



Multi Purpose Taxi (MPT) Vehicle & Fitting Specifications



**A guide containing the specifications required for vehicles
Licensed to operate as MPTs in Western Australia**



1 Introduction

- 1.1 A Multi Purpose Taxi (MPT) [also known as Maxi Plus Taxi] is a taxi which operates under the control of Transport's designated Co-Ordinator as part of the MPT fleet in Western Australia. (Maxi Plus Taxi is referred to as a Multi Purpose Taxi under the Taxi Act 1995.)
- 1.2 This document contains the specifications required for vehicles licensed to operate as Multi Purpose Taxis in Western Australia.
- 1.3 New or used vehicles presented for initial licensing as MPTs in Western Australia, after 1st February 2000 shall comply with:
 - The following MPT Vehicle and Fitting Specifications; and
 - The requirements outlined in the relevant MPT Plate Ownership Conditions.
- 1.4 In developing these MPT Vehicle and Fitting Specifications, the following standards have been considered:
 - Transport's WA 1995 MPT Vehicle and Fitting Requirements.
 - AS – 1428 – 1998 Design for access and mobility. Parts 1 and 2.
 - AS – 2942 – 1994 Wheelchair occupant restraint assemblies for motor vehicles.
 - AS – 3856 – 1998 Hoists and ramps for people with disabilities. – Vehicle mounted. Parts 1 and 2.
 - Draft Disability Standards for Accessible Public Transport – 1999.
- 1.5 Terms used in this document are defined as follows:
 - **'Shall'** – means requirement is mandatory
 - **'Should'** – means requirement is a recommendation
 - **'MPT, Maxi Plus and Multi Purpose'** - all relate to the same type of vehicle. This is referred to as a Multi Purpose Taxi in the Taxi Act 1995.
 - **'MPTOD'** refers to Multi Purpose Taxi Owner Driver.
 - **'Transport'** – refers to the Department of Transport.

2 Vehicle Inspection Requirements

- 2.1 Vehicles being presented for licensing as MPTs shall meet the requirements outlined in this document.



- 2.2** Modifications to the vehicle shall be performed by a competent and experienced vehicle modifier and authorised by way of a modification permit issued by a Transport Vehicle Examiner. Note where extensive modifications have been performed, it may be necessary to provide the examiner at the time of inspection with an Engineers Report. (Generally where extensive or complex modifications are necessary, prior approval should have been obtained from Transport's Vehicle Safety prior to the commencement of the work.)
- 2.3** The taxi must comply with the vehicle standards imposed by:
- the Road Traffic (Vehicle Standards) Regulations 1977, [including the appropriate Australian Design Rules];
 - Transport; and
 - the MPT Co-ordinator.

3 Age of Vehicle

- 3.1** The following conditions shall apply to the taxi:
- The vehicle shall not operate as a taxi at a time which is more than 10 years after the date on which it was first registered; and
 - For second hand vehicles – the vehicle shall not be initially registered as a taxi at a time which is more than 5 years after the date on which it was first registered.

4 Access requirements

4.1 Passenger Space Requirements

- 4.1.1** The vehicle shall safely accommodate:
- a) two adult passengers using non-reclining standard sized wheelchairs travelling together.

The minimum allocated space for each of these two standard wheelchairs shall be 800mm by 1300mm.

In addition, (but not necessarily at the same time), the vehicle shall safely accommodate:



- b) one adult passenger using a reclining wheelchair, a long wheel-based wheelchair, a wheelchair with extended legrests or an electric scooter travelling alone.

The minimum allocated space for this longer wheelchair shall be 800mm by 1500mm.

4.1.2 In addition to the minimum space requirements outlined in **Section 4.1.1 (a) and (b)**, extra space and tracking shall be provided to enable the restraint systems to be applied in accordance with AS-2942 – 1994 *Wheelchair Occupant Restraint Assemblies for Motor Vehicles* and with the restraint system manufacturer's safety instructions. This includes meeting clear space requirements (see section 5.1), and recommended angle and tension requirements.

4.1.3 Other minimum space requirements shall be:

- Minimum door entry height: 1500mm
- Minimum door entry width: 800mm
- Minimum interior head room height: 1500mm
- Minimum width of wheelchair access path through vehicle: 800mm.

4.2 Boarding Methods

4.2.1 General Requirements

- a) The vehicle shall be rear entry loading, not side loading.
- b) Wheelchair access to the vehicle shall be provided by either hoist or ramp. (See sections **4.2.2** and **4.2.3**)
- c) Ramp access shall only be allowed where the distance between the ground and the floor level of the vehicle is less than 400mm. (In vehicles with a floor level higher than 400mm, a rear hoist shall be used).
- d) All boarding apparatus shall comply with the requirements of AS 3856.1 and 2, – 1998 except for the platform hoist size, which shall conform, with the requirements outlined in **Section 4.2.2. (b)** below.

