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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Committee CE-001— Parking Facilities

DRAFT

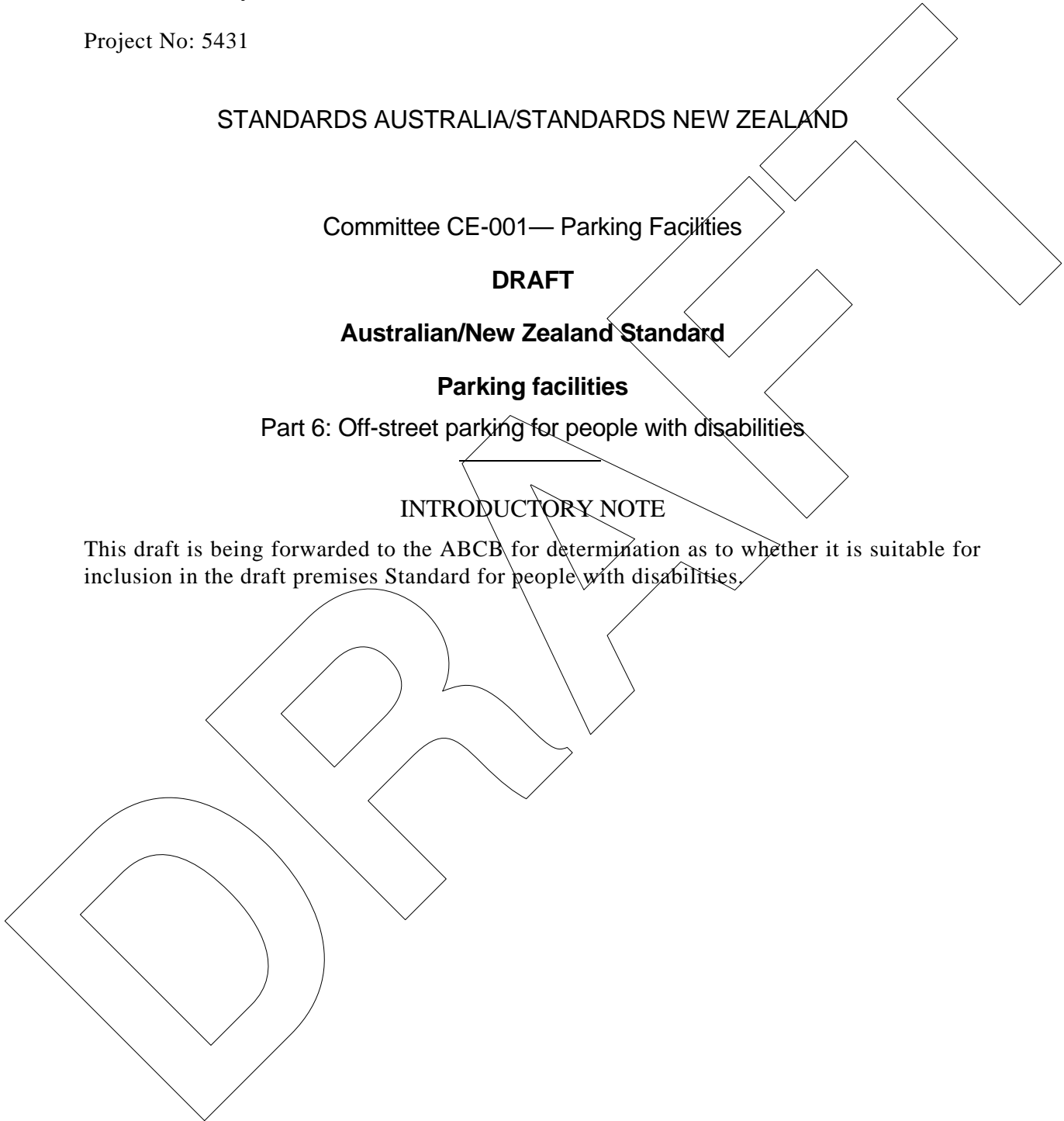
Australian/New Zealand Standard

Parking facilities

Part 6: Off-street parking for people with disabilities

INTRODUCTORY NOTE

This draft is being forwarded to the ABCB for determination as to whether it is suitable for inclusion in the draft premises Standard for people with disabilities.



PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CE-001, Parking Facilities and supersedes AS 2890.1—1993, *Parking facilities, Part 1: Off-street car parking* in respect of requirements for parking for people with disabilities.

It is one of a series of Standards on parking facilities as follows:

AS/NZS

- 2890 Parking facilities
- 2890.1 Part 1: Off-street car parking
- 2890.6 Part 6: Off-street parking for people with disabilities (this Standard)

AS

- 2890 Parking facilities
- 2890.2 Part 2: Off-street commercial vehicle facilities
- 2890.3 Part 3: Bicycle parking facilities
- 2890.5 Part 5: On-street parking

The principal change from the previous Standard is the provision of shared areas adjacent to dedicated parking spaces for people with disabilities. These now provide for new technology associated with the loading and unloading of wheelchairs and their occupants by means of ramps or platform hoists fitted to the side or rear of a vehicle. The ways in which this new technology is accommodated are described in Appendix A.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

This Standard will be referenced in the Building Code of Australia...

DRAFTING NOTE: ABCB to provide remainder of text for this paragraph. Date to be shown as 'DD-MM-YY' until actually known.

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Australian/New Zealand Standard
Parking facilities

Part 6: Off-street parking for people with disabilities

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies minimum requirements for the provision of off-street parking facilities for people with disabilities.

1.2 REFERENCED DOCUMENTS

The following document is referred to in this Standard:

AS

1428 Design for access and mobility

1428.1 Part 1: General requirements for access—New building work

1.3 DEFINITIONS

For the purpose of this Standard, the following apply.

1.3.1 Dedicated (parking) space

A parking space set aside exclusively for the parking of a single vehicle.

1.3.2 Shared space

An area adjacent to a dedicated space provided for access or egress to or from a parked vehicle and which may be shared with any other purpose which does not involve other than transitory obstruction of the area, e.g. a walkway, a vehicular aisle, dual use with another adjacent dedicated space.

1.3.3 Shall

Indicates that a statement is mandatory.

1.3.4 Should

Indicates a recommendation.

SECTION 2 PARKING SPACE LAYOUT AND ACCESS

2.1 GENERAL

This Section specifies layout requirements for parking spaces including headroom requirements and requirements for vehicular access to those spaces.

NOTE: A commentary on this Section is given at Appendix A.

