ramp shall be:
 - 1 in 14; or
 - if the ramp is less than 1520mm long, 1 in 8.
- 2.3.1.5 For assisted use, the maximum slope of a ramp shall be 1 in 4.

2.4 Door Height and Width

- 2.4.1 Doorways must have an unobstructed vertical height of at least 1500 mm. The measurement is made vertically from the allocated space floor to the underside of the doorway.
- 2.4.2 Doorways must have an unobstructed width of at least 800mm.

2.5 Allocated Space Dimensions and Clear Space Around Wheelchair

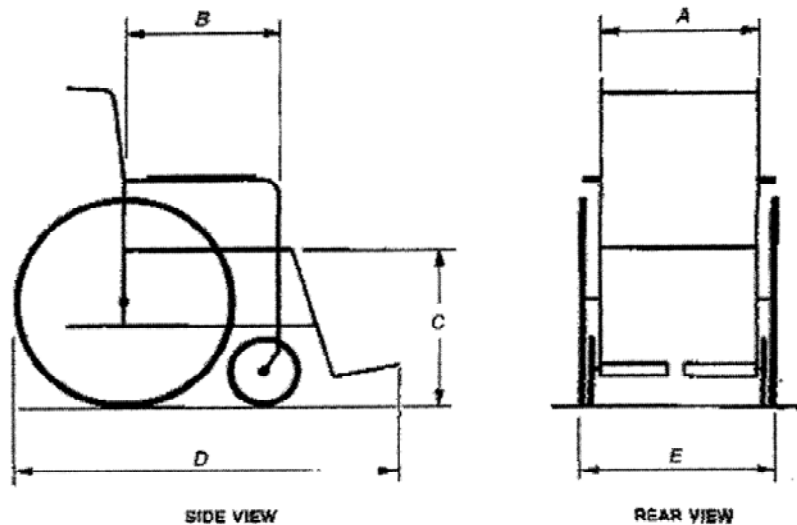
- 2.5.1 The minimum floor space allocated for each wheelchair shall be at least 1300 mm (length) by 800 mm (wide). The length dimension must be parallel to the vehicle centreline. In addition, this floor space must be able to accommodate a rectangular prism with the minimum dimensions of 1300 mm (length) x 800 mm (width) x 1500 mm (height). No intrusions into the allocated space, other than for adjustable restraint devices, are permissible.
- 2.5.2 The height is defined as the perpendicular distance from the top surface of the floor covering to the underside of the vehicle's headlining at all points over the allocated floor space.

- 2.5.3 The floor of the wheelchair space is to be flat and level.
- 2.5.4 The clear space around each wheelchair shall be in compliance with Clause 4.2 of AS.2942-1994. *Wheelchair Occupant Restraint Assemblies for Motor Vehicles*. Note that this space requirement varies in accordance with the type of occupant restraint used.

2.6 Minimum and Maximum Size of a Wheelchair

2.6.1 The minimum and maximum size of a wheelchair that can be accommodated by restraint assemblies in a wheelchair accessible taxi is depicted below and defined in AS 2492-1994.

	Minimum Size	Maximum Size
A - Frame width	350 mm	500 mm
B - Seat depth	330 mm	530 mm
C - Seat height	350 mm	530 mm
D - Length overall	800 mm	1200 mm
E - Width overall	450 mm	700 mm
F - Wheel Diameters	100 to 660 mm	



2.7 Signage

- 2.7.1 Raised taxi registration numbers are to be placed on the exterior passenger doors (forward of the handle).

2.8 Engineering Certificate

2.8.1 Engineering Certificate – Standard Paragraph

- 2.8.1.1 Engineering Certificates, issued for registration purposes by Engineering Signatories, for Wheelchair Accessible Taxis must contain the following standard paragraph, *“I certify that the vehicle has been checked against and complies with the Transport NSW Wheelchair Accessible Taxi Measurement Protocol dated 3 March 2011.”*

N.B. For registration purposes, the NSW Roads and Traffic Authority (RTA) requires that any wheelchair installation in a motor vehicle is to comply with AS.2942-1994 *Wheelchair Occupant Restraint Assemblies for Motor Vehicles*, which specifies the requirements for wheelchair and wheelchair occupants and their anchorages. If these vehicles are fitted with ramps or wheelchair lift mechanisms, they must also be shown to comply with AS/NZS.3856 *Hoists and ramps for people with disabilities – Vehicle Mounted*.

For further information, see the RTA’s Vehicle Standards Information Sheet No 21 (VSI.21) vehicles modified for people with disabilities and Vehicle Inspectors Bulletin 36 Wheelchair accessible Taxis (WATs)