4.2.2 Hoist Requirements

- a) Except for the platform size (see **Section 4.2.2 (b)**), all hoists fitted shall comply with:
- AS-3856.1 - 1998 *Hoists and ramps for people with disabilities - Vehicle-Mounted. Part 1: Product Requirements.*
 - AS-3856.2 - 1998 *Hoists and ramps for people with disabilities - Vehicle-Mounted. Part 2: Installation requirements.*
- b) Hoist platform minimum size shall be:
- Minimum width: 800mm



- Minimum length: 1275mm
- c) The minimum hoist loading capacity shall be 300kg.
- d) The hoist shall be fitted with safety handrails in accordance with AS-3856.1 – 1998 Section 2 1.7 (g).
- e) The hoist shall have minimal intrusion on the vehicle's internal space and shall not compromise the clear-space requirements as determined by AS-2942 - 1994 *Wheelchair Occupant Restraint Assemblies for Motor Vehicles*. (See diagram in **Section 5.1**)
- f) The hoist shall be fitted to the rear of the vehicle.

4.2.3 Ramp Requirements

- a) All ramps fitted shall comply with:
 - AS-3856.1 – 1998 *Hoists and ramps for people with disabilities – Vehicle-Mounted. Part 1: Product Requirements*.
 - AS-3856.2 – 1998 *Hoists and ramps for people with disabilities – Vehicle-Mounted. Part 2: Installation requirements*.
- b) The ramp shall have a minimum width of 780mm.
- c) The ramp shall be slip resistant and have edge barriers.
- d) Ramps shall be single piece and secured to the vehicle. Portable or dual access ramps are not acceptable.
- e) When deployed the gradient of the ramp shall be no steeper than 1 in 6.
- f) The vehicle modifier shall provide evidence that the ramp supplied and fitted, meets the requirements outlined above in **Section 4.2.3 (a) – (e)**

4.2.4 Assistance for Ambulant Passengers

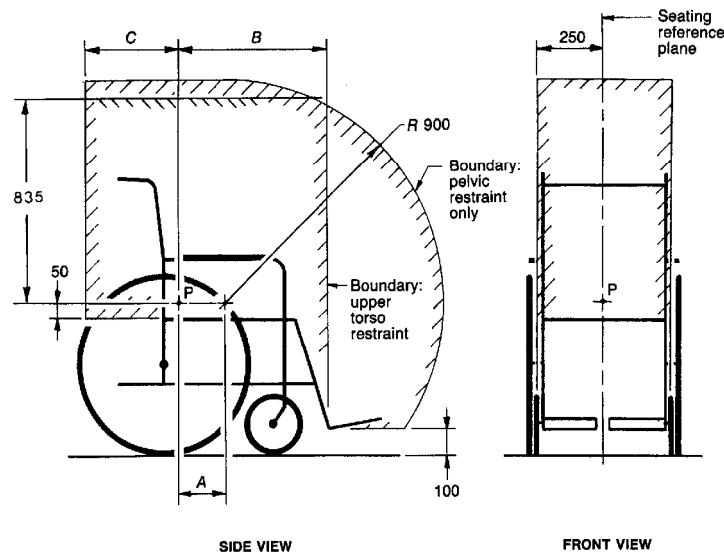
The vehicle shall provide assisted access for ambulant passengers with mobility disabilities. The following shall be installed:

- a) A fold down or slide-out step which is secured to the vehicle, to assist ambulant passengers access the rear passenger cabin.
- b) A vertical grab rail, on the left hand pillar behind the front passenger seat (through side-entry). This rail shall assist passengers during entry and exit from the cabin in accordance with AS 1428.2. Clause 10.2.

5 Safety requirements

5.1 Clear Space Requirements

The vehicle design and fittings shall allow the wheelchair and its user to be safely secured and transported, in accordance with the minimum clear space requirements outlined in AS 2942-1994, Sections 4.1 - 4.3. See diagram below. (Reproduction of copyright material – AS 2942-1994 figure 4.1 – permission to reprint granted by Standards Australia January 2000.)



DIMENSIONS IN MILLIMETRES

LEGEND:

A = horizontal excursion of dummy's hip, relative to the test frame (measurement Q)

B = the greater of—

(i) 800 mm; or

(ii) the horizontal excursion of the dummy's shoulder relative to the test frame (measurement S), plus 300 mm.

C = 400 mm except for assemblies incorporating head and back restraints. In this case, C shall be sufficient to allow for the space occupied by the head and back restraints plus the measured excursion U.

NOTE: Q, S and U are defined in Paragraph F7(c). The excursions are determined by dynamic testing, and their values are included in a dynamic test report.

FIGURE 4.1 DETERMINATION OF CLEARSPACE AROUND A WHEELCHAIR POSITION

5.2 Emergency Exit

The vehicle shall have a clear side exit suitable for use in an emergency. This should enable evacuation of the wheelchair passenger in the event of a rear end collision.