2.2 PARKING SPACES—DIMENSIONS

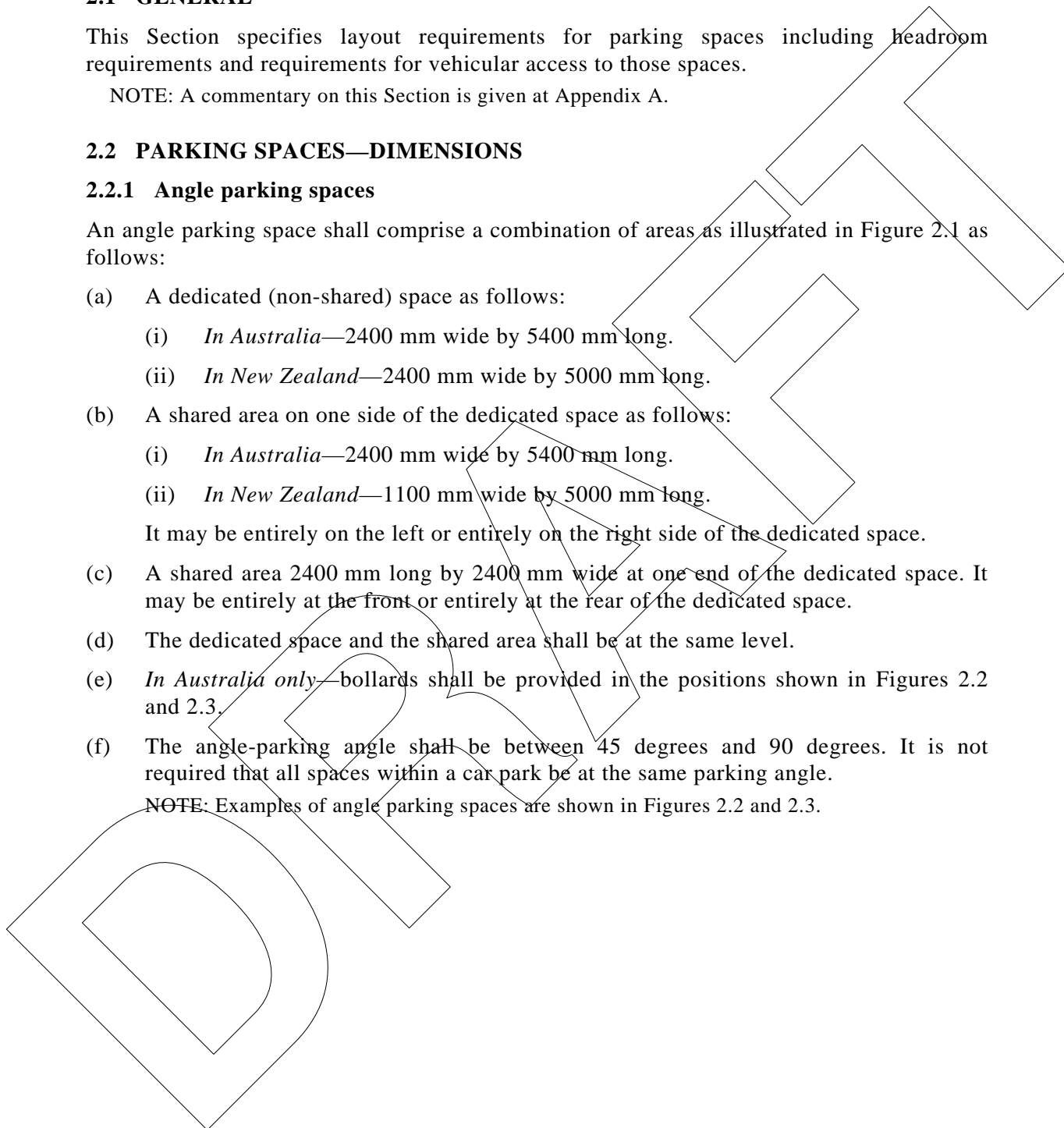
2.2.1 Angle parking spaces

An angle parking space shall comprise a combination of areas as illustrated in Figure 2.1 as follows:

- (a) A dedicated (non-shared) space as follows:
 - (i) *In Australia*—2400 mm wide by 5400 mm long.
 - (ii) *In New Zealand*—2400 mm wide by 5000 mm long.
- (b) A shared area on one side of the dedicated space as follows:
 - (i) *In Australia*—2400 mm wide by 5400 mm long.
 - (ii) *In New Zealand*—1100 mm wide by 5000 mm long.

It may be entirely on the left or entirely on the right side of the dedicated space.
- (c) A shared area 2400 mm long by 2400 mm wide at one end of the dedicated space. It may be entirely at the front or entirely at the rear of the dedicated space.
- (d) The dedicated space and the shared area shall be at the same level.
- (e) *In Australia only*—bollards shall be provided in the positions shown in Figures 2.2 and 2.3.
- (f) The angle-parking angle shall be between 45 degrees and 90 degrees. It is not required that all spaces within a car park be at the same parking angle.

NOTE: Examples of angle parking spaces are shown in Figures 2.2 and 2.3.



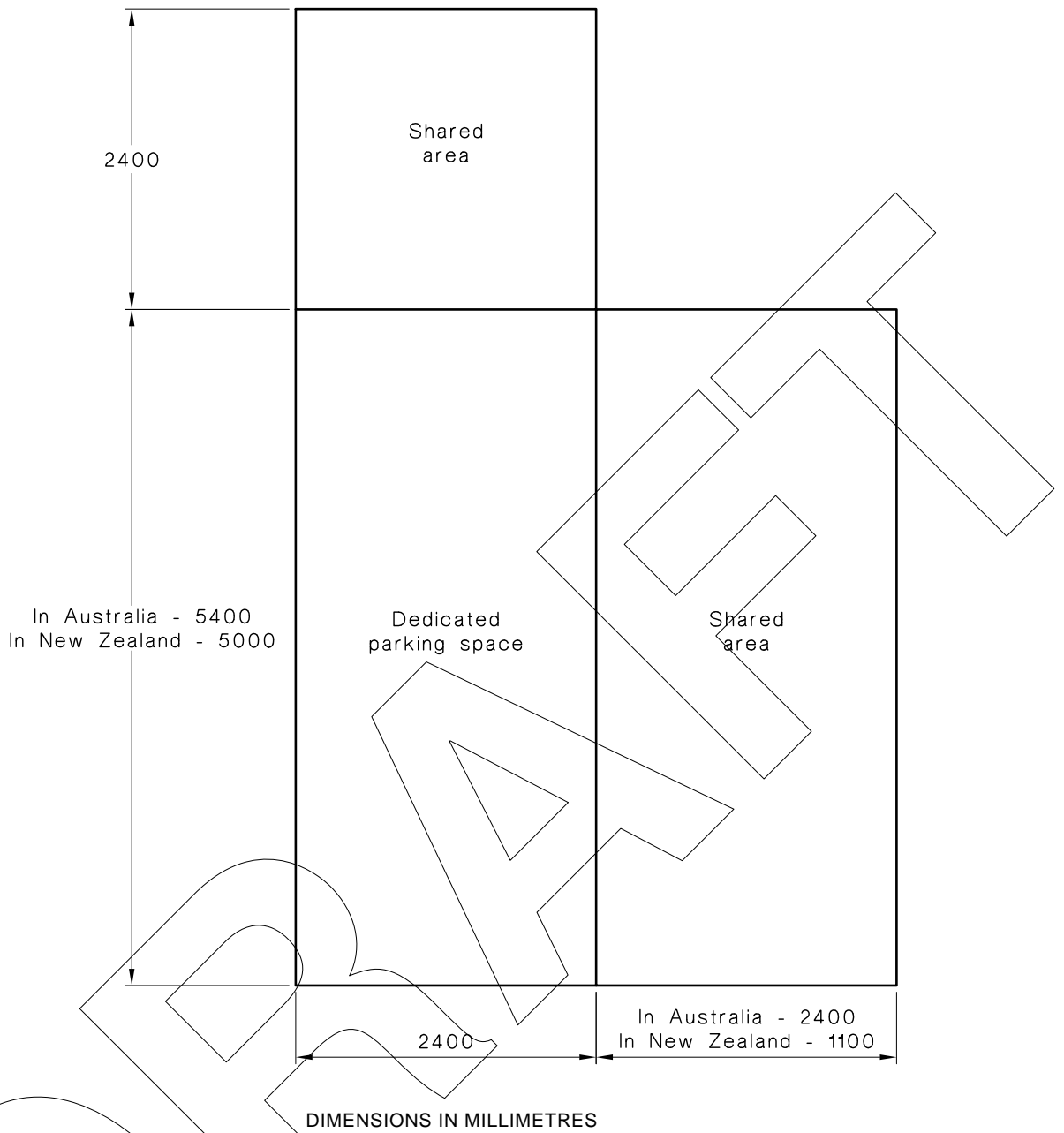


FIGURE 2.1 DIMENSIONS OF ANGLE PARKING SPACES

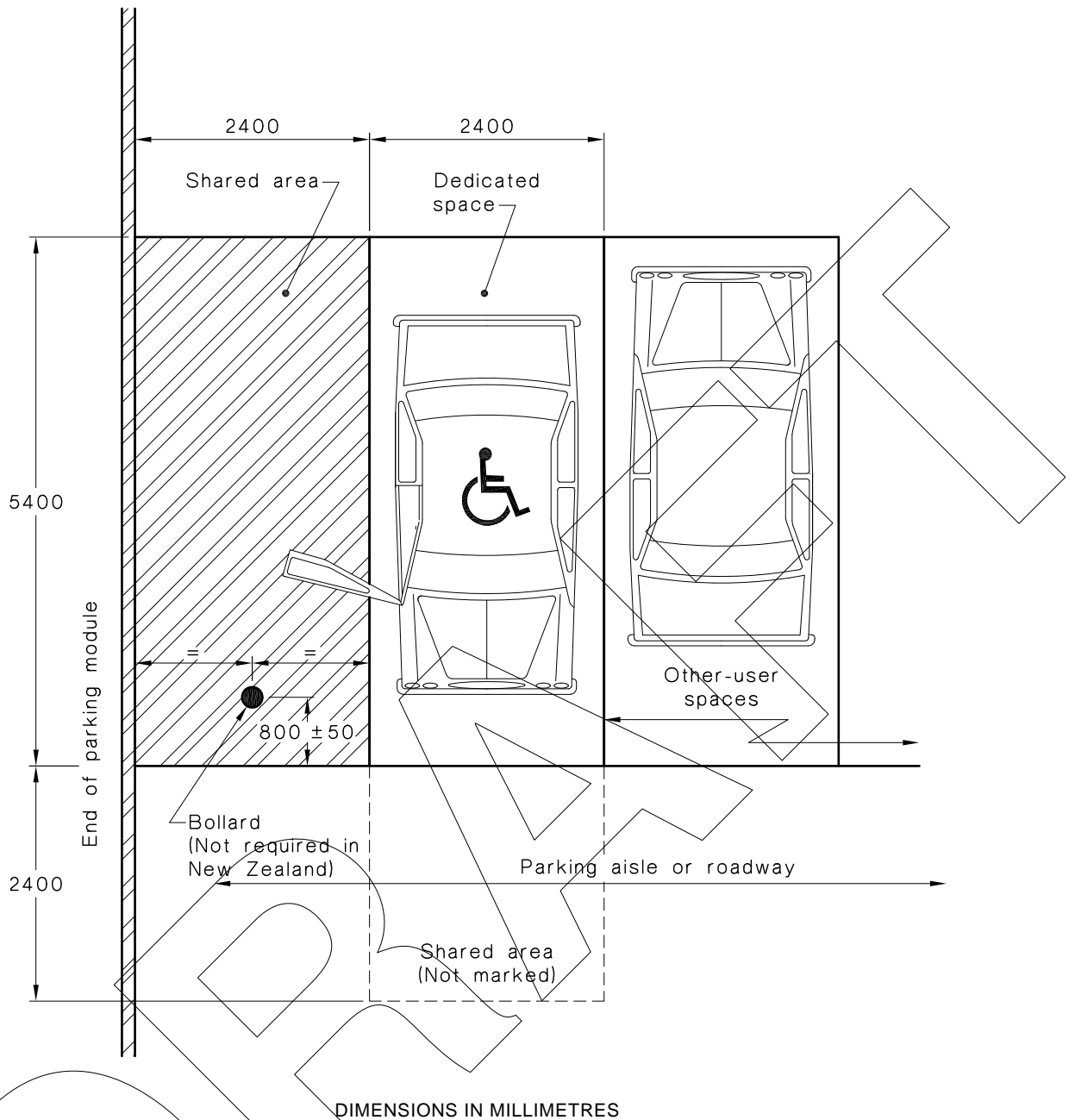


FIGURE 2.2 EXAMPLE OF AN ANGLE PARKING SPACE WITH SHARED AREA ON ONE SIDE ONLY—DIMENSIONS FOR AUSTRALIA ONLY*

* Base dimensions for angle parking spaces and shared areas in New Zealand are shown in Figure 2.1.