5.3 Fire Extinguisher

The vehicle shall be equipped with a fully maintained fire extinguisher of at least 20B rating and fitted with a hose. It shall be securely mounted in a position so as to be readily available for use and not be a hazard or cause annoyance to vehicle occupants.



5.4 Wheelchair/Occupant Restraint Systems

5.4.1 All restraints fitted shall comply with AS-2942 - 1994 *Wheelchair Occupant Restraint Assemblies for Motor Vehicles*.

5.4.2 Two restraint systems are required:

- Wheelchair Restraint System.
- Occupant Restraint System

5.4.3 Two complete sets of the above restraints shall be supplied with the vehicle.

5.4.4 Restraints shall be in good order, with no signs of wear and tear.

5.4.5 The restraint systems fitted shall be of universal use. A four-point anchorage system, which can be used with a wide variety of wheelchairs should be used. The restraint systems which use a single lock-down method and require that the wheelchair have special brackets fitted, are unacceptable.

5.4.6 The restraint tracking shall be recessed flush into the vehicle floor.

5.4.7 The vehicle modifier shall provide evidence that the restraints supplied and fitted meet the requirements outlined above in **Sections 5.4.1 – 5.4.6**

5.5 Temperature Control

5.5.1 The vehicle shall provide effective temperature control for passengers and drivers.

5.5.2 A separate air conditioning unit for the rear of the vehicle shall be fitted unless the vehicle is fitted with a split system, climate control, air conditioning system.

5.6 Suspension

The vehicle suspension should be installed and maintained at a standard which enables passengers to travel in comfort with a smooth ride.

5.7 Seats

5.7.1 If the vehicle manufacturer does not provide seats, the first preference is to fit any additional seating, together with the appropriate seat belts, to anchorage points already provided by the manufacturer for additional seats.



5.7.2 Any seat not provided for by the vehicle manufacturer shall be installed in accordance with the National Code of Practice entitled **Commercial Manufacture and Installation of Additional Seats** (VSB 5A). This VSB requires additional seats to be provided with seatbelts in accordance with the intent of the Australian Design Rules (ADRs) applicable to the vehicle's date of manufacture and category. Where the vehicle is a goods carrying vehicle and is to be converted to carry passengers, engineering evidence is required to show the vehicle meets those higher safety requirements.

5.7.3 The exposed surfaces of 'Seats' shall be covered with non-absorbent materials. Removable seat covers if fitted shall be made of non-absorbent or washable material.

5.8 Signage

Appropriate safety instructions that can be seen by the passengers using wheelchairs shall be provided in the vehicle. The signage shall include:

- the correct methods of use for wheelchair/occupant restraints as outlined in AS 2942 - 1994, sections 2.4 and 3.3.
- the clear space requirements as outlined in AS-2942. 1994. (**See diagram in section 5.1**).

5.9 Reversing Warning Buzzer

The vehicle shall provide an audible reversing warning signal of sufficient output to perform the task without being too obtrusive. The device shall be fitted with a switch to enable it to be turned off if necessary.

5.10 Hoist Buzzer

An audible warning signal which is automatically activated by the hoist being lowered shall be provided. This shall be of sufficient output to alert people within two metres of the vehicle's rear. The device shall be fitted with a switch to enable it to be turned off if necessary.

5.11 Storage

The vehicle shall have suitable storage facilities for loose equipment. This shall include a sealed, lockable, fixed storage box and cargo straps to store or secure extra seats, walking aids, wheelchair trays, restraint belts and buckles etc.



6 Comfort/Aesthetic Requirements

6.1 Windows

6.1.1 In most vehicles **observation windows** will be additional to the side windows normally provided by the vehicle manufacturer. However where the side windows are of sufficient height to act as efficient observation windows, then the side windows will be deemed to satisfy the requirements of this clause.

6.1.2 Side and rear vehicle windows shall be tinted to reduce heat and glare on passengers. Side and rear window tinting is controlled by the Road Traffic (Vehicle Standards) Regulations 1977. Side window glazing may be coated to achieve a luminous transmittance of not less than 35%.

Observation window glazing may be coated to achieve a luminous transmittance of not less than 35%.

The windscreen must not be tinted except for the upper 10% of the windscreen area. The upper 10% of the windscreen glazing may be coated to achieve a luminous transmittance of not less than 35%.

Glazing that has been coated to reduce its luminous transmittance must not have a reflectance of over 10%.

6.2 Quality of Fittings

The aesthetics of fittings and fixtures shall meet Transport's taxi vehicle standards and in general should be comfortable, visually appealing and promote good acoustics within the vehicle. The aim is to supply a vehicle which, as far as possible, resembles a passenger vehicle rather than a commercial van.

6.3 Courtesy Lights

Courtesy lights shall be provided over the hoists, to assist with passenger loading at night.

6.4 Floor Coverings

6.4.1 Floor coverings shall be non-slip and provide low resistance for wheelchairs.

6.4.2 The floor coverings and fittings shall not prevent access to the mandatory service access points of the vehicle.