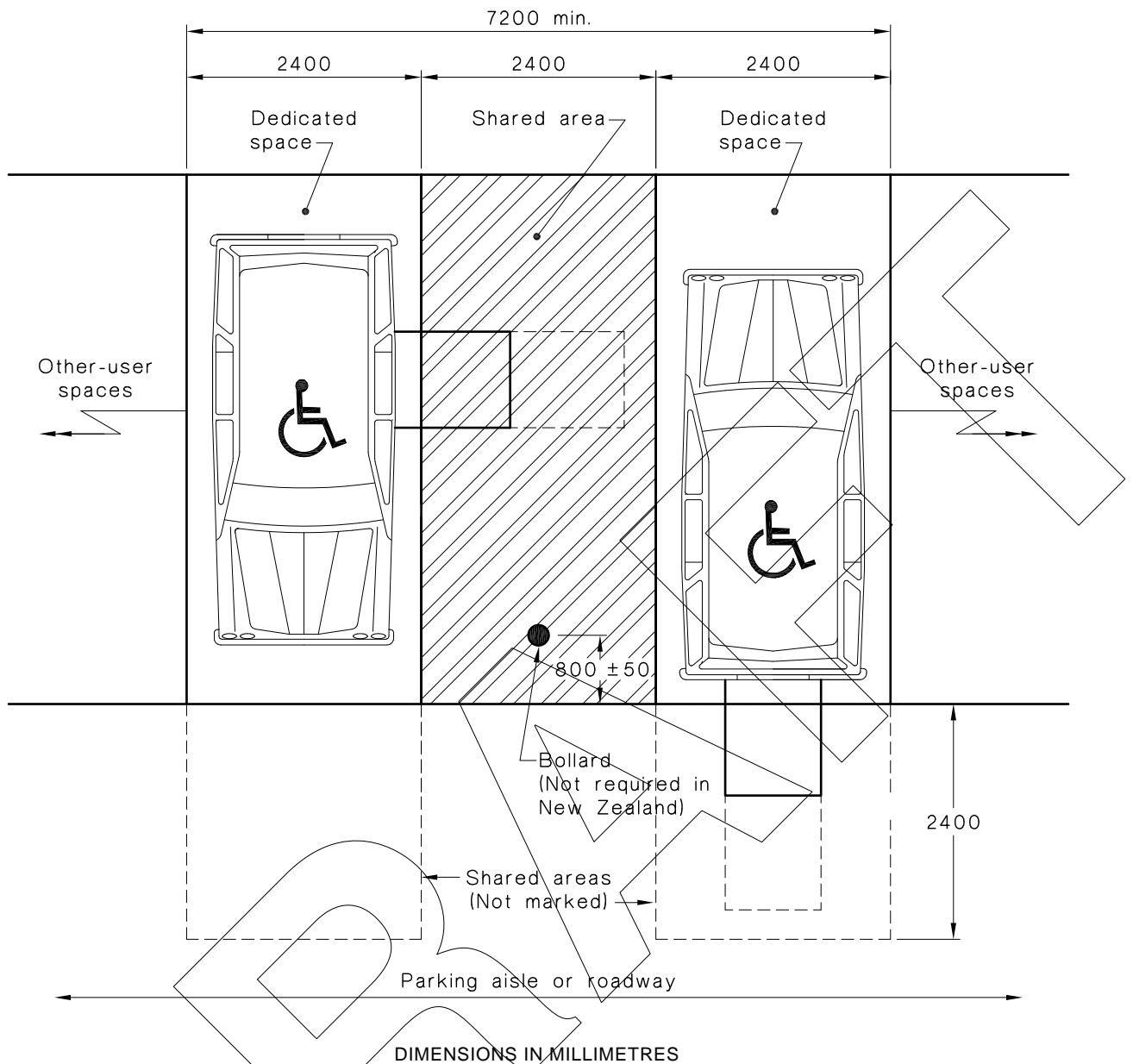


FIGURE 2.3 EXAMPLE OF TWO PARKING SPACES WITH A COMMON SHARED AREA—DIMENSIONS FOR AUSTRALIA ONLY*

2.2.2 Parallel parking spaces

A parallel parking space shall comprise areas as illustrated in Figure 2.4 as follows:

- (a) A dedicated space as follows:
 - (i) *In Australia* at least 3200 mm wide by 7800 mm long.
 - (ii) *In New Zealand* at least 2400 mm wide by 7800 mm long.

All of the dedicated space shall be at the same level.
- (b) A shared area adjacent to the non-trafficked side of the dedicated space as follows:
 - (i) *In Australia* at least 1600 mm wide by 7800 mm long.
 - (ii) *In New Zealand* at least 1100 mm wide by 7800 mm long.

* Base dimensions for angle parking spaces and shared areas in New Zealand are shown in Figure 2.1.

The shared area may be at a higher level than the dedicated space in which case it shall be separated by a kerb not more than 190 mm high and shall be increased in width to accommodate kerb ramps in accordance with AS 1428.1.

NOTE: Examples of parallel parking spaces are shown in Figures 2.5 and 2.6.

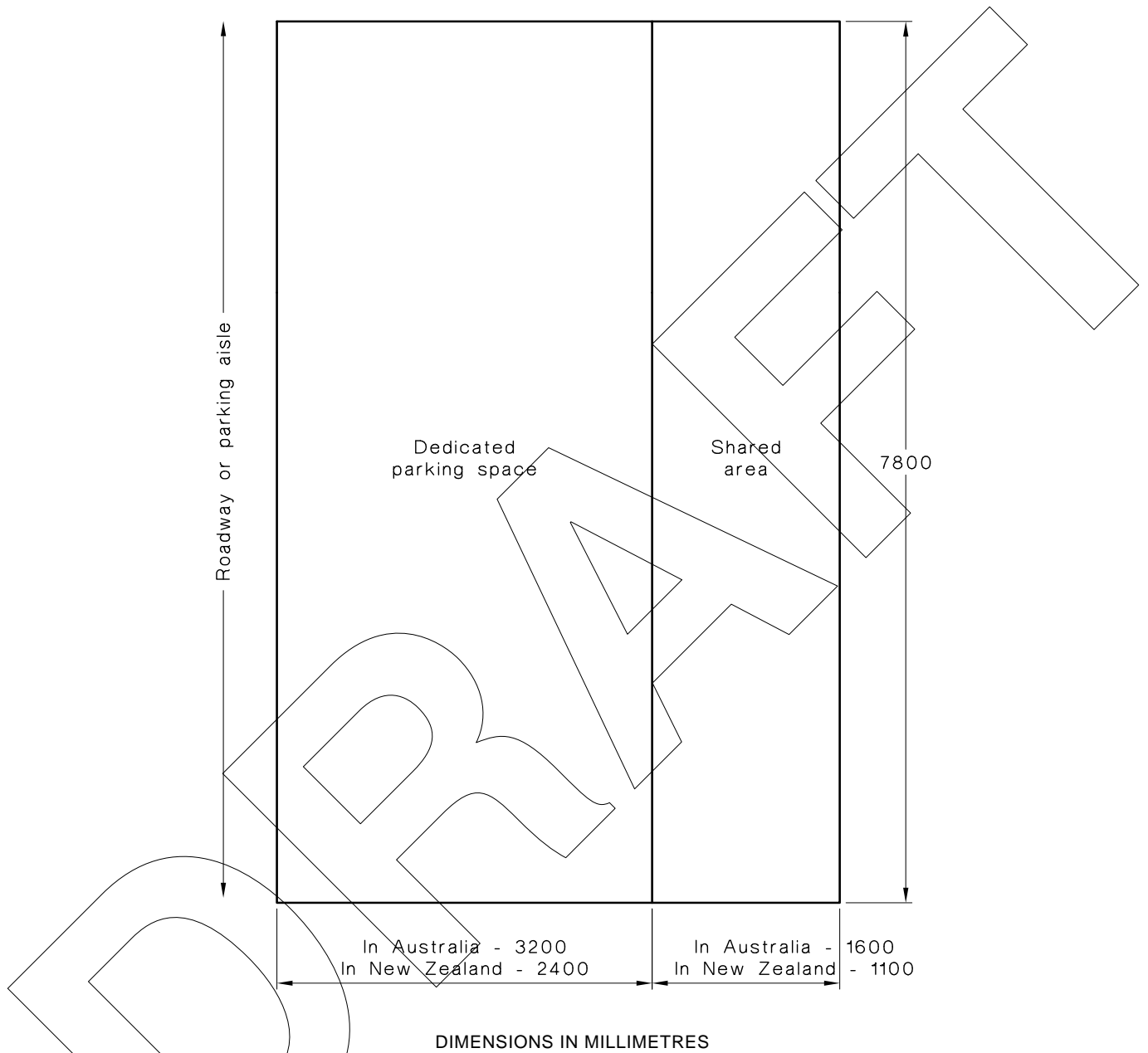


FIGURE 2.4 TYPICAL DIMENSIONS OF PARALLEL PARKING SPACES

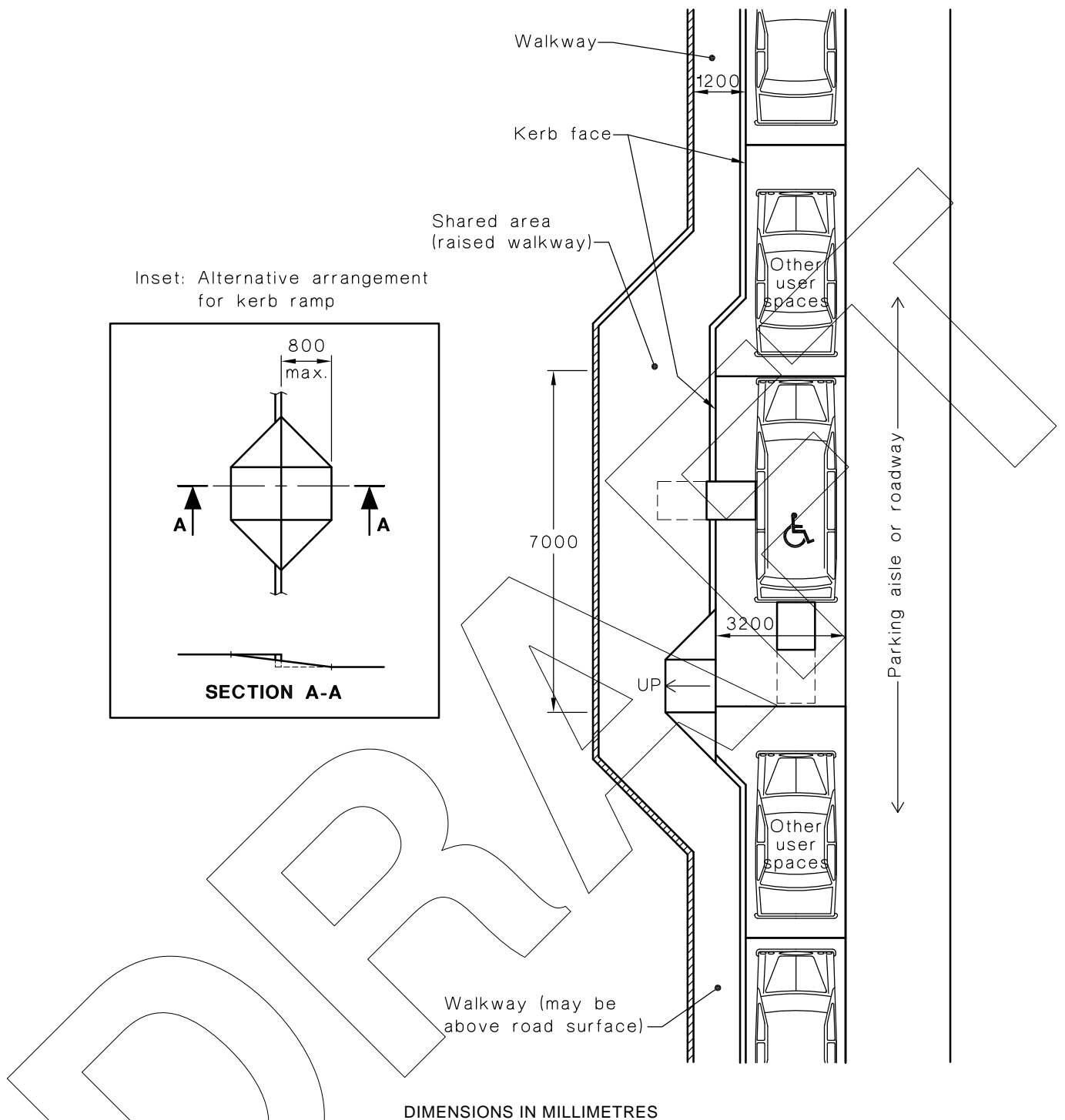


FIGURE 2.6 EXAMPLE OF A PARALLEL PARKING SPACE WITH SHARED AREA RAISED—DIMENSIONS FOR AUSTRALIA ONLY*

2.3 PAVEMENT SLOPE AND SURFACE

Each parking space for people with disabilities and related walking and wheelchair unloading areas shall comprise a firm plane surface with a fall not exceeding 1:40 in any direction (1:33 if the surface is a bituminous seal and the parking space is out of doors). These areas shall have a slip-resistant surface.

* Base dimensions for parallel parking spaces and shared areas in New Zealand are shown in Figure 2.4.

2.4 HEADROOM

The path of vehicular travel from the car park entrance to all parking spaces for people with disabilities and from those spaces to the car park exit shall have a minimum headroom of 2200 mm.

The headroom above each dedicated space and adjacent shared area, measured from the level of the dedicated space shall be a minimum of 2500 mm. For an angle parking space the headroom of the front of the space and its adjacent shared area may be reduced to lie within the profile shown in Figure 2.7.

NOTES:

- 1 Where a wheelchair hoist is used, although the wheelchair is stored on the vehicle roof in a flat position, it is raised to full wheelchair height (in addition to the height of the roof rack) during the hoisting process.
- 2 The method of measuring headroom is given in AS/NZS 2890.1.

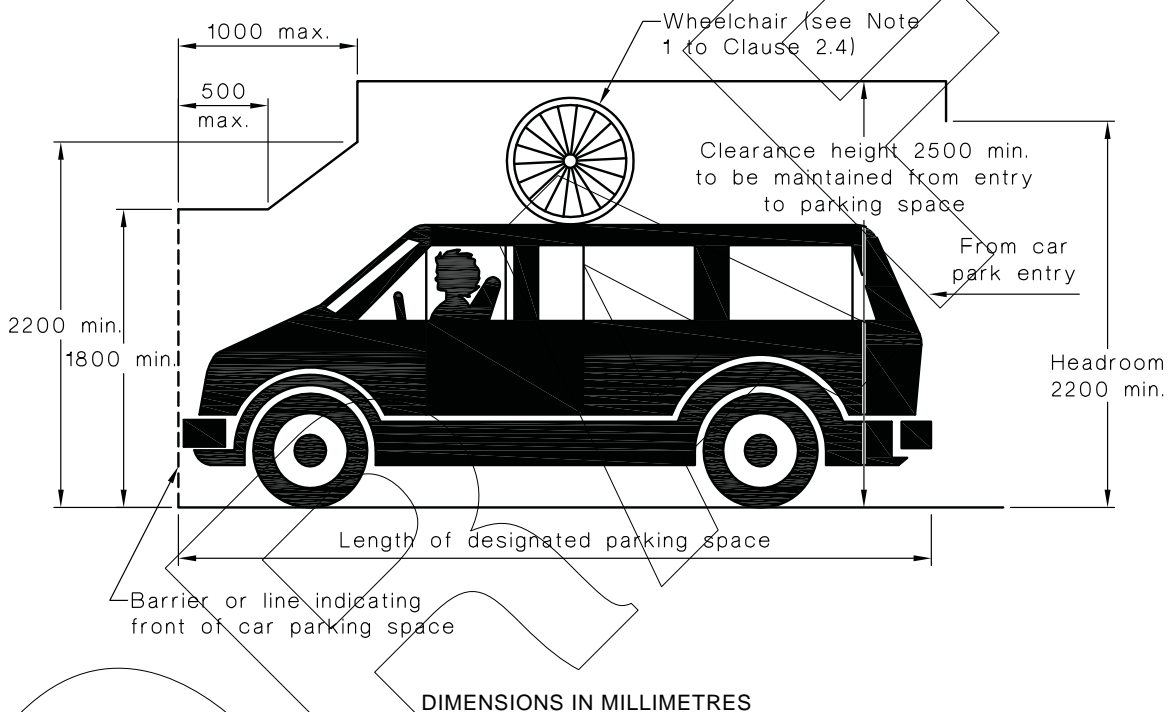


FIGURE 2.7 HEADROOM REQUIRED ABOVE CAR SPACES FOR PEOPLE WITH DISABILITIES

2.5 KERB RAMPS

Where kerb ramps are to be provided they shall be placed at a front or rear corner of the parking space.

NOTE: Details of kerb ramps are given in AS 1428.1.

SECTION 3 SPACE IDENTIFICATION AND DELINEATION

3.1 SPACE IDENTIFICATION

Each dedicated space shall be identified by means of a white symbol of access in accordance with AS 1428.1 between 800 mm and 1000 mm high placed on a blue rectangle with no side more than 1200 mm, placed as a pavement marking in the centre of the space between 500 mm and 600 mm from its entry point as illustrated in Figure 3.1.

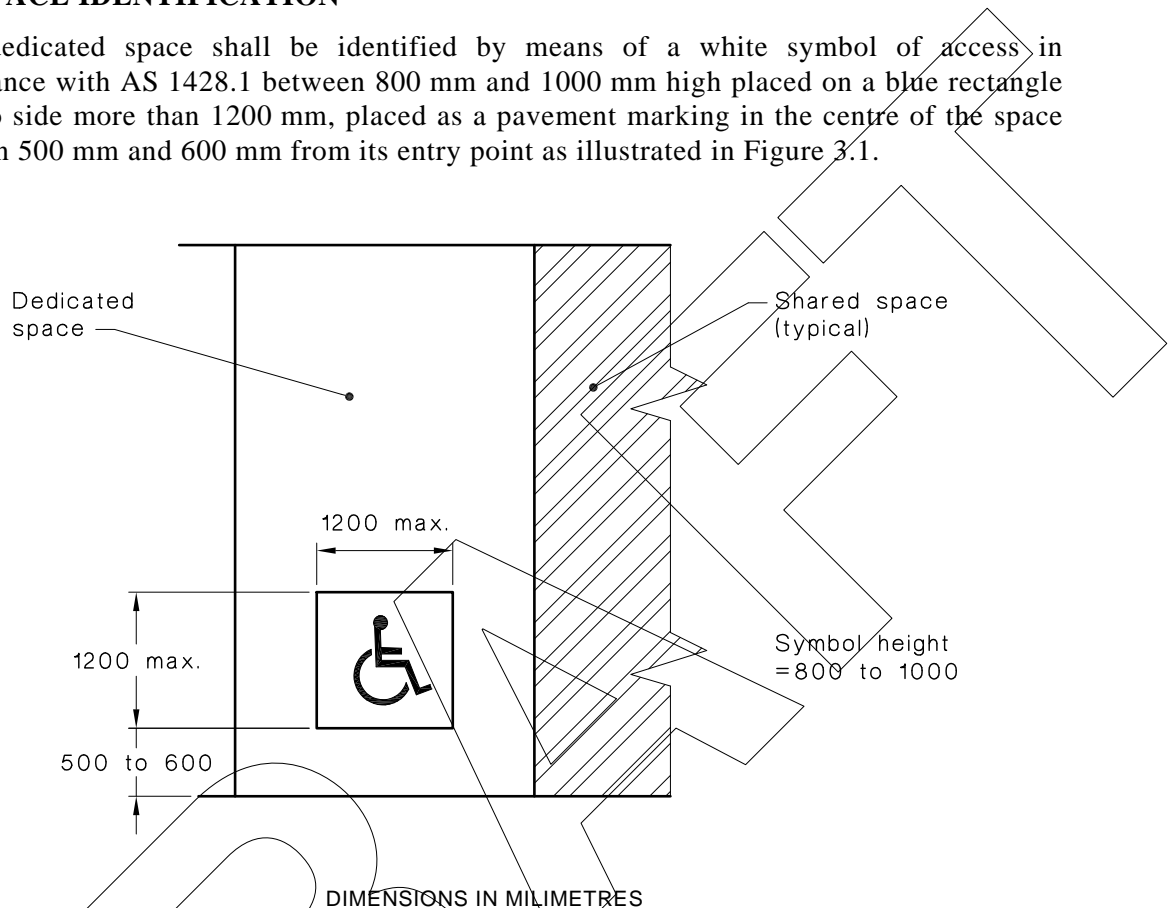


FIGURE 3.1 USE OF SYMBOL OF ACCESS TO IDENTIFY SPACES

The requirement for a symbol of access to be placed on the pavement shall not apply to any privately owned parking space for people with disabilities associated with a single residence and intended primarily for use by the occupants of that residence.

3.2 SPACE DELINEATION

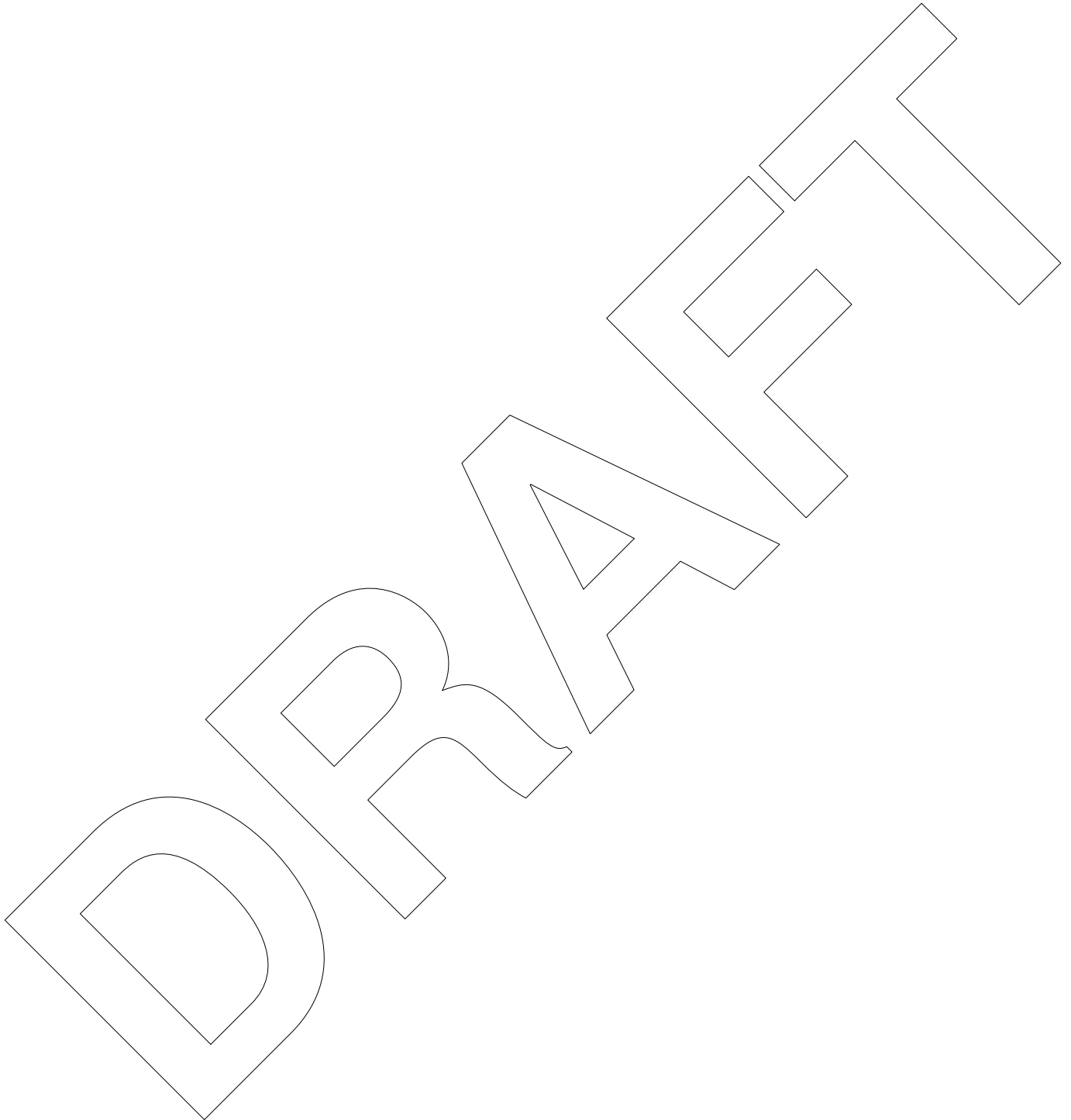
Pavement markings specified in Items (a) and (b) of this Clause shall be yellow and shall have a slip resistant surface. Raised pavement markers shall not be used for space delineation.

Pavement markings shall be provided as follows:

- (a) Dedicated parking spaces shall be outlined with unbroken lines 80 to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall.
- (b) Shared areas shall be marked as follows:
 - (i) Walkways within or partly within a shared area shall be marked with unbroken longitudinal lines on both sides of the walkway excepting any side delineated by a kerb, barrier or wall.
 - (ii) Other vacant non-trafficked areas which may be intentionally or unintentionally obstructed (e.g. by unintended parking) shall be outlined with unbroken lines 80

to 100 mm wide on all sides excepting any side delineated by a kerb, barrier or wall, and marked with diagonal stripes 150 to 200 mm wide with spaces 200 mm to 300 mm between stripes. The stripes shall be at an angle of 45 ± 10 degrees to the side of the space.

- (iii) No shared area markings shall be placed in trafficked areas.



APPENDIX A

COMMENTARY ON PROVISION OF PARKING FOR PEOPLE WITH DISABILITIES

(Informative)

A1 GENERAL

The purpose of this commentary is to explain the various requirements of this Standard for the provision of parking and related facilities for people with disabilities including how and why those requirements have been specified. Recommendations related to the signposting, safe location of spaces and provision of access controlled entry devices are also given.

A2 PROVISION OF PARKING SPACES—AUSTRALIA ONLY

A2.1 Basic space requirement

Parking spaces for people with disabilities need to be substantially wider and longer than other spaces in a car park. The increased space is needed to cater for recent technological advances in vehicle mounted equipment to load and unload wheelchairs. Vehicles equipped with ramps or platform hoists either at the side or rear of the vehicle can cater for wheelchair-bound occupants, either driver or passenger, to leave or enter the vehicle in the wheelchair. The space required for this operation comprises an area of 1.2 m × 1.2 m beside or to the rear of the vehicle into which the ramp or hoist lowers, and a further 1.2 m × 1.2 m space beyond that to manoeuvre the wheelchair on and off the ramp or hoist. These spaces will also provide adequately for the unloading of roof-mounted wheelchairs and also for ambulant people with large mobility aids.

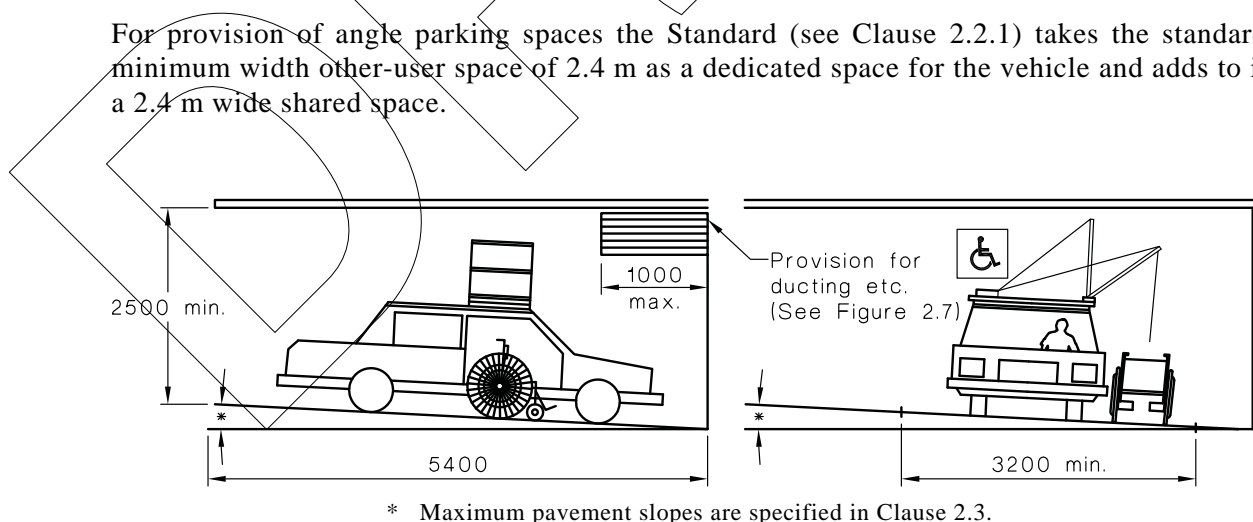
NOTE: Smaller unloading and manoeuvring spaces are specified for New Zealand as side-loading ramps and platform hoists are not in common use in New Zealand.

An example of the unloading of a roof-mounted wheelchair is shown in Figure A1.

The Standard provides for a combination of dedicated parking spaces and shared areas which are shared with other users or for other purposes, to provide the necessary spaces.

A2.2 Angle parking spaces

For provision of angle parking spaces the Standard (see Clause 2.2.1) takes the standard minimum width other-user space of 2.4 m as a dedicated space for the vehicle and adds to it a 2.4 m wide shared space.



DIMENSIONS IN MILLIMETRES

FIGURE A1 UNLOADING A ROOF-MOUNTED WHEELCHAIR

The entire 2.4 m wide shared space is required to be all at the same level as the dedicated space.

The shared space can be shared with any other suitable use, noting that it needs to be accessible in accordance with AS 1428.1 and free of other than transitory obstructions at all times. In a typical case, as illustrated in Figure 2.3, a 2.4 m space can be shared between two adjacent disabled user dedicated spaces. It is noted that such an arrangement can be conveniently provided in a parking configuration comprising a series of 2.4 m minimum width standard modules. Depending on which side of the vehicle the disabled user needs to alight, one or other of the vehicles may need to back into the space.

A similar space of length 2.4 m needs also to be provided at the end of the space for rear unloading/loading of a wheelchair. This can also be a shared area at the same level as the dedicated space. It is commonly shared with the parking aisle as illustrated in Figure 2.3.

A2.3 Parallel parking spaces

A parallel parking space will always require a dedicated space 3.2 m wide and 7.8 m long all at the one level, see Clause 2.2.2. The general case is illustrated in Figure 2.4.

The 3.2 m width needs to be entirely dedicated because a vehicle will normally have to face in one particular direction when using it and consequently will have to park hard against one edge or other of the space depending on which side the disabled user is to alight.

An extra width of at least 1.6 m is required for side ramp or platform hoist unloading and can either be shared on the traffic side with the roadway or on the non-traffic side with other usage space, e.g. a walkway. In the case of parallel parking this extra space need not be at the same level as the parking space but may be raised. Figures 2.5 and 2.6 illustrate typical layouts respectively without and with a kerb separating the dedicated and shared spaces. A kerb if present needs to be not more than 190 mm high and have kerb ramps. Note that to accommodate kerb ramps the width behind the kerb may need to be increased as shown in Figure 2.6.

The extra length, i.e. to provide a total space length of 7.8 m is required to allow rear ramp unloading.

A3 SIGNPOSTING

Signs should be provided where necessary, as follows:

- (a) *Direction signs* If the route to parking spaces for people with disabilities is not readily apparent from the vehicular entrance to the car park, direction signs comprising the international symbol of access and an arrow should be used at the entrance and at each change of direction to direct traffic to the spaces. The symbol should point in the same direction as a left or right arrow.
- (b) *Space reservation signs—Australia only* In public car parks linear parking control signs* bearing the user limitation '(Access Symbol) ONLY' should be used if it is necessary to formally reserve spaces for their intended use.

NOTE: Additional words such as PERMIT MUST BE DISPLAYED may be added to the signs.

A4 ACCESS CONTROLLED ENTRY

Where an entry to a carpark is access controlled, the access or intercom pedestal should if practicable, be positioned so that the push button is positioned laterally 50 ± 25 mm behind the face of the adjacent kerb so as to be accessible by a driver in a seated position within a

* Linear parking control signs are shown in AS 1742.11 Manual of uniform traffic control devices, Part 11: Parking controls

vehicle equipped for a driver who uses a wheelchair. The access control or intercom button should be located so that the vehicle is entirely within the queuing area when the device is being operated. Systems that issue a ticket should be designed in the knowledge that a person with a weak grip may need to use them.

Access control units should not be located adjacent to kerbs which are on a left-hand curve due to the difficulty in drawing a vehicle in close enough for the driver to reach the access or intercom button.



APPENDIX B
NUMBER OF REQUIRED ACCESSIBLE CAR SPACES—
NEW ZEALAND ONLY

(Normative)

B1 APPLICATION

The requirements of this Appendix apply to New Zealand only.

NOTE: Corresponding provisions for Australia are given in the Building Code of Australia.

B2 NUMBER OF ACCESSIBLE CAR SPACES

Parking facilities, whether public or private shall provide the number of car parking spaces for people with disabilities as specified in Table B1.

**TABLE B1
PROVISION OF ACCESSIBLE CAR
PARKING SPACES**

Total number of car spaces	Number of accessible car spaces
1-20	Not less than 1
21-50	Not less than 2
For every additional 50 car spaces or part thereof	Not less than 1

NOTE: Further detail on provisions for people with disabilities are given in NZS 4121.

*** END OF DRAFT ***

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The first national Standards organization was created in New Zealand in 1932. The Standards Council of New Zealand is the national authority responsible for the production of Standards. Standards New Zealand is the trading arm of the Standards Council established under the Standards Act 1988.

Australian/New Zealand Standards

Under a Memorandum of Understanding between Standards Australia and Standards New Zealand, Australian/New Zealand Standards are prepared by committees of experts from industry, governments, consumers and other sectors. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian/New Zealand Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